

# The Long Sword and Scabbard Slide in Asia

*William Trousdale*

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## ABSTRACT

Trousdale, William. *The Long Sword and Scabbard Slide in Asia*. *Smithsonian Contributions to Anthropology*, number 17, 332 pages, 100 figures, 24 plates, 1975.—The scabbard slide is a distinctive carrying device developed 2,500 years ago for the long, iron, equestrian sword. The history of the long sword and scabbard slide in Asia begins and ends in the same region, the steppelands of the southern Ural mountains. The association of this weapon and its suspension device endured for a thousand years, during which time it may be observed among many settled and nomadic cultures between China and the Mediterranean, and even beyond, as far west as France and England. The present study is an attempt to evaluate the significance of this association in its broadest cultural sense in terms of an aspect of weapons history among the peoples in Asia who employed the long sword and scabbard slide.

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Washington, D.C., April 1972.





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The Long Sword and  
Scabbard Slide  
in Asia



# Introduction

The small object to which the principal part of the following study is devoted has been known and produced in China for over two thousand years. As with many other objects, knowledge of, and reverence for the antiquity of its form, and fondness for the material of its manufacture, chiefly jade stone, sufficed for the continued production of this object when specific knowledge, or reliable or credible record of its ancient function was lacking. Authentic ancient examples, plundered from tombs of unknown date and provenance, as well as antiquarian imitations and outright forgeries, must have been relatively plentiful in the dealers' shops of the larger cities in China during the early decades of this century, for it was during this period that these objects entered collections of museums and private individuals in Europe and the United States in considerable numbers.<sup>1</sup> That among them a fair number of authentic examples are to be found is surely as much the result of chance as of knowledgeable discernment, for there were as yet almost no reliable criteria by which jade objects could be assigned to particular historical periods.

Not until the end of the nineteenth century was a serious attempt made to define the function of this object, and it had the misfortune of being widely noticed and repeated, and of being wrong.<sup>2</sup> Wu Ta-ch'eng, whose pioneering study on ancient jades became the model for early Western specialists in this sphere, considered the object to be a girdle clasp, *sui* 璪, in spite of the fact that a plausible means by which it might fulfill this specialized function could not be demonstrated. It is equivocal now whether this opinion was formed in recognition of the fact that certain of these objects were produced in accordance with a current belief that they were girdle clasps and thus equipped with knobs on the under side in imitation of those found on the reverse of one end of belt hooks, or whether the examples exhibiting this particular feature were produced in full cognizance of the above belief (which was evidently not entirely original with Wu Ta-ch'eng) in an effort to bring the object more into conformity with the requirements of a girdle clasp (see **CV.73**, **CG.49**, **CH.45**, C.6—references thus indicated throughout the text are to the Catalog section of this publication.)<sup>3</sup> Acceptance, at any rate, of Wu Ta-ch'eng's identification has persisted even though the true function of the object has been known for more than four decades.<sup>4</sup>

Paradoxically, the first definite knowledge of the antiquity and function of this object came not from a con-

trolled excavation in China where it had seemed uniquely indigenous, but from a third-century tomb in Kerch in the Crimea of South Russia, some three thousand miles from the borders of China.<sup>5</sup> Unfortunately, the opening of the tomb in about 1918 had not been conducted in a scientific manner and the zeal of the excavators led to misunderstanding and misrepresentation of the find. The chalcedony object, evidently found in close proximity to an iron sword, was placed by its finders on the sword in the position of guard (see **SR.2**).<sup>6</sup> This new and seemingly attested identification was widely, if briefly, accepted.<sup>7</sup>

Apart from the above two early attempts at identification, the object has, at various times in widely separated places, been considered as a stamp seal,<sup>8</sup> a door latch or whetstone,<sup>9</sup> a headdress ornament,<sup>10</sup> a pestle for grinding pigments,<sup>11</sup> a cleat for hanging up a sword.<sup>12</sup> These identifications were based on an inadequate knowledge of the chronological and geographical distribution of these objects.

Not before 1925, with the publication of the finds made in 1916 by Japanese archeologists at Lo-lang 樂浪 in Korea, was the need for further speculation on the identification of this object terminated and its application as an attachment to the sword scabbard conclusively demonstrated.<sup>13</sup> In tomb number 9 the jade object (here *CV.8*) was found lying upon the well-preserved remains of a black-lacquered wooden scabbard containing the blade of an iron sword. It must be noted, however, that recognition of the true identity and function of these objects had actually occurred at an earlier date, but little attention appears to have been paid to these statements, unsupported by actual finds.<sup>14</sup> It is interesting to note also that the identification permitted by the Lo-lang finds was, only slightly later, independently proposed by P. Rau (who certainly had not yet seen the Japanese publication) on the basis of excavations conducted by himself near Pokrovsk (Engels) on the Lower Volga in 1926.<sup>15</sup>

Since these discoveries, a number of special studies have been devoted to the scabbard slide,<sup>16</sup> and during the past two decades more than three dozen examples have been retrieved from controlled excavations in China.<sup>17</sup> These will be discussed in the following section.

Extant examples of the scabbard slide may be classified into two basic groups according to form. The overwhelming majority are of a form which several authors have described as parallelepiped, which is to say their basic shape is that of an object with parallel sides. The under side of each is provided with a rectangular loop enclosing an aperture. The upper plate is extended above and below this rectangular loop (see Figure 95). The second

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basic type of scabbard slide is of a simpler form, consisting of an enclosed aperture only, without the extension above and below of the upper plate. Of the 440 scabbard slides to be examined here, 333 belong to the former type while only 68 are of the latter.<sup>18</sup>

The material from which scabbard slides of both types are fashioned is preponderantly jade stone. In only a few cases has the stone been subjected to scientific tests and the specific mineral determined. Therefore, the term "jade" as used here should be understood in its broadest sense, to include any of the wide range of minerals commonly, if incorrectly, classified as jade stone. Scabbard slides made from materials other than jade—bronze, lacquered wood, gold, ivory and bone, common and semi-precious non-jade stones—are decidedly few in number and, especially as regards the last four materials, are encountered chiefly outside China.<sup>19</sup>

Neither the interest nor importance of the scabbard slide is to be derived from the size or beauty of its intrinsic form. The average length is only 3.04 inches; the average width .90 inches; the average depth .56 inches.<sup>20</sup> Countless other jades whose basic form is not determined by utilitarian or quasi-utilitarian requirements present more interesting and pleasing shapes and provided the jade carver with a freer range of surfaces for his exacting, painstaking art. The significance of the scabbard slide lies in the implications inherent in its extremely wide distribution and historical occurrence in one or another of its forms in Asia and Europe. Again, the major portion of known slides, over eighty percent, may be ascribed a Chinese provenance. But in lesser numbers they have been found in Korea, Inner Mongolia, Viet-Nam, Pakistan, the Crimea and the lower Volga and Perm regions of European Russia, possibly in Turkey, and, in a related form, in Syria, southern Denmark, Germany, Switzerland, Bulgaria, Sweden, Norway, Finland, France, and England. This geographical scope may be extended by the addition of regions where no actual examples have been reported, but where their presence may be inferred from representations: northern India, Iran, Iraq, Afghanistan, Soviet Central Asia, southern Siberia, and Italy.

The possible significance of this broad geographical distribution has not been overlooked by specialists in the arts of the diverse regions concerned, and the scabbard slide has, at times, figured as a subsidiary point in extraordinary and sometimes naive theories of sweeping ancient intercultural borrowings based on historical generalizations on areas incidental to the author's scope. It is certainly clear at the outset that the geography of the scabbard slide does imply extensive inter-regional relations of one form or another—the migration of peoples, or of ideas, or simply of goods. The problem has been approached from each of these aspects, but never exhaus-

tively and never conclusively.

The fullest and most competent study of the scabbard slide to date is the late O. J. Maenchen-Helfen's article "Crenelated Mane and Scabbard Slide" (1957) in which the chronology, distribution, and significant function of the slide were partially outlined. But here, once again, principal emphasis was laid on the diffusion in Asia of a particular style of horse mane, cut into crenelations, and the slide was noted and discussed insofar as its appearance in various places seems to have coincided with the presence of the crenelated mane.<sup>21</sup> The crenelated mane has a meaning by itself—symbolic, probably metaphysical— independent of its form, while the scabbard slide has only distinct form and function, and its diffusion throughout Asia is not contingent upon the migration of an idea or belief which moves with people, but on the transference of technical knowledge which need not be related to such movements. The study here presented is concerned almost exclusively with the scabbard slide. The problems of mane and slide are only phenomenally interrelated and it is hoped that, among other aspects, the following pages will assist in the clarification and significance of this relationship.

The study of the scabbard slide will be presented in the following manner. I shall commence with a discussion of the scabbard slide in China. Since the majority of known examples may be presumed to come from China, or are, as in the case of those discovered in Korea, for the most part indisputably of Chinese manufacture, this body of slides forms ostensibly the broadest base from which to view the manifold problems of the slide in other regions and historical contexts where it is less well represented. Furthermore, it is from Korea, and most recently from China, that the majority of archeologically attested examples have emerged, and though the specific attention accorded these small objects in the published reports has often been disappointingly little or vague, it is sufficient at least to suggest a typological evolution of the scabbard slide in the Far East on the basis of which upper and lower chronological limits for its duration may be proposed.

Upon the basis of a study of the slide in China, it is hoped valid hypotheses relating to its origin and governing its diffusion as a whole may be offered. Accordingly, the problems relating to its appearance in other regions of Asia have been explored in some detail and an effort made to discern the factors involved in an evident greater or lesser interrelation of these areas in ancient times.

Finally, an attempt has been made to establish the origin of the scabbard slide, to deal with the broader historical currents in which the scabbard slide played a part and which, in some measure, may be elucidated or altered in our estimation by an understanding of the history and function of this object.



## Chapter 1

# The Chinese Scabbard Slide: Description

Each of the two basic forms of scabbard slide defined in the Introduction may be subdivided into several categories on the basis of the treatment of the outer surface, that is according to its decoration or lack of decoration. The first form (Form I), on which the upper plate is extended above and below the aperture on the under side, may be divided into five classes, with a sixth class into which a small number of atypical examples are grouped. These classes are designated in the Catalog as CP, CV, CR, CG, CH and CZ.<sup>22</sup> The second basic form (Form II), consisting simply of an enclosed aperture, is also represented by five distinct classes which are similar to those of Form I, and a sixth class into which are placed the comparatively few atypical examples. These classes are designated in the Catalog as XCP, XCV, XCR, XCG, XCH, and XCZ.<sup>23</sup>

The subdivisions of each of the two basic forms will be discussed separately, beginning with those of Form I. The order in which they have been placed does not imply chronological precedence. Relative stylistic and chrono-

logical relations of the basic forms and subdivisions will be discussed in the following chapter.

It would, of course, be unreasonable and unprofitable to attempt to account here for every minor variation in form and decoration. Of the hundreds of scabbard slides known to me from personal examination or from published photographs (which I do not presume to be more than a selection of those presently in collections throughout the world, but hopefully a representative cross-section), I have failed to discover two identical pieces. My aim is simply to outline the typological and stylistic criteria which may serve as a framework sufficiently comprehensive that the variants within each typological and stylistic group may with care be placed in their proper relation to the main developments. This I have attempted to do in the Catalog for the numerous scabbard slides which will not be individually discussed here.<sup>24</sup>

For an explanation of the descriptive terminology used in the following discussion, see Figure 95.

### FORM I: DESCRIPTION

#### Geometric Class (*CV.1–CV.103*)

The upper surface is decorated with a bilaterally symmetrical composition of several curvilinear geometric forms, the principal elements of which are elongated Cs, C-hooks, spirals and volutes, with subsidiary elements, at the sides or along the central vertical axis, consisting of incised lines of various forms and polygonal cross-hatched areas (e.g., Plate 3*b*). The surface of the decorated portion of the slide is cut away so that the principal elements of the composition rise in relief. Along the long sides there are thin, plain borders equal in height to the low relief of the geometric elements. The upper plate is slightly arched so that the side borders toward each end subside to the level of the relatively flatter decor surface. The composition is enclosed at each end by an incised line connecting the side borders, or, more rarely, the ends are open. At the forward end, there is an animal mask

facing upward which is executed in low relief with incised details.

At first sight the ornamentation of all the slides of this class appears virtually identical, but in actuality I have observed no two pieces identical in detail of pattern and execution. There are, moreover, two distinct systems of decor with only partially parallel development. In both systems, the same basic and subsidiary elements are employed; the distinction between them is to be noted in the way in which these elements are ordered and in the concept of the formation of the design as a whole.

#### TYPE I

*Stage a.* In the earliest stage of development the bilaterally symmetrical pattern is achieved without benefit of a defined central vertical axis.<sup>25</sup> The elements of the decor are densely ordered, relief is generally very low and

forms tend to be rendered by a beveled rise in the surface level defined along one side by an incised line which gives the impression of an embossed pattern on a soft surface and imparts to the forms a rudimentary quality of volume, or plasticity. From the inside center or lower end of each elongated C in the opposed pairs which alternately back upon the undefined vertical axis, or face toward it from opposite borders, a C-spiral is projected at right angles to the axis, toward either the borders or the axis, in relation to the position of the elongated C. The elongated Cs and C-spirals are rounded, almost semicircular, in shape. At corresponding intervals along each side border, small, flattened spirals extend downward and curl toward the borders. At one or two places along each side, a shallow incised line extends inward at right angles to the border a short distance and then turns upward to parallel the borders. At intervals along the undefined central axis are incised drop-shaped ornaments, pairs of incised lines connecting the backs of the elongated Cs across the axis, and cross-hatched triangles. The form and utilization of these elements remains generally constant throughout the development of Type 1. The background in Stage a tends to be quite flat, except for the slight elevations essential to the formation of the geometric shapes.

All of the characteristics of decor outlined above are not consistently evident on all of the slides which seem to belong to this type and stage. As we shall have occasion to observe again, there is a tendency particularly apparent in the first stages in the development of each class of decor for the jade carver to use the various elements more freely, a circumstance which suggests the initial phase in a process by which patterns became gradually more formalized and conventional. In the above stage we find border spirals curving upward and inward (CV.37), or downward and inward (CV.34), in conjunction with the more regular form. Circular, rounded knob grains, which figure with varying degrees of prominence in the decor scheme here (CV.4, CV.28, CV.29), tend to be eliminated from the later stages. A wider and freer range of volute forms, with back-curving spirals (CV.34) are employed.

The chief distinction between the above stage of Type 1 and subsequent stages is to be observed in the treatment of the surface and in the subtle development of the forms, all, or most, of which remain basically the same as to kind.

*Stage b.* The second stage, represented by a single example (CV.22, Plate 2a), is essentially transitional.<sup>26</sup> The central vertical axis is still undefined, the surface still charged with closely set elements and there are two circular, rounded knob grains along the axis. There are, at the same time, new characteristics which foreshadow subsequent developments. The pairs of elongated Cs are somewhat flatter and longer; the C-spirals perpendicular to the axis henceforward are uniformly attached to, or emanate from, the lower end of the elongated C. The flat-

tened border spirals consistently curve downward and outward toward the border. The pairs of incised lines joining the elongated Cs across the axis are straight, whereas in the preceding stage they had curved upward or downward, were set close together or drawn apart, were paired or single. The most significant change, however, is in the treatment of the surface which in the first stage had been quite flat. The surface area now is treated as an integral part of the ornamentation, is constantly sloping or undulating in one direction or another, creating a sense of volume, depth, and motion independent of the geometric forms; but at the same time interacting with these through the varied plastic volumes imparted to them by the movement of the surface. In richness and mastery of carving technique and feeling for the interaction of forms, this piece is without parallel among the slides of this class. The incised lines perpendicular to the side borders which curve upward near the end to parallel the border, as noted above, are here employed in the definition of an irregular, beveled plastic shape. At opposite sides of the lower end are incised lines projected for a short distance marking forty-five degrees in the right angles formed by the borders. These lines constitute a regular feature in the following stages.

*Stage c.* The third stage is closely related to the preceding in carving technique and utilization of the decor elements.<sup>27</sup> The following changes, however, may be noted: partial definition is usually given to the central vertical axis by a low, beveled ridge at those points where pairs of elongated Cs back upon the axis, joining above and below these Cs pairs of volutes on the axis; the pairs of incised lines joining the backs of elongated Cs across the axis arch downward; the incised lines perpendicular to the sides define the bottom and inward side of low relief rectangles.

*Stage d.* The changes described in the third stage carry over to the fourth,<sup>28</sup> but with some decline evident in the quality of the workmanship and feeling for the design. In some cases all elements appear to be incised (CV.6, CV.9). The pairs of incised lines joining pairs of elongated Cs backing upon the axis arch downward as before, but this element is missing from the majority of these slides. The surface has become flatter again, undulating very slightly between thinner, more elongated geometric forms now clearly defined by a beveled plastic relief line setting them apart from the surface and causing them to lack the volume afforded by the richer surfaces of the preceding two stages. In consequence of the elongation and thinning of the geometric forms, the elements are now more widely spaced and there is a corresponding increase in the amount of plain surface area. The pattern is more rigid, formalized, conventional, static. The standard of carving remains, on the whole, technically high, but the loss of the sense of actively interrelated forms and surfaces im-

parts a general perfunctory character to these scabbard slides.

*Stage e.* The final stage in the development of this type of slide is marked by a continued deterioration in the quality of workmanship.<sup>29</sup> The principal geometric elements in irregular relief line are set awkwardly on flat, or nearly flat, surfaces. There is a lack of uniformity in the utilization of the geometric elements that does not suggest early experimentation with forms, but rather a lack, or loss, of concern for, or surfeit with, the foregoing formality of design. The incised lines joining paired elongated Cs across the axis are missing in some instances; on one slide two separate sets appear, each reaching to the ridge of the partially defined axis and arching upward. This form, as well as pairs of incised lines between elongated Cs and the side borders (e.g., CV.30, Plate 3e), are characteristic of Type 2, as is also the border spiral curling upward and toward the border seen on CV.62 (a form not earlier appearing on slides of Type 1), in conjunction with the border spiral form normal on Type 1 slides. Such hybrid characteristics (see also CV.25, Plate 3d) and decline in quality of execution and form differentiation suggest perhaps the dissolution of Type 1 and/or its fusion with Type 2 which may have continued until a somewhat later date.

## TYPE 2

The stages in the development of this type are less clear, owing in part to the fact that the type is represented by a smaller number of slides. Certainly observable changes are less extensive than those of Type 1 and, as shall be seen, the chronological span is less broad. Slides of this type are characterized by a more formal arrangement of the decor elements, allowing less freedom in the placement of the elements and carving of the surface.

*Stage a.* In the earliest stage the central vertical axis is well-defined by a relief line, interrupted briefly at two points only by paired volutes opening downward.<sup>30</sup> The paired, elongated Cs are relatively flat; replacing the C-spiral proceeding at right angles to the vertical axis in Type 1 is another C, interlocked with the lower end of some of the vertically oriented Cs and turned in the opposite direction, but also paralleling the central axis. From the lower end of those Cs is not interlocked with others, a thin curved relief line is extended to the side border. On CV.24 incised lines of this form also join to the axis the upper ends of Cs backing toward the side borders. Along the borders at regular intervals flattened relief spirals curl upward and outward toward the borders, reversing the direction of these spirals on slides of Type 1. The thin incised lines partially outlining relief rectangles at the borders are missing entirely from this type. The elongated

Cs backing upon the central axis are joined to the axis by two pairs of downward-curved incised lines which reach but do not cross the axial ridge. (On CV.83 these lines appear to arch upward and cross the central axis, thus reflecting a feature of Type 1 and, with the C-spirals projected downward from the tips of the eyebrows, suggesting a transitional degree between Type 2, Stages a and b.) Elongated Cs backing upon the side borders are joined to the side borders by single pairs of downward-curved incised lines. Incised drop-shaped ornaments and cross-hatched polygonal ornaments along the central axis, common to all stages of Type 1, are likewise uniformly present throughout the stages of Type 2. The background is flat, or undulates only slightly between the principal elements of the decor which are raised in thin, rounded, essentially unmodulated relief lines, and this tends to emphasize the relatively larger amount of plain surface and more sparing application of ornamentation.

*Stage b.* A second stage is defined by the appearance of an unbroken central vertical axis which, however, may be interrupted at regular intervals to enclose lozenge-shaped areas of cross-hatching along the axis which are generally not enclosed by paired volutes.<sup>31</sup> Except for CV.14 (Plate 4d), the border spirals disappear. The vertical orientation of the pattern is emphasized by the protraction of the eyebrows of the animal mask downward along the sides, and by the principal C-forms which are thin and more elongated and are generally interlocked at each end with subsidiary C-forms or C-spirals extending upward and downward parallel to the vertical axis. The elongated Cs are joined to the axial ridge or side borders by pairs of incised lines in the manner of the preceding stage, but here these lines are straight or arched upward. From the curled tips of the animal mask's eyebrows, C-spirals curl downward, and between the eyebrows there is a somewhat squared, or triangular, area of cross-hatching. The background is flat or only slightly contoured between the principal elements raised in thin, rounded relief line.

*Stage c.* A final stage, closely allied to the foregoing, may be indicated by CV.18 (Plate 5c) and CV.94. The relief line in which the principal geometric elements have been executed on the flat surface has become extremely thin and somewhat unsteady, and a number of new forms, such as semicircles filled with comb-like striae (cf. CV.20, CV.65, CV.96) and thin straight lines drawn between the central axial ridge and the side borders, are introduced.

In general, the scabbard slides of Type 1 demonstrate a richer and more varied use of a limited number of geometric forms and possibly, linked to a more sophisticated feeling for the potentialities of interaction between surface and ornamentation, a higher standard of technical achievement. A tendency marked in the stages of Type 1 for these more complex compositional qualities to pass gradually into simplified, formal geometric patterns, is a

more evident characteristic of all of the slides of Type 2.

The development of the basic shape of the scabbard slide, of equal, or surpassing importance in determining the typological sequences of this functional object, has been taken into account in the formulation of the above stylistic categories based on surface decoration. But since developments in the basic form proceed in a reasonably regular fashion for all scabbard slides irrespective of surface ornamentation, I shall relate these to the parallel decor stages in the following chapter on typology and chronology. Likewise, those aspects of ornamentation and shape which seem to characterize later forgeries or archaistic imitations of the scabbard slide will be discussed after the chronological range of the authentic pieces has been established.

### Ridge Class (CR.1)

Among the Form I scabbard slides I have studied over the last decade, only one has an upper surface ornamented with a series of vertically oriented parallel concave grooves (Plate 5*d*). Clearly the object constitutes an anomaly among Form I slides, but it is easily accounted for by its obvious relationship to the more numerous Ridge Class scabbard slides of Form II. A description of this slide will, therefore, be more relevant when seen in the context of related Form II pieces, and I have included it in the later discussion of these scabbard slides.

### Grain Class (CG.1–CG.76)

Scabbard slides belonging to this classification of decor do not suggest stylistic sequence independent of chronological considerations. Range and variation in decor are more limited than in the Geometric Class.

In their simplest form, slides in this class are decorated with small knobs or grains set in straight rows covering the entire surface, or in rows offset vertically or horizontally to form diagonals to the undefined vertical axis, and are raised above a recessed ground entirely enclosed by a thin raised border, or framed thus only lengthwise. The pattern is achieved by first laying out on the surface a reticular screen of parallel lines in two or three directions which, intersecting each other, divide the surface into small polygonal areas from which the individual grains are carved. Generally, the surface area between the grains is cut away to a depth sufficient to obliterate all traces of the deeply cut reticulation by means of which the pattern was laid out, but in a number of examples prominent traces of these lines remain.<sup>32</sup> The presence of these lines on jade carvings may in some cases be imputed to hasty or careless workmanship, but in other instances the lines are definitely conceived as an integral part of the finished design.<sup>33</sup> The use of stencils or dies for laying out and

carving the surface decoration on slides of this type may be presumed from the perfect regularity of the patterns, but is even more evident in the occasional misorientation of the rows of grains and consequent appearance of partial grains at the side borders.<sup>34</sup>

The grains are of three types: a tight, modeled spiral or comma-grain, the tail of which may terminate level with the background surface or be extended as a graduated incised line continuing below the surface level (Plate 6*b*, CG.19); circular, rounded knob-grains (Plate 6*e*, CG.66); and square knob-grains (Plate 7*a*, CG.11). In a number of examples where the surface has been poorly or improperly carved, grains of irregular polygonal shape have been formed. Small cone-shaped grains may appear on a single example cast in glass (CG.27).

On the surface between the grains, incised linear patterns (distinct from the above basic reticulation) of two types are found: short incised lines interlocked at right angles to form a pattern of diagonal stepped Ts (CG.6, Plate 6*d*, CG.8); and curved incised lines interlocking pairs of grains and forming a diagonal step pattern (e.g., CG.12, CG.14 [Plate 6*f*], CG.17, CG.18). The incised lines of the latter type are sometimes arranged to form patterns of a different sort (e.g., CG.21, plate 7*b*, and CG.30).

The animal mask, present on every scabbard slide of the preceding Geometric Class (except CV.71, a late imitation), occurs rarely on authentic jade slides with grain pattern;<sup>35</sup> however, of the five glass scabbard slides belonging to the Grain Class, simplified, highly stylized animal masks facing upward have been cast at the upper end of three.<sup>36</sup> This distinction on the part of the glass scabbard slides is neither clearly typologically nor chronologically significant, and it seems possible, therefore, that the production of glass scabbard slides may have been governed by a convention in part distinct from that governing the production of jade slides. The use on glass slides of a decorative form of evident rarity on jade slides of this class suggests, however, that objects cast in glass may not have served simply, or exclusively, as inexpensive substitutes for jade, as has often been maintained,<sup>37</sup> but may have constituted a somewhat distinct and separate province of decorative or symbolic expression.<sup>38</sup> Animal forms of a different type appear on only three slides of this class. On CG.6 (Plate 6*d*), a sinewy bird-headed serpent form in openwork silhouette is projected from the right side of the scabbard slide, and on the forward edge of CG.8 and CG.28 a small figure of a quadruped in relief has been carved.

### Hydra Class (CH.1–CH.87)

The slides belonging to this class employ only a single principal decorative element, the hydra.<sup>39</sup> They may be

divided into two groups: those on which a single hydra appears (CH.5, Plate 8d); and those on which two, more rarely multiple, hydra forms appear (CH.8, Plate 9b). The latter compositional type has been called "the hydra watching its young one" owing to the placement of a small hydra at the upper end, or on the forward edge, and a larger hydra below with head turned toward the smaller form.<sup>40</sup> Generally, the quadruped hydra forms are curved in relief considerably higher than that used on the Grain or Geometric slides. At times, the figures are partially, or almost wholly, undercut from the surface so that they are virtually sculptures in the round (CH.14, Plate 9d). On a few examples, however, the hydra form is executed in very low relief (e.g., CH.11, Plate 9a). Unlike the surface decor of the preceding classes, the hydra is raised above the surface of the slide rather than being carved into it. Borders, therefore, are somewhat less integral and frequently consist simply of faintly incised lines along the sides, with ends open, or of depressed or negative borders along the slides. In only a few cases, and these are the slides on which the hydra has been carved in low relief, partially from the surface of the slide, are

low relief borders fashioned.

The body of the hydra assumes the form of an extended S and is frequently ornamented with incised or sculpted lines suggesting musculature, claws and various forms of body patterning. The tail is generally long and may be divided into two or more curved "stems." When a single hydra only is employed, the body extends upward from the lower end of the slide with the head at the top, looking up, or turned to look back down the slide. The normal body position of the larger hydra on the dual hydra slides is the same as on the single hydra examples, but with the head invariably facing upward toward the smaller hydra which faces downward. I am acquainted with only one seemingly indisputably authentic example (CH.6, Plate 10a) on which the smaller hydra has been placed at the lower end facing upward toward the larger hydra extending upward, but with back-turned head. Among the unquestionably authentic slides of this class, those with dual, or multiple hydras are the rarer.

The hydra scabbard slides, like those of the preceding class, do not suggest a descriptive stylistic sequence independent of typological and chronological considerations.

## FORM II: DESCRIPTION

The scabbard slides classified as Form II, that is those consisting of an enclosed aperture only without the forward and rear extensions of the upper plate, here identified by the class prefix X, present a number of special problems. As a type they are known only from China, and from those regions bordering China—Korea, Inner Mongolia—where Chinese influence or domination may be presumed to account for their presence. They are considerably more scarce than slides of Form I.<sup>41</sup> Probably, this evident rarity is due in part to the fact that they are of an uninteresting, commonplace form, and less often collected or published.<sup>42</sup> But the fact that only three jade slides of this type found in controlled excavations in China have thus far been published. (XCG.1, XCG.2, XCG.15), as opposed to a considerably larger number of Form I slides, suggests that they were indeed less common in China.

No special or peculiar characteristics are consistently evident in slides of this form which would facilitate distinguishing the true slide from objects of similar shape intended for different uses. Maenchen-Helfen, in his recent and thus far most thorough study of the scabbard slide,<sup>43</sup> did not recognize this type, nor was it recognized by any earlier author treating this subject, owing doubtless to the fact that their efforts were directed toward attempts to establish the relationship of the scabbard slides of Form I from European Russia to their counter-

parts in China. The three examples excavated at Huihsien, however, found virtually *in situ*, on or beside swords, in a position where slides of Form I have more regularly been found, as well as the earlier published examples from Inner Mongolia (XM.5) and Korea (XK.1), leave no doubt that objects of this shape served the same function as those of the preceding form.

Commonly objects of this type have been identified as sword-guards in spite of the fact that the aperture is rather too large and incorrectly formed to accommodate snugly the tang of a sword and shoulder of the blade, and that jade sword-guards of a single and wholly different form only have been found attached to swords recovered from excavations.<sup>44</sup> Other authors have believed them to be ferrules, or fittings about the mouths of scabbards,<sup>45</sup> though again no scabbard with jade ferrule has ever been recovered and the shape of the mouth of the relatively numerous, known, ancient scabbards is altogether different from that of the aperture of these jade objects. Their identity as scabbard slides has been recognized by only some compilers of the reports on excavations where such objects have been found and by a few authors of catalogs of jade.<sup>46</sup>

Scabbard slides of Form II are of three distinct profile types (Figure 1).

Profile Type A, by far the most common, is attested to by XM.2, XM.3, XM.5 (all Type A-1) excavated, or

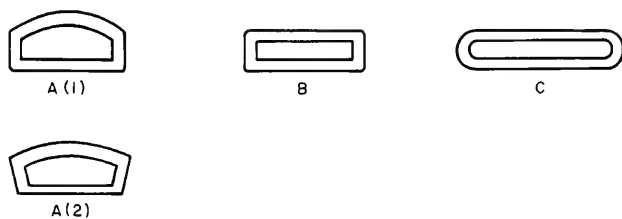


FIGURE 1.—Form II scabbard slide profile types.

found, in Inner Mongolia (*XM.2* and *XM.3*, Plate 24*c-d*) and possibly by *XCG.1*, *XCG.2*, *XCG.15* (all Type A-2?), from Hui-hsien, though the poor photographs of the latter render verification of this impossible. *XCH.16* (Plate 23*d*), of unknown provenance but certain authenticity, also exhibits Type A-1 profile. Profile Type B is attested to by *XK.1*, excavated in Korea. Probably those with profile Type C are not to be classified as scabbard slides. They appear in each case to belong to periods rather remote from those of the first two profile types and generally exhibit a characteristic which renders their use as scabbard slides unlikely, namely carved ornamentation on both upper and lower exterior surfaces (see *XCZ.1*, *XCZ.2*, *XCZ.3*, Plate 24*b*). Their use is not known, but some appear to have been worn in recent times as ornaments at the waist, passed over a belt or sash. On at least two examples with profile Type A (*XCV.1*, *XCH.1*, Plates 22*c* and 23*b*), there is a very short projection of the upper plate above and below the aperture, a trait which suggests relationship to slides of Form I such as *CG.1* (Plate 6*a*), with thick projection of the upper plate below only, and *CR.1* (Plate 5*d*) and *CG.19* (Plate 6*b*) with very short projections of the upper plate above and below.

The very existence of the above-cited problems concerning the limited geographical distribution of Form II scabbard slides, the varied aspects of their shapes and ambiguous relationship to Form I slides, has, I think, a significance which I shall attempt to clarify in Chapter 3. Included in the descriptions below are the examples from the Chinese border regions as their form reveals their dependence on, derivation from, or close relationship to, Chinese varieties: *XK.1* (Korea), *XM.1*, *XM.2*, *XM.3*, *XM.4*, *XM.5* (Inner Mongolia).

### Geometric Class (*XCV.1*–*XCV.11*)

Here, as with each category below, the examples which may reasonably be considered authentic are so few in number that only the vaguest comparative reference to slides of Form I is possible. The upper surfaces of the slides of this class, all of which belong to profile types A and B, are decorated with bilaterally symmetrical compositions of addorsed and confronted elongated Cs, with

laterally projected C-spirals perpendicular to the central vertical axis, similar to Form I, Class CV, Type I. With the possible exception of *XCV.2*, which may be an archaic piece manufactured in imitation of the authentic Chinese slide, the Form I, Geometric Class, Type 2 decor is not found. At intervals along the side borders, flattened spirals curl downward and outward toward the borders. At one end, presumably that intended as the upper, is an animal mask, facing outward, in low relief with incised details. Along the central axis at one or two points are pairs of confronted volutes. The central vertical axis appears to be undefined on one example only (*XCV.1*, Plate 22*c*); the open ends and narrow, plain, side borders separated from the ornamented area by an incised line are similar to those on *XCV.2*. The other slides of this class (here, *XCV.3*, *XCV.4*, *XCV.6*, *XCV.11*) have raised, beveled borders and raised, rounded axial ridges which may project slightly beyond the open ends of the decorated surface. The central axis here is not conceived as forming a part of the surface pattern, but serves clearly to divide the upper surface into halves. It is not terminated at the animal mask, as is the integral axial ridge on the Form I slides of this class, but divides the mask likewise into halves. On one example (*XCV.6*), the vertical axis is marked with incised slanted lines suggestive of a simplified rope pattern. None of the slides of this class is sufficiently well published to determine the manner in which geometric elements and surface have been carved. From what little can be ascertained from the photographs and rubbings, the background surfaces appear to be laterally arched between the borders and the axial ridge (in combination with the normal vertical arching of profile Type A), but are otherwise unmodulated. The principal elements are rendered either as semi-plastic forms in low, flat relief (*XCV.6*), or are perhaps incised only (*XCV.4*, *XCV.11*). The central axis and border forms on these slides link them closely to some of those in the following class.

### Ridge Class (*XCR.1*–*XCR.10*; *XM.2*, *XM.3*, *XM.5*)

The upper surfaces of these slides are decorated with only five types of ridges. Other arrangements of the basic decor elements are likely since the number of Ridge Class slides included here is small. It is a category of ornamentation represented among the slides of Form I by a single example: *CR.1*.

1. The first type of ridge pattern, represented by two examples only, is clearly related to the slides of the above Form II Geometric class. *XM.2* (Plate 24*c*) is of profile Type A, while *XCR.4*, which is of inferior quality and almost certainly not authentic, has Type-C profile. The

authenticity of the type as a whole is confirmed by *XM.2*, which is carved from wood and was found in a reliable, semi-datable context in Inner Mongolia, in the vicinity of Kara-khoto. The upper surface is laterally arched to either side of a raised, rounded, central vertical ridge. The surface is otherwise plain. The central ridge and borders of *XM.2* are cut flush with the ends. **XCR.4** combines characteristics of this and the following type: a square groove is carved along the inside of each border and along each side of the central ridge, and the surfaces to either side of the central ridge are concave.

2. The slides of this type, represented by three examples, are all of profile Type A. Incised parallel grooves or narrow ridges divide the surface lengthwise into three (**XCR.1** and *XM.5*), or five (**XCR.7**), concave bands. These bands are either of equal width (**XCR.1**), or the outer bands may be narrower than the inner (**XCR.7** and *XM.5*). The authenticity of this sub-type is confirmed by *XM.5*, excavated by Ono and Hibino in Inner Mongolia. Form I slide **CR.1** belongs to this group.

3. The slides of this type, again represented by three examples (**XCR.2**, **XCR.3**, *XM.3*), are all of profile Type A. Along the sides are raised, rounded or squared, borders, cut off flush with the ends. The surface of the upper plate between the borders has a slight lateral arch, but is otherwise plain. Authenticity of the type is confirmed by *XM.3* (Plate 24*d*), which is carved from wood and was found in the same region as *XM.2* above.

4. The authenticity of the fourth type is not confirmed by a reliably attested specimen. It is represented by three examples (**XCR.5**, **XCR.6**, **XCR.8**), of which at least two (**XCR.5**, **XCR.6**) belong to profile Type A, while the profile type of **XCR.8**, has not been determined. The upper surface of each is divided lengthwise into seven bands of equal width. Alternate bands are depressed below the surface. The edges of bands and grooves are squared. The two bands at the borders and two of the five interior bands are raised. The surfaces are flat and otherwise unornamented. **XCR.10**, with a central convex band bordered by two concave bands of equal width, constitutes a subtype within this group.

5. A fifth type, represented by a single example (**XCR.9** Plate 22*d*), is closely related to 1 and 3 above. At each side are ridge borders framing lengthwise the upper surface marked by a deep axial groove replacing the relief ridge of the first type. The plain surface, divided by the groove into two rectangular biconvex panels, is similar to that of slides of the first type.

### Grain Class (*XCG.1*–**XCG.16**)

As far as can be determined from published photographs and the available information on the scabbard

slides of this class, all belong to profile Type A.<sup>47</sup> The class is attested to by the three scabbard slides discovered *in situ* at Hui-hsien (*XCG.1*, *XCG.2*, *XCG.15*), but unfortunately these are so poorly published and so briefly described that nothing concerning them beyond the existence of a grain-pattern surface decoration can be confirmed. In all cases, the decor consists of fine, circular, rounded, closely set rows of knob grains, offset horizontally to form diagonals. The majority are provided on all four sides with thin, plain, raised borders (*XCG.4* [Plate 22*e*], *XCG.5*, *XCG.6* [Plate 22*f*], *XCG.7*, **XCG.16** [Plate 23*a*]). Only one example appears to have no borders (*XCG.3*), in which case the small grains presumably stand in relief above the general level of the surface of the plate. On those examples where traces of pattern-forming background reticulation remain (*XCG.3* and *XCG.6*, Plate 22*f*), these lines have been laid in three directions. On one example (**XCG.9**), the screen only has been applied to the surface and individual grains not carved from the irregularly shaped polygonal areas formed by the asymmetrical junction of the screen lines.

### Hydra Class (**XCH.1**–**XCH.17**)

The authenticity of Form II scabbard slides of the Hydra Class has not yet been confirmed by excavated examples, but the existence of this class among Form I slides and of a somewhat proportionately equivalent number among slides of Form II suggests that this group may be reliably included. All three profile types are represented among the slides of this class: profile type A (**XCH.1**, **XCH.2**, **XCH.3**, **XCH.4**, **XCH.5**, **XCH.9**, **XCH.13**, **XCH.16**, **XCH.17**); profile type B (**XCH.6**, **XCH.8**); profile type C (**XCH.7**). The upper plate of **XCH.1** projects slightly beyond the aperture walls at both the upper and lower ends, but its intrinsic shape is that of a Form II scabbard slide. Among the slides of this class sufficiently well published or studied, only three (**XCH.1**, **XCH.16**, **XCH.17**) may be reliably authentic. One of the three (**XCH.17**, Plate 24*a*) is decorated with the body of a single hydra in a contracted S with the head presumably indicating the upper end. **XCH.1** (Plate 23*b*) is decorated with two confronted hydras, the so-called "hydra watching its young one" pattern. The smaller hydra is at the top, the larger below. The figures, in moderately high relief, are softly, somewhat indistinctly, contoured. Body contours and facial details are partly sculpted, partly incised. **XCH.16** (Plate 23*d*) is decorated with parts of at least two fabulous creatures in low relief. The animal forms are typical of Late Eastern Chou design, and this slide is certainly the earliest and finest of this group. There are thin, plain, only slightly raised and rounded borders on **XCH.16**; the surfaces are otherwise

plain The smaller hydra on **XCH.1** emerges from the surface, and small ripples, as though in water, surround the body where it emerges. No significant variant features are represented among the other slides of this class.

One of the two plain Form II scabbard slides (**XCP.1**) has been published in profile only (type A), and it may properly belong to the Ridge (**XCR**) Class. Since **XCP.2** is clearly of recent manufacture, the existence of authen-

tic slides belonging to this class must remain in doubt. **XK.1**, excavated at Lo-lang, Korea, contains surface decoration of some sort, but from the description of it as a form of "tracery" it is not possible to determine to which category of decor it may belong. It may well be that the piece was manufactured outside China, and the decor, therefore, may not wholly conform to Chinese styles. It has a type-B profile.

## SUMMARY

The Chinese scabbard slide, of which the majority of extant examples have been carved from jade stone, is of two distinct forms: (1) a rectangular enclosed aperture with the upper plate extended above and below the aperture, and (2) a simpler type consisting of an enclosed rectangular aperture only. Scabbard slides of the first form, far more numerous, may be divided into five classes on the basis of the carving of the outer surface of the upper plate: (A) the upper surface decorated with a bilaterally symmetrical composition of various curvilinear geometric forms, with an animal mask at the upper end facing outward; (B) the upper surface decorated with a series of parallel, vertically oriented, concave bands (represented by a single slide only); (C) the upper surface covered with relief comma-shaped, hemispherical, or square flat-topped knob grains with an animal mask, facing outward, appearing rarely at the upper end; (D) the upper surface decorated with single, dual, or multiple hydras in either low, moderate, or high relief, with body contours and patterning partly sculpted, partly incised;

(E) a fifth class on which the flat surface of the upper plate is polished, but otherwise plain. Scabbard slides of the second form, numerically less common, may be divided into four, possibly five classes: (A) the upper surface decorated in a manner similar to Form I, Class CV (A above); (B) the upper surface decorated with various forms and combinations of parallel, vertical, relief bands or engraved lines; (C) the upper surface covered with a pattern of hemispherical knob grains; (D) the upper surface decorated with single or dual hydras in the manner of Form I, Class CH (D above); (E) a possible fifth class on which the upper plate is undecorated. The relatively few scabbard slides which may not be placed in one or another of the above classes (classes CZ and XCZ) do not introduce decorative elements or schemes typologically or chronologically inconsistent with other contemporary objects fashioned from the same materials, nor introduce any consistent criteria which would invalidate the above classification of ornamentation.



## Chapter 2

# The Chinese Scabbard Slide: Chronology

Individual scabbard slides have been dated as early as Late Eastern Chou (ca. 450–250 B.C.) and as late as the Chi'ien-lung 乾隆 period (1736–1795) of the Ch'ing dynasty, thus intimating a chronological range of at least two thousand two hundred years.<sup>48</sup> As shall be seen, in terms of individual preserved specimens, a chronological range of such vast extent is certainly correct. But the fact that the function of this object, even its name, has been unknown, or the subject of speculation, over a period of at least the last thousand years justifies taking a somewhat narrower view of its meaningful chronological limits.

Writing in 1912, Berthold Laufer stated: "The specimens in my collection are all of the Han period, judging from material, technique and ornamentation. So I am inclined to believe that the type itself is not older than this epoch, and that its formation may be credited to the Han."<sup>49</sup> Similar opinions have been expressed by H. Rivière, Pelliot, Hommel, and, as late as 1957, by S. H. Hansford.<sup>50</sup>

Attempts at the formulation of a systematic typology and chronology of ancient jades have been few in number until recently. The chronological touchstones provided by excavated pieces were exceedingly rare.<sup>51</sup> Owing to the conservative nature of the jade carvers' art and traditional repertoire of shapes and decorative motives, convincing criteria for distinguishing jades of later periods from those of the earliest periods have been slow to evolve. Inscribed pieces are relatively rare before the Ming dynasty and possibly do not exist for those periods under primary consideration here. Furthermore, jade interacts more subtly than many materials with its environment so that the age of a piece cannot be determined from its physical condition unless provenance and nature of burial or preservation are known. To some extent, at least, jade may be "restored," stains produced by contact with other objects and minerals in the soil removed, and surface decomposition polished away. Likewise, the skilled forger has at his disposal numerous ways of simulating age by discoloring the stone and artificially decomposing the surfaces by application of acids or heat.<sup>52</sup>

To date, the most ambitious and rewarding stylistic and chronological studies of ancient jade have been based in part upon comparisons with bronzes where the evolution of decor styles has been more convincingly demon-

strated, and by this means a basic chronology for ancient jades tentatively established. Owing to an intensive archeological program instituted in China after 1950, we are in an incomparably better position today to assess the chronological range of the scabbard slide in China. Before this time only the scabbard slides belonging to the Han colony at Lo-lang in Korea, a single specimen from Viet-Nam, and those from a Han-dynasty locality in Inner Mongolia had been discovered and recorded under conditions of controlled archeological excavation, the latter reported in an extremely rare publication.<sup>53</sup> Now, several more slides have been excavated under controlled conditions in different regions of China, and probably the tombs from which these were recovered very nearly represent the full span of time during which the scabbard slide in China served its intended function. This recent and wider range of excavated scabbard-slide types makes it possible to expand the reliably authentic assemblage by a fairly large number of unattested pieces which may be related to the range of shapes and decor observed among the excavated slides. Whenever possible, emphasis in the following sections on the typology and chronology of the scabbard slide has been placed first of all on the examples recovered in archeological context, and, secondly, upon consideration of forms, carving techniques, and decoration of jades of different types also reliably attested, and finally by reference to comparable pieces in older, published collections.

No scabbard slide with decor characteristic of Middle Chou (ninth-seventh centuries B.C.) has been found and Maenchen-Helfen's contention that "it is extremely unlikely...one will ever appear" is strongly supported by the evidence afforded by the 440 slides included in the present study.<sup>54</sup> Virtually all of the decorative elements represented on the scabbard slides of all classes, however, appear during the Late Eastern Chou period. Stylistic distinctions between early and late slides are to be noted chiefly in the organization of the decorative themes and changes in carving techniques.

More revealing of the typological and chronological development than an exhaustive cataloging of stylistic comparisons could be is the study of the alteration or development in the basic shape of the scabbard slide. In

this context the stylistic progression, insofar as it appears to coincide with logical developments in form, is more

meaningful. The following discussion concerns slides of Form I only.

## LATE EASTERN CHOU

On the basis of available reports, to date eight scabbard slides have been excavated from tombs of this period.<sup>55</sup> Three classes of decor are represented: Geometric, Grain, and Hydra. Only the Ridge and Unornamented classes are lacking from the group. Though found in only three localities,<sup>56</sup> the broad distribution of these sites indicates that the slide was probably in use throughout most of China during at least part of this period (Figure 2).<sup>57</sup> The presence at Ch'ang-sha and at Lo-yang of slides with all three classes of decor suggests that these classes may have been in simultaneous use over the wider area. None was found in a context that immediately suggests a relatively precise date within the period. Four of the slides (*CG.1*, *CG.58*, *CH.1*, *CH.2*) were found in association with their swords.

The bronze sword found in association with *CH.1* (Figure 3),<sup>58</sup> 16–26 inches long, is of the type described by Max Loehr as the "classic" Chinese sword, developed during the late Chou period.<sup>59</sup> Among the swords of the Werner Jannings collection is one nearly identical to it in length and form, placed by Loehr in his category Chou IV, or later, that is, close to the end of Late Eastern Chou.<sup>60</sup>

The sword to which *CH.2* (Figure 4) apparently belonged is of a more unusual type, with long, narrow, double-edged iron blade and tubular bronze hilt with a concave, circular pommel socket and jade guard decorated on one side with an animal mask and C-shaped spirals, and on the other side with a hydra-figure carved in relief. The hilt, probably hollow, is believed by Loehr to be the precursor of the hilt on the classic sword, solid with ringed grip.<sup>61</sup> But the jade guard which imitates the form of bronze guards found on the later classic sword type (e.g., Figure 35), with rounded shoulder and depressed central saddle, clearly indicates that this particular specimen constitutes a later continuation of a hilt type, perhaps by then generally replaced by the solid handle girt by two or three bronze rings cast with the hilt. The extraordinary combination of bronze hilt with iron blade suggests that the sword may be a transitional type between Chou swords,<sup>62</sup> almost exclusively of bronze, and the full iron sword which seems not to have become common much before the end of the Late Eastern Chou period.<sup>63</sup> The transition from bronze to iron weapons seems to have followed a similar course at an earlier time in the Minusinsk and Upper Yenisei regions of southern Siberia.<sup>64</sup> Use of an essentially non-functional jade guard projecting beyond the edges of the blade suggests a furth-

er development from the late Chou classic sword on which the guard, cast with the blade and rarely projecting much beyond the edges of the blade, served as a solid base for the blade, with hilt mounted in the saddle between the raised, rounded shoulders of the guard (cf. Plate 9*d* with Figure 35). Separately cast projecting guards of bronze, which become during the following Han dynasty a common feature of iron swords, are only rarely encountered on swords of late Chou date.<sup>65</sup> It is unlikely that jade guards of the same basic form precede the separately cast bronze types. The length of this sword, 34.96 inches also suggests the transition between the bronze swords of late Chou with lengths seldom exceeding 20 inches and even longer swords of iron commonly in use during the Han dynasty. While William Watson has pointed out the tendency for older forms of the sword to coexist with later varieties,<sup>66</sup> the rarity of combining parts of iron and bronze in sword manufacture, at least as regards China, suggests that the hilt may be older than the iron blade which was secured to the bronze hilt after the jade guard had been passed over the tang of the iron blade and fixed in position. The jade guard could not have been placed in any other manner. Our concern, then, is logically more for the date of the blade than of the hilt, and both the material of its manufacture and its length point to a date close to the end of the Chou dynasty.

The bronze weapon associated with *CG.1* (Figure 5) is too short to be classified as a sword. The blade is only 6.42 inches long; the total length of the weapon, 9.84 inches. The solid bronze hilt with three rings and flat, circular pommel socket, resembling the handle of the classic Chou sword, is mounted on a thin rhombus-shaped plate serving as the base of the blade, a feature derived from the earlier swords with hollow handle.<sup>67</sup> The flat, thin blade, splayed slightly at the upper end, is strengthened by a central vertical rib on either side which lessens in height as it approaches the point, receding into the flat tip. More suggestive of date than is this atypical weapon is a wooden sword with which one of the small, painted, wooden human figures in the tomb had been equipped (Figure 39).<sup>68</sup> The actual length of this miniature sword, carved together with its scabbard (furnished with an imitation of a jade chape), is 9.84 inches, but the narrow form indicates that a thin rapier-type sword of much greater length is imitated. Max Loehr is inclined to believe that narrow swords nearly a meter in

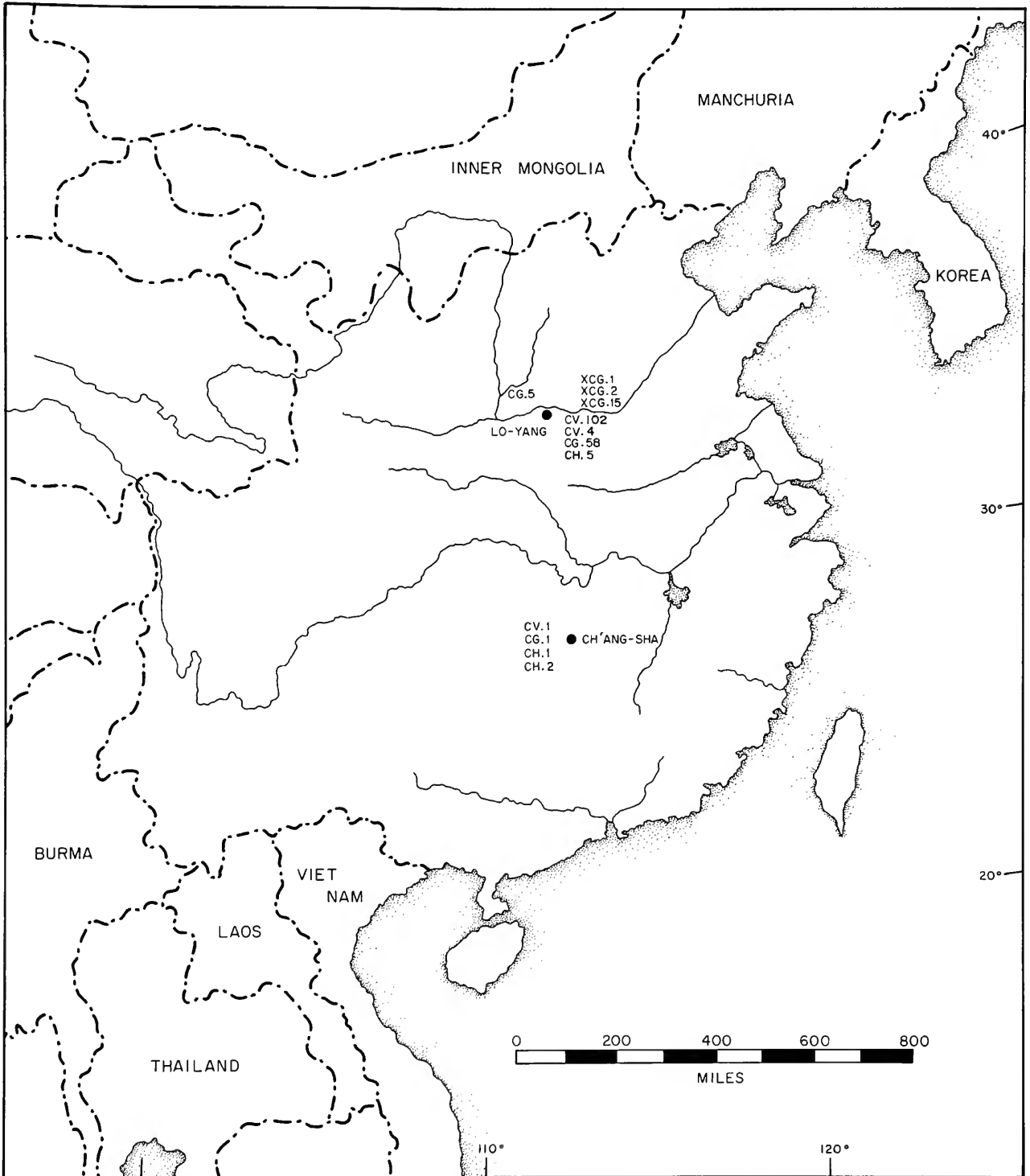
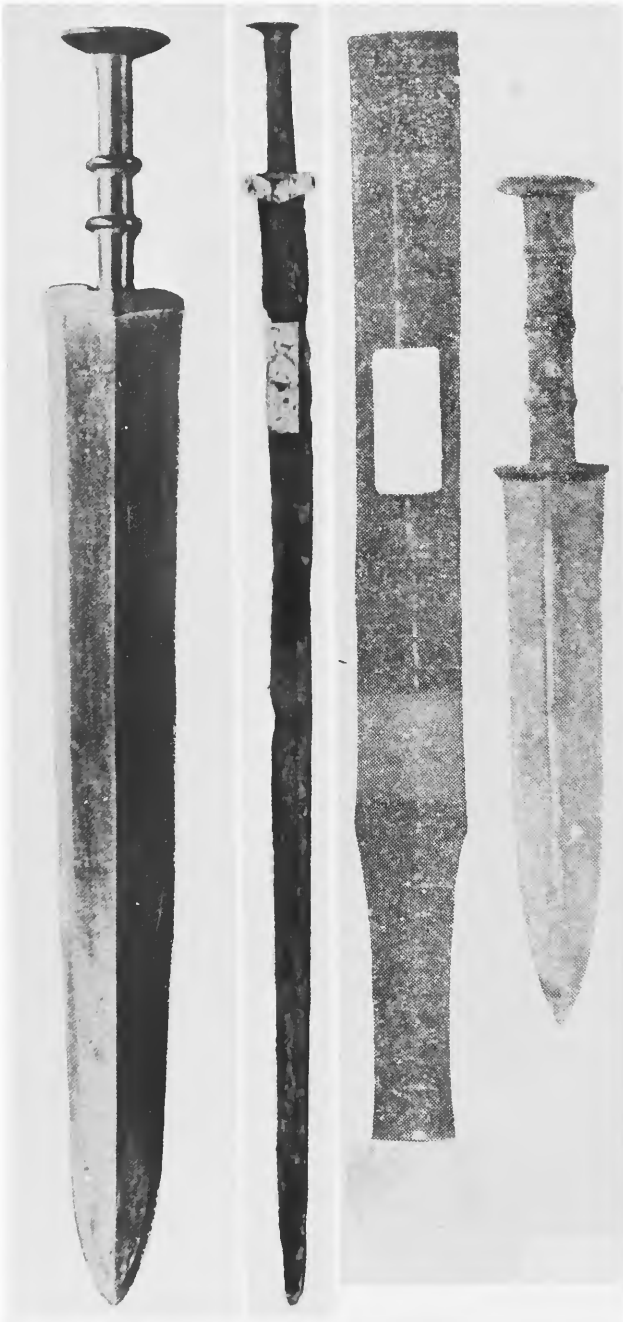


FIGURE 2.—Distribution of Late Eastern Chou excavated scabbard slides.



FIGURES 3-5.—Left, bronze sword excavated with *CH.1*. [After *Ch'u wen-wu* (1954), plate XXXVIII,74 (1).] Center, sword with bronze hilt and iron blade excavated with *CH.2*. [After *Ch'u wen-wu* (1954), plate XXXIX,75 (1).] Right, bronze weapon excavated with *CG.1*. [After *Hu-nan sheng wen-wu kuan-li wei-yüan-hui* (1957a), plate III,5.]

length, such as is suggested by the proportional relationship of this wooden imitation to the human figure, are to be placed toward the end of his Chou IV category, probably not before the end of the fourth century B.C.<sup>69</sup>

Some ambiguity surrounds the sword associated with *CG.58*; probably it is the small double-edged bronze sword with unusual rectangular jade guard and round jade disk pommel inlay (both ornamented with a plastic comma-spiral similar to that of the slide) described in the Catalog. According to present estimates, the artifacts from this tomb span several centuries. A date falling somewhere between the end of the fifth and fourth centuries B.C. is, however, indicated for the two swords found in this tomb, and this scabbard slide may, therefore, be the earliest of the four Late Chou slides recovered with swords.

The evidence thus afforded by the above four scabbard slides and their associated sword points, in the main, toward the later rather than the earlier part of the Late Eastern Chou period. In that sense, a date somewhat more precise than that suggested by the decor of the slides is indicated, for sufficient criteria is still lacking for distinguishing more than the general characteristics of jade objects within given historical periods.

### Grain Class

Of the three scabbard slides with grain pattern (*CG.1*, *CG.5*, *CG.58*), only *CG.1* (Plate 6a) and *CG.58* are sufficiently well published to determine the type of grains decorating the upper surface. These are grains of the comma-spiral variety which first appear on jades of Late Eastern Chou and are a special and widely employed decorative feature of this period,<sup>70</sup> being largely supplanted by various forms of the knob grain in the Han. The grains, in both right and left spirals, are fully modeled; the surface is depressed around each grain. The rows of grains are oriented horizontally (*CG.1*) in contrast to the later more normal vertical orientation, or have no apparent order, but perhaps contain some symmetrizing elements (*CG.58*). Among the unattested slides are two others with a similar surface decoration of comma-spirals: *CG.19* (Plate 6b) and *CG.15* with both right and left comma-spirals arranged in somewhat irregular rows offset horizontally. It may be presumed, from the irregular spacing and absence of screen lines, that the grains on *CG.1*, *CG.19*, and *CG.58* were applied without aid of a symmetrizing die. On these scabbard slides the comma-spirals begin as incised lines below the surface level, mounting into relief as the spiral contracts toward the center. The grains on *CG.15* are almost wholly above the surface and probably were applied with the aid of a die. In general, grains of the former type, in conjunction with a less ordered arrangement on the surface, precede those

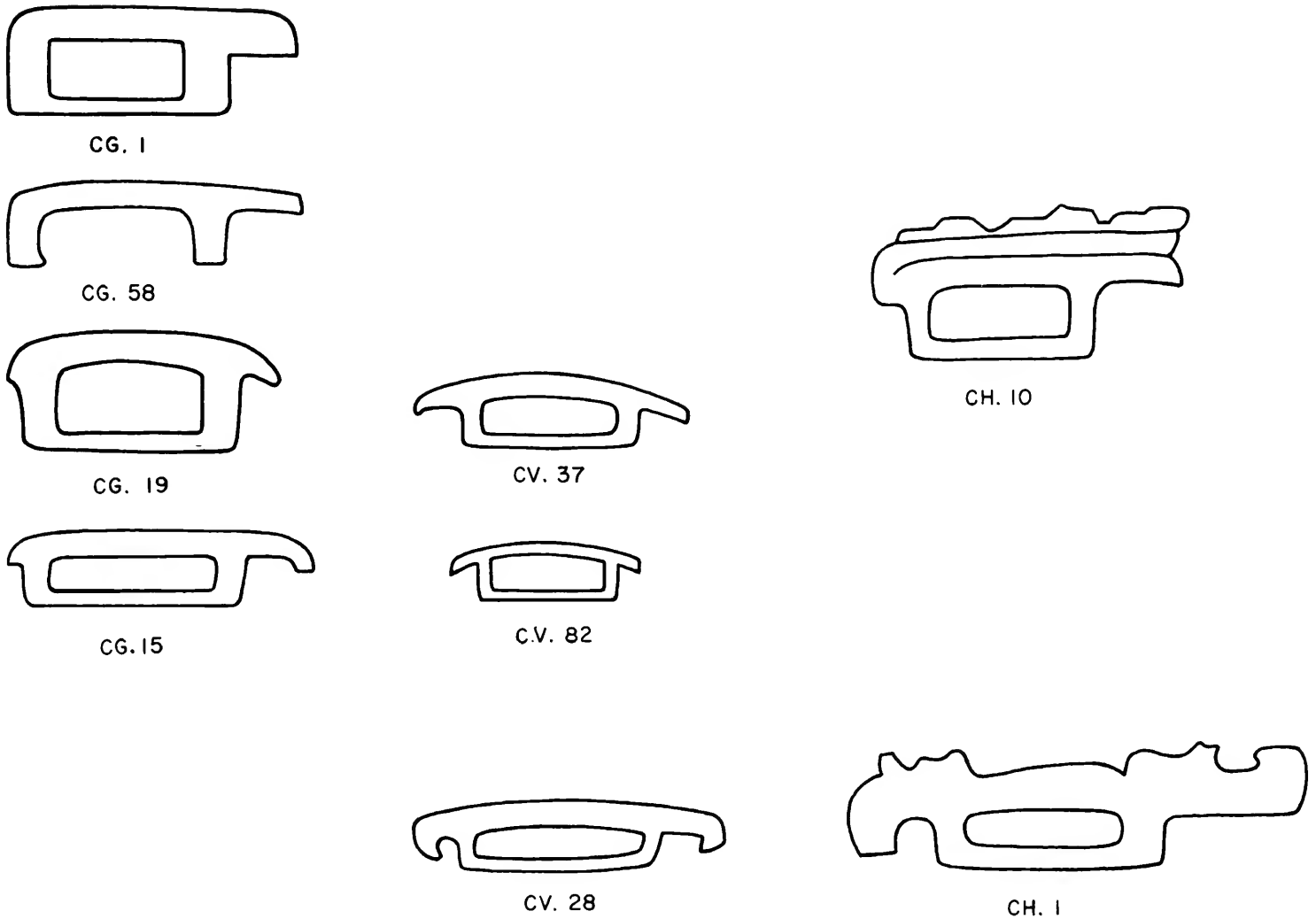


FIGURE 6.—Chinese Form I scabbard slide profile typology: Late Eastern Chou.

of the latter type.<sup>71</sup>

The evident typological order of these slides is reflected in significant profile changes (Figure 6). *CG.1* consists of a deep aperture enclosed by thick, sturdy plates. The flat upper plate is not projected beyond the aperture at the forward end, but curves inward to merge with the forward aperture wall. Below the aperture, there is a short straight extension of the upper plate. If the depth of this extension is considered to represent the depth of the upper plate, it will be noted that the aperture penetrates upward into the upper plate from which it is in part carved. A rubbing only of the profile of *CG.58* has been published, but from this, and from the slightly oblique top/profile photograph of the piece, it may be seen to closely resemble that of *CG.1*. On this less massively pro-

portioned piece, the aperture does not appear to penetrate the upper plate which is almost imperceptibly arched, curving inward slightly in the briefly extended area below the aperture. The profile of *CG.19* is closely related to the preceding, but here the upper plate, in addition to being slightly arched, is terminated above the aperture with a small curved beak-like projection. The short extension of the upper plate below the aperture is curved more sharply inward, with blunt end. The aperture, still deep in relation to the length of the slide, does not properly extend into the upper plate. The profile of *CG.15* advances further, in a logical way (though an intermediate stage may be lacking), the characteristics of the preceding examples. The slide has become longer in relation to its depth. The curved beak-like projection of

the upper plate above the aperture is more pronounced. The projection of the upper plate below the aperture is also longer; it is extended straight for a ways and terminates in a deeper, bolder inward curve. Unlike the preceding three slides, the comma-spirals of **CG.15** have a regularized formation and orientation, a factor in keeping with its more advanced profile.

The jade art of Late Eastern Chou is inclined to break with tradition. Its repertory of material culture favors and invents objects of secular use, the carver creating new patterns, especially of geometric character. The patterns remain with jade art throughout its long history, although the perfection of their rendering is equaled at no other time.<sup>72</sup>

The outward form of scabbard slide *CG.1* (Plate 6a) hardly coincides with such an estimate of late Chou jade carving. Whereas thin, gracefully shaped curvilinear ornaments typify the work of this period, this scabbard slide is angular, massive in appearance, and awkward and ponderous in feeling. The possibility that *CG.1*, in keeping with its curious weapon, is a clumsy, atypical specimen is, I believe, eliminated by its similarity to, and evident relation with, *CG.58* (Figure 6) and **CG.19** (Figure 6 and Plate 6b), and by the logical way in which its outward form develops into such a still bold, but rather more sophisticated, shape as **CG.15**. Though typologically more advanced than *CG.1* from the southern site of Ch'ang-sha *CG.58* from Lo-yang to the north, in all likelihood, is the earlier of the two. The possible significance of this disparity between chronology and form development will be discussed later. The profile of *CG.1* is in sharp contrast to the meticulously executed delicate decor of its upper surface which is wholly within the range of Late Eastern Chou style and accomplished technique. Therefore, one is drawn toward the conclusion that decor and shape do not originate in the same milieu. Since the decor agrees well with what is known of Late Eastern Chou form and style while the shape of the slide has no parallel from this same period, it is the form of the scabbard slide itself which must be related to shapes outside the jade repertory. This problem which concerns the origin of the scabbard slide will be returned to in a later chapter.

### Geometric Class

The evident stages in the development of scabbard slides of this class are less well supported by excavated examples. Unfortunately, the only certainly excavated piece is a completely atypical and unique example (*CV.1*) and has been published only in drawings which almost certainly are inaccurate. The only other scabbard slide of this class of reasonably sure provenance and reliable Late Eastern Chou attribution is one (*CV.4*) salvaged by Bishop White from the plundering of a group of tombs in the vicinity of Lo-yang belonging, on the whole, to

this period. The profile of this piece (Plate 1c) is similar to that of **CV.82**. The decor of its upper surface, that designated as Type 1, Stage a, permits the assemblage of a small number of slides with similar characteristics.<sup>73</sup> Among these are four (**CV.28**, **CV.29**, **CV.37**, **CV.82**) with known profiles (Figure 6).

On the whole, the profiles of this group appear to be slightly more advanced than those of the preceding Grain Class. Possibly the earliest stages are not here represented. **CV.37** and **CV.82** are the most archaic of the group and are to be placed between profiles **CG.19** and **CG.15**. The upper plate, more pronouncedly arched than those of the Grain slides, is also projected further beyond the upper aperture wall before terminating bluntly, or with a slight inward-projecting beak. Below the aperture is an extension of almost equal length, deriving its gentle curve from the arc of the upper plate without turning sharply inward at the end.

The profile of **CV.28** clearly carries the development well beyond the most advanced stage in the Grain class as does that of **CV.34** (Plate 1e). The upper plate, less arched than those of **CV.37** and **CV.82**, is terminated at its lower end by a squared wedge turned inward at a right angle to the upper plate. The slight forward slope of the inner side of this lower end ridge points toward the subsequent development of more substantial forward-projecting wedges at the lower end of the slide. The rounded forward edge, terminating in a sharp, slightly back-curved and undercut hook, suggests also the beginning at this time of a distinctive feature more fully developed during the succeeding dynasty.

Obviously one or more stages between **CV.82** and **CV.28** are missing. This gap may in part be filled by **CV.35**, but the profile of this slide, seemingly terminated at each end with blunt inward-projecting ridges, is poorly known. In profile, **CV.45** may also represent an intermediate stage between **CV.82** and **CV.28**, but the published rubbing is possibly unreliable, the decor of its upper plate atypical (cf. **CV.101**).

The Late Eastern Chou slides of this class all belong to Stage a of Type I surface ornamentation. Unlike the comma-grain of the preceding class which was widely used to decorate a variety of objects during the Late Eastern Chou period, a composite geometric decor of the type employed on the scabbard slides of this period seems rarely to have been applied to other shapes.<sup>74</sup> Isolated geometric shapes forming a part of these patterns, and particularly the subsidiary incised elements, are relatively common, however, on late Chou bronzes and on jade objects of this and succeeding periods.<sup>75</sup>

Insofar as may be ascertained, the profiles of this class are in general more advanced than those of the Grain Class. The aperture in no instance projects into the upper plate and none of the shapes is as clumsy and

unrefined as *CG.1*. As shall be seen, however, scabbard slides of the Geometric Class are consistently more sophisticated in profile than the grain slides which tend to be the most static of the three classes. This distinction is probably not indicative of a chronological precedence of the Grain Class as a whole, but rather of the utilization of different styles and shapes for each of the three groups, with certain common characteristics governing the carving of scabbard slides reflective of their function and the tastes of the periods. A characteristic common to the slides of both Geometric and Grain classes during the Late Eastern Chou is their relative shortness compared to those of succeeding periods.<sup>76</sup> Slides somewhat longer than any thus far discovered, however, seem certainly to have been in use before the end of Chou.<sup>77</sup>

### Hydra Class

Among the scabbard slides of the Hydra Class recovered from Late Eastern Chou tombs,<sup>78</sup> the profiles of only two (*CH.1-CH.5*) are known. Among the unattested slides which may reasonably be considered to belong to this period,<sup>79</sup> again the profile of only one (*CH.10*) is known. We are, therefore, in a correspondingly poorer position to define the earliest stages in the development of this class of slide. There is perhaps some significance as regards both the typology and chronology of the scabbard slide to be drawn from the fact that all but one (*CH.5*) of these slides have come from, or been ascribed a provenance within, territories occupied by the Late Eastern Chou state of Ch'u 楚. Attention will be drawn to this circumstance at the end of this chapter.

Slide *CH.1* (Figure 6) from Ch'ang-sha, is longer (2.94) than any reliable piece of the preceding two classes. The decor of the upper plate has not been published, but is evidently that of a hydra figure carved in moderately high relief. The profile suggests that the piece is extremely clumsy. The aperture, enclosed by thick walls, is less clearly rectangular and more oval than those of the other slides of this period. The upper plate, apparently very thick, is extended considerably below the aperture and is terminated in an extraordinary upward curve which imparts to it the appearance of merging with the surface decoration. Above the aperture, the upper plate is extended briefly beyond the forward aperture wall, curving inward awkwardly and terminating in a blunt ridge. The significant aspect of the forward edge, and the one which suggests the slide might conceivably be typologically more advanced (in spite of its crudeness) than any thus far presented, is the pronounced back-slope, a characteristic more fully developed during the early part of the Han dynasty.

Slide *CH.10* (Figure 6) is, again, known only in profile. Karlbeck, who published the piece, believes it to be in a

fragmentary condition.<sup>80</sup> But the similarity of this slide in profile to *CG.1* and the absence of any signs whatsoever of breakage, suggest that it is complete and that its extraordinary shape may be a cause for Karlbeck's misinterpretation of the piece. Some uncertainty exists, however, as to the proper classification of this slide. The unusually formed, extremely thick upper plate is extended briefly above the aperture and is terminated bluntly, a circumstance which suggests the placement of this piece midway between *CG.58* where there is no forward extension of the upper plate and *CG.19* where the extension is handled in a more refined manner. The extension of the upper plate below the aperture, curved inward very slightly and rounded at the end, suggests likewise a position between the above two slides with straight projection and more subtly curved projection respectively. If the depth of the forward extension is taken to represent that of the upper plate, it will be noted that here, as with *CG.1*, the relatively deep aperture penetrates upward into the upper plate from which it is in part carved.

*CH.5* seems to fall between *CH.10* and *CH.1*. The ends of the upper plate are projected straight above and below the aperture, terminating abruptly, but with rounded edges. The aperture does not extend upward into the mass of the upper plate.

Meager as the evidence is, it seems to indicate that in general the profiles of the Late Eastern Chou slides of this class may be somewhat more primitive in form than those of the Geometric Class, though slightly more advanced than the simplest profiles of the Grain Class. On the other hand, the pronounced back-slope to the forward edge of *CH.1* (an otherwise clumsy piece), quite surpassing that of *CV.28*, marks an advancement over any other of the Late Eastern Chou slides here reviewed by the introduction of a trait to become more fully developed on the scabbard slides of the succeeding period.

Unfortunately, the surface ornamentation of the two slides with published profiles is not clearly known; conversely, of the two attested Late Eastern Chou slides (*CH.2-CH.5*) with published surface ornamentation, the profile of only one is known. It seems probable, however, that the surface decor of the profile pieces would not strictly augment or alter those characteristics discernible on the two pieces with known decoration; and on the basis of these general characteristics, it is possible that another unattested and poorly published slide (*CH.9*) may belong to this group. In each case (excepting *CH.9*) the upper surface is decorated with the figure of a single hydra carved in moderately high relief and, even within so small a group, of strikingly varied representational form. All are strongly modeled, vigorously organic creatures, but all are somewhat roughly carved and naively proportioned. The head of the animal on *CH.2*, an almost unarticulated oval with two small borings set like

eyes near its top, is especially archaic. The conception and rendering of these animals is far below the normal standard of the dynamic, superbly refined and graceful animal silhouettes and figures carved during the late Chou period. The most sophisticated of the hydra representations on this group of slides is that of **CH.5** (Plate 8*d*) where, contrary to what will in succeeding periods become the conventional representational form, the animal is depicted in profile. From the more graceful curvature of the body, the more sensitive modulation of body volume, it is certainly to be considered as an effort to reproduce on the surface of this slide one of the technically superior late Chou animal-profile silhouettes of the type seen, for example, on the outer rim of a large jade disk in the Nelson Gallery.<sup>81</sup>

The generally coarse quality of the ornamentation on these slides is probably not indicative of relative earliness among jade artifacts generally. As we have seen above, there is no evidence at present for the appearance of the jade scabbard slide in China before the end of the fifth, or early fourth, century B.C., by which time techniques for the carving of jade had already become highly advanced and countless superior works had been executed. Of the four, possibly five, slides here ascribed to the Late Eastern Chou, four were either excavated or collected within the territory of the southern Ch'u state, while the fifth (**CH.5**), which appears to be the most technically refined of the group, comes from the Lo-yang region in central China. The suggestion presents itself, therefore, that jade carving techniques may perhaps have been more advanced in central and northern China at this period. Such, at least, would appear to be borne out by a cursory comparison of the Ch'ang-sha jade finds with those of Chin-ts'un near Lo-yang.<sup>82</sup> Other factors as well might be introduced here to account for this discrepancy between date and quality, but these will be discussed later in the

chapter when the chronology of the slide is reviewed in relation to its full time span.

Before proceeding to a review of the Western Han scabbard slides, several conclusions on the general characteristics of the Late Eastern Chou slides may be summarized. The anomalous Form I, Ridge Class slide has not been discussed separately here, since this single specimen is clearly related to the more numerous Form II slides with the same type of surface decor. That **CR.I** (Plate 5*d*) must be placed within the typological sequence for the Late Eastern Chou scabbard slide offered here is clearly indicated by its profile which is nearly identical to that of **CG.19**, though the piece itself is considerably more massively proportioned and has certain other features to be discussed later which mark it as a more archaic specimen.

Including **CR.I**, all four categories of surface ornamentation are present, Grain and Geometric in sophisticated form wholly in keeping with the advanced techniques of Late Eastern Chou jade carving; the Hydra Class alone exhibits an unexpectedly clumsy, unrefined style. In the early stages, the upper plate is thick and may project only beyond the lower wall of the deep aperture. The later slides of the series demonstrate changes in form which are further developed during the succeeding period: the upper plate becomes thinner and is slightly arched, projecting both above and below the aperture, and curving inward slightly at either end, with the formation of rudimentary involuted hook-ridges. The forward edge becomes slightly back-sloped. The apertures acquire greater length in proportion to depth. Thus a form which first emerges essentially as an enclosed aperture, probably sometime during the fifth century B.C., develops into a more elegantly proportioned and aesthetically appealing object by the end of the Chou dynasty.

## WESTERN HAN

With the emergence of the Han dynasty, we arrive on surer ground. The chronological touchstones provided by excavated examples are more numerous, and among unattested slides are a much greater number of pieces which may safely be related to these, or serve to fill in, in a logical way, certain stages in the development which cannot be demonstrated among the excavated pieces. As may be expected, the larger number of slides attributable to the Western Han period introduce a correspondingly wider variety of forms which, taken individually, do not seem to present an orderly progression. While these variants have been taken into full account, emphasis has been placed on those examples which are most revealing of the general course taken in the development of the scabbard

slide throughout the Western Han period. Four classes of slide represented during the Late Eastern Chou (Geometric, Grain, Hydra, Atypical) are present also in the Western Han. But a new class is added: Unornamented (CP).

The large number of scabbard slides excavated from Western Han tombs precludes a separate detailed discussion of each here. The reader is referred to the Catalog for the pertinent details concerning these.<sup>83</sup> A few general remarks on the group as a whole may be made.

The geographical distribution of the excavated Late Eastern Chou slides extends over northern, central and southern China, with Shansi, Honan, Anhui, and Hunan provinces represented (Figure 2). In Western Han the



distribution is very much broader and includes even territories to the north, west, and south of the present bor-

ders of China (Figure 7).<sup>84</sup> Within China proper, scabbard slides of Western Han date have been recovered from

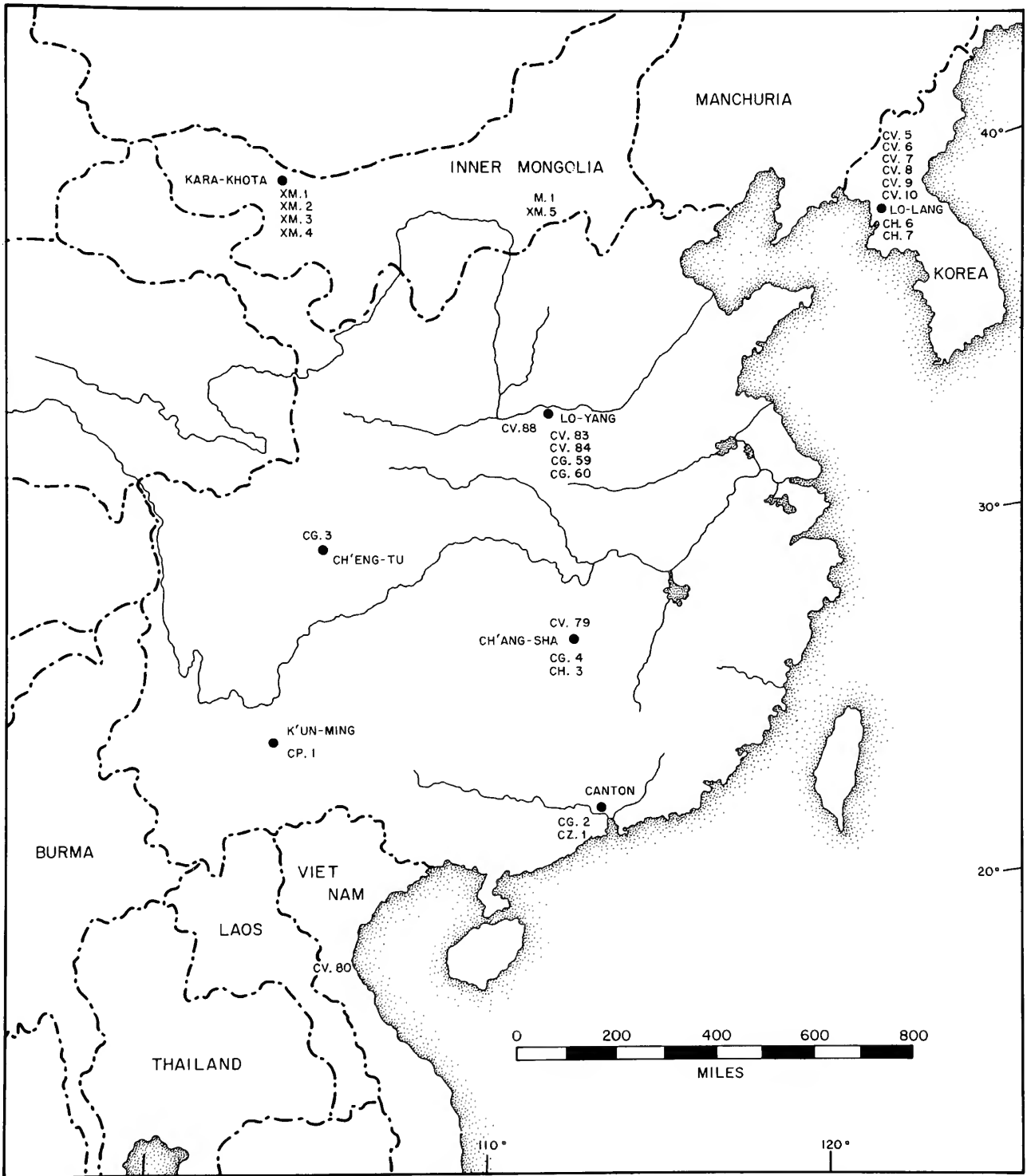


FIGURE 7.—Distribution of Western Han excavated scabbard slides.

tombs in the provinces of Honan, Hunan, Szechuan, Kwangtung, and Yünnan.<sup>85</sup> Though the number of excavated examples hardly exceeds one-third of the slides here ascribed to Western Han, the geographical distribution of the classes permits speculation on several factors. It may be observed that the number of scabbard slides excavated beyond the borders of China exceeds that of those recovered within the country—fifteen from outside as opposed to twelve from within. Against attributing too much significance to this, it may be noted that of those slides found outside of China, over half were found at a single site, the Chinese colony at Lo-lang, Korea. Still, the number of Western Han sites excavated within China, particularly during the last decade, vastly exceeds the ones opened chiefly earlier outside China; it seems likely more than pure chance that the number of slides from all the Western Han tombs excavated in China barely surpasses that of the single site of Lo-lang.

The three principal classes of decor (Geometric, Grain, Hydra) have been found together at only one site, Ch'ang-sha in Hunan Province. Slides of the Grain Class are rare in North China and absent from the regions farther north, but occur in three provinces of South and West China. Two slides of the Hydra Class were found in Korea, together with another of the same type (K.1) of local manufacture. On the other hand, slides of the Geometric Class are numerous in North China and Korea while a single example only has been found in South China. If one may venture to presume, on the basis of these relatively few excavated slides, that the Geometric Class reflects a more particularly northern fashion, it is less surprising then to find slides of this class not only most numerous in the government-controlled colony at Lo-lang, but also in the government-administered territory of Annam (Viet-Nam). Of the two Geometric Class slides from Viet-Nam (CV.80, CV.81, a chance find) at least one (CV.80) is a locally made copy of the Chinese type. The fashion of mounting a short dagger and its scabbard to the sheath of the sword, noted both at Lo-lang and in Viet-Nam, further joins these two widely separated areas.<sup>86</sup>

Of the ten swords of Late Eastern Chou date found, or associated, with scabbard slides, seven of the swords were bronze while only two were iron, and one combined an iron blade with a bronze hilt.<sup>87</sup> The iron sword associated with CZ.10 was not recovered in context; that with the doubtful CV.1 had wholly decomposed, but is presumed to have been iron. The ratio is quite reversed in Western Han. Of the nineteen swords found, or associated, with slides, only two are of bronze while seventeen are of iron.<sup>88</sup> All of the iron swords are tanged, double-edged types. Six (CV.6, CV.9, CV.88, CG.3, CG.59, CG.60), possibly seven (CV.84), were provided with separately cast bronze guards of the type shown on Figure 37, while

six (CV.7, CV.8, CV.10, CG.4, CH.3, CH.7), possibly seven (CH.6), were provided with jade guards of essentially the same form. Only one sword (CG.3) is of the classic Chou bronze type with hilt, guard, and blade cast as one piece. Black-lacquered leather or wood scabbards were found with eight of these Western Han swords.<sup>89</sup> If we add to these statistics the scabbard slides from the reliably authentic group which will be brought forth to augment the excavated examples in the following discussion we find that the ratio of bronze to iron among the excavated slides is upheld. Bronze oxide is found on two slides only (CG.17, XCG.11), whereas nineteen, possibly twenty-two, slides show iron-oxide stains which reveal their one-time association with iron swords.<sup>90</sup> Almost certainly more, unobserved or unreported, bear metal-oxide stains. The majority of the iron swords are poorly preserved, but for the most part they are longer than any of the bronze swords, a few exceeding a meter in length (e.g., CV.8, CV.88).

Unfortunately, the excavated scabbard slides do not provide us with a complete cross-section of Western Han developments. Of the twenty-one excavated slides, only two were found in burials which may be ascribed to mid-Western Han, possibly even somewhat earlier (CG.3, CP.1). All of the others, excepting two for which no relative position within the period can be determined on the basis of the brief reports (CG.2, CZ.1), belong to the closing decades of Western Han, probably within the last fifty years,<sup>91</sup> or to the Interregnum of Wang Mang 王莽 (A.D. 9–23) which separates the two Han periods (CV.84, CG.60). In studying the development of the scabbard slide during this period it will be necessary, therefore, to introduce a fairly large number of reliably authentic slides which seem to represent intermediate steps between the stage of development at the conclusion of the Late Eastern Chou and those clearly indicated by the excavated slides from mid- and late-Western Han.

### Grain Class

Among the Grain Class (Figure 8) slides are five specimens excavated from Western Han tombs. Of these, one (CG.3) belongs approximately to the middle of this period while CG.4 and CG.59 belong to the end of the dynasty, and CG.60 to the Interregnum. The date of CG.2 is not surely known. Probably it belongs to the later part of the dynasty, but its extreme southern provenance (Kwangtung), far from the principal known centers of jade carving, may account for a somewhat archaic character.

All of these slides are ornamented on their outer surfaces with knob grains, in contrast to the comma-spiral variety which characterized the Late Eastern Chou, Grain Class slides. On two of the slides, the grains are set in

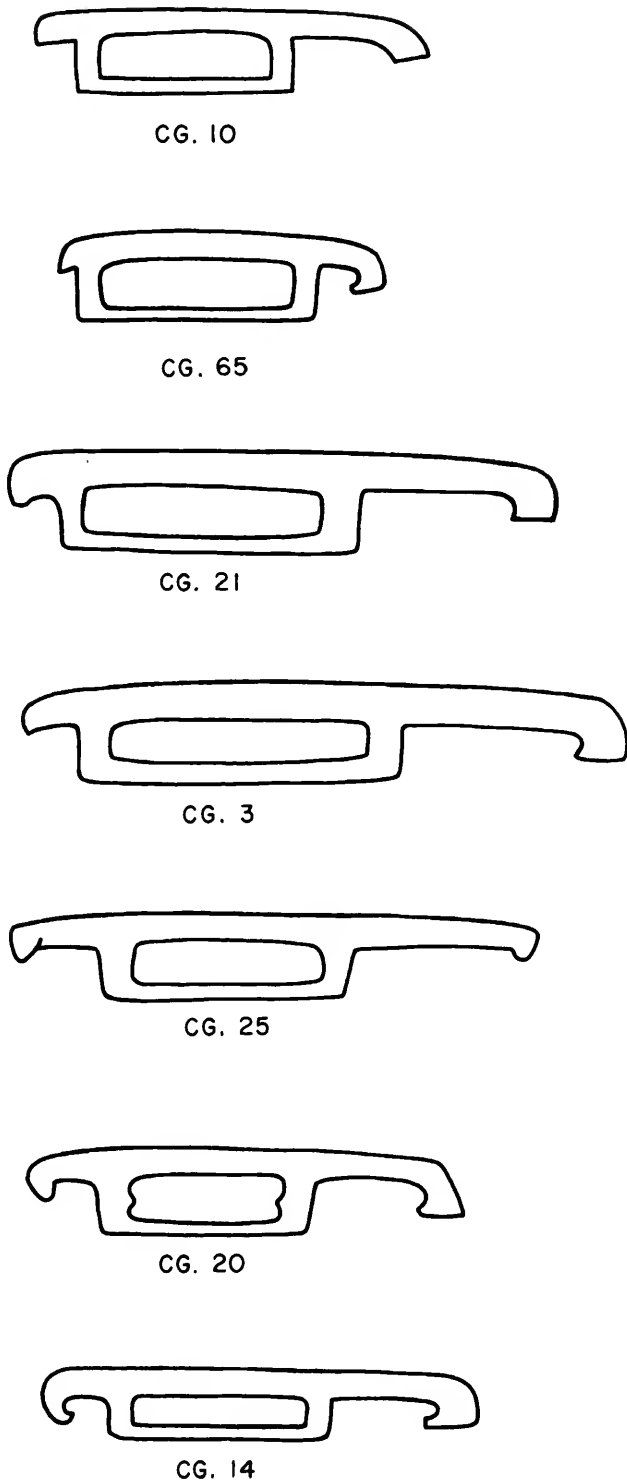


FIGURE 8.—Chinese Form I scabbard slide profile typology:  
Western Han.

parallel vertical rows: on *CG.2* the grains are of a rare variety, square rather than round (cf. also *CG.10*, *CG.11*, Plate 7*a*); on *CG.59* the hemispheric nodules are joined in pairs by curved incised lines set at the right side or above the pairs, interlocking them in such a way that the grains and their joining lines form a diagonal step pattern. On *CG.3*, *CG.4*, and *CG.60*, the rounded grains are set in horizontal rows offset horizontally to form diagonals. They vary considerably in size and spacing, from the widely spaced and moderately small grains on *CG.10* and *CG.65* (Plate 6*c*) to a very closely set small variety on *CG.3*. In the interstices between the grains of *CG.4* there may be a “stepped-T” pattern of incised lines forming a diagonal, but the presence of this feature is uncertain. At the upper end of *CG.59* there is an animal mask, partly incised and partly carved in low relief. This is the only reliably excavated jade scabbard slide of the Grain Class on which the animal mask appears, though it is frequently encountered on the glass scabbard slides belonging to the same period and on other jade slides of unquestionable authenticity. Probably it is to be considered as an influence extending from the Geometric Class slides; for had it been a meaningful element of ornamentation on Grain Class slides, it would certainly have been more widely employed.

A fairly large group of unattested slides with similar surface ornamentation and/or profiles might be adduced to broaden our view of the range of decor on Grain Class slides during this period.<sup>92</sup> It has already been noted that grains of the square variety occur on two unattested examples that assuredly also belong to this period. (*CG.10*, *CG.11*). The profiles of both of these pieces have been published so that one is able to discern that the grains rise in full relief above the surface of the slide and are flanked by plain recessed borders (Plate 7*a*). On the more numerous slides with rounded knob grains, normally the grains rise to a height not greater than the flanking plain relief borders; in other words, the grains have been fashioned by the carving away of the surface around them, leaving borders and grains at an equal height.

The “stepped-T” pattern, possibly observed on *CG.4*, is found also on *CG.6* (Plate 6*d*), *CG.8*, *CG.16* and *CG.63*, in conjunction with rounded knob grains in every case arranged in parallel vertical rows. Extending in openwork beyond the right side of *CG.6* is a design of dissolved animal parts in flat silhouette reflecting related forms of Late Eastern Chou ornamentation. Possibly the appearance of this element may indicate relative earliness for the “stepped-T” group as a whole. The profiles of this group are not sufficiently well-known to suggest a single typological stage for all.

Grains joined in pairs by curved incised lines of the type noted in connection with *CG.59* occur on *CG.18* also. This basic motive has several variations: incised

lines arched to the right and below pairs of rounded knob grains (CG.14 [Plate 6f], CG.17), to the left and above (CG.12), and a combination of two or more of such forms interlocking grains in units of four or six rather than forming a diagonal step pattern (CG.21, Plate 7b). The grains in every case are arranged in parallel vertical rows.<sup>93</sup>

Three glass scabbard slides probably also belong to the Western Han group. All are decorated with parallel vertical rows of rounded knob grains, two with very fine, widely spaced points (CG.23 and CG.25, Plate 8b) and the third CG.26 with larger but rather irregularly formed rounded grains. Both CG.25 and CG.26 are provided with animal masks at the upper end, stylized in a curious way never observed on stone scabbard slides.

A final variation in the treatment of the grain decor on Western Han slides is represented by CG.20 (Plate 7c). While the profile (Figure 8) exhibits a highly refined form (though the aperture has been somewhat crudely cut), the upper surface is treated in a summary fashion uncharacteristic of any but the latest and poorest imitations. This creates the impression that the piece may not have been finished though deep and widely spread iron-oxide stains indicate that it was indeed fastened to the scabbard of an iron sword at the time of burial, the slide having come into direct contact with the oxidizing blade of the sword after the scabbard had entirely decomposed. The surface of this slide is simply scored with a reticulation of parallel lines laid in three directions, forming roughly triangular areas by their intersection. This is the normal first stage in laying out a grain pattern. Afterwards, small individual grains are fashioned from each of these triangular areas and quite possibly, therefore, work was halted on this piece after only the grid had been laid upon the surface.

The profiles of the Grain-Class scabbard slides exhibit, on the whole, a logical progression from the most developed stage of the Late Eastern Chou Grain Class slide. Just as both Geometric and Hydra profiles during Late Eastern Chou exhibit rather more advanced forms than those of the Grain Class, so during the course of the Western Han does the profile of the Grain slides reflect a more conservative development. Compared to the slender, graceful elegance of the Late Western Han Geometric Class slide, there is a quality of rigid restraint in the Grain slides, an unwillingness to achieve or to imitate the flowing contours of the slides from other classes, though basically an equivalent progression in the development of form is present.

The earliest stage is probably represented by CG.10 (Figure 8), a slide with square grains raised in relief above the surface. The upper plate, somewhat thinner than before, is subtly arched and is extended briefly beyond the upper aperture wall, curving inward in a regu-

lar arc to meet the slightly undercut inner face at just less than a right angle. Below the aperture, the upper plate is extended further than on Late Eastern Chou Grain slides, curving inward at the lower end less than ninety degrees and cut off squarely to form a blunt ridge. The aperture henceforward never intrudes into the area of the upper plate, but is always projected inward from the underside of the upper plate. There is a general tendency for the aperture to become longer, harmonious in proportion to the expanding length of the slide, though there is no clear correlation in this relationship. In depth, the aperture remains fairly constant. The other slides with square grains (CG.2, CG.11, Plate 7a), including one excavated example, have seemingly more highly developed profiles and are similar to each other. It is a type somewhat outside the main course of development and while it may indeed represent a considerable span of time, it seems probable that slides of this type belong to the second century B.C.

A second stage, also within the second century B.C., and perhaps coeval with CG.10, is marked by CG.65 (Figure 8 and Plate 6c). Above the aperture the upper plate is terminated with a short beak-like projection only slightly more developed than that of the Late Eastern Chou slide CG.15 in that the beak on CG.65 is bent inward, suggesting incipient upper hook formation. The projection of the upper plate below the aperture is uncommonly short, but the inward-projecting undercut wedge at the lower end represents a clear advance in the development of Grain Class slides.

A third stage, probably still within the second century, is marked by CG.21 on which the upper plate is almost imperceptibly arched, the forward edge slightly back-sloped, the end of the upper plate being drawn inward slightly. At the lower end, the upper plate curves ninety degrees inward through a regular arc and is cut off bluntly. CG.3, an excavated piece, probably of mid-Western Han age, is very similar to the preceding piece. Advancement in form is to be marked chiefly in the elongation of the slide and in the treatment of the lower end: the inner side of the plate is very slightly undercut so that an angular wedge projects forward.

Possibly the glass scabbard slides (CG.23, CG.25 [Plate 8b], CG.26) are to be placed next in the sequence, though the casting of this material in molds and subsequent filing of the sides has given them somewhat distinct shapes. In fact, both in form and decor they depart sufficiently from the standard stone variety that it would be hazardous to suggest a precise position within the period. The upper plates are slightly arched, the forward edges slightly back-sloped, with inward-projecting wedges, either rounded (CG.25, CG.26), or squared (CG.23). The lower edges of the upper plate are also back-sloped, with inward-projecting wedges similar in form to those at the upper end.

These inward-projecting wedges at the ends of the upper plate are not undercut, possibly because the pieces were cast in reusable molds. The general characteristics of the glass slides broadly point to a Western Han date, and their profiles suggest a date during the first century B.C., but since many details of their form may be attributed to their material and casting technique, they may in fact be either slightly earlier or later than this (see **CG.66**, Plate 6*e*).

Between **CG.3**, to be placed in mid-Western Han, and **CG.20** near the end of the dynasty, it would seem several subtly progressing stages are here lacking. The back-sloped forward edge of **CG.20** is similar to that of the glass slides, while the lower end exhibits the full, and almost final, development of this part. At the lower end, the upper plate turns inward rather abruptly, the angle on the outer side being obtuse, the inner angle acute owing to the inward side being undercut, having an angular forward-projecting ridge at its extremity. Judging from the oblique top/profile photographs of the excavated examples **CG.59** and **CG.60**, the latter belonging to the Han Interregnum, they have essentially the same form, though their upper ends project inward to a greater depth and may resemble the following slide.

The final stage in the development of the Western Han, Grain Class slide may be illustrated by **CG.14** (Figure 8 and Plate 6*f*). The lower end of the upper plate turns inward more sharply than on **CG.20** and the inner side is deeply undercut, leaving at the extremity a pronounced, squared, forward-projecting wedge. The upper end, back-sloped as before, curves inward more gracefully and reaches a greater depth. It also is deeply undercut to form a sharp hook-ridge. Fully formed upper and lower bays emerge as a result of the deeper inward projection of the ends.

Throughout the Western Han, development of the Grain Class slides is to be noted chiefly in the subtle alterations of profile. The decor itself gives little hint of these changes beyond the fact that the comma-spiral of Late Eastern Chou is replaced by the knob grain, and that those slides with squared grains and those with "stepped-T" patterns of incised lines point to the earlier rather than later part of the period. Incised lines dividing the corners of the ornamented surface into forty-five degree angles appear on some pieces (e.g., **CG.16**); such lines constitute an early Han innovation on Geometric Class slides and seem not to appear earlier on Grain slides (see pages 4 and 24, **CV.22**). The grain pattern is inherently the simplest of the three principal classes of decor, its potential for continued dynamic variation less than that of either the Geometric or Hydra Class. The use of dies in laying out the grain patterns may in some cases be assumed (see **CG.18**). The glass slides appear to have been cast in one-piece molds, the surface ornamentation pressed into the

cooling glass with a die.

An aspect of the development of the scabbard slide, also present on Late Eastern Chou slides (e.g., **CG.19**), is the appearance among Western Han slides of a vertical taper, that is, an inward slope to the sides so that the lower aperture plate is narrower than the upper plate. No pertinent conclusions may be drawn from the existence of this often scarcely detectable feature. Such tapering appears not to be accidental, but may be a matter of style in that it imparts to those slides which have it a more graceful shape. The taper is too slight to have contributed measurably to an easier accommodation of the scabbard slide on the wall of a narrow sword scabbard. Such tapering is never reported in the published descriptions of scabbard slides, so that it is impossible to tell how extensively it occurs. Of the scabbard slides discussed in this section, I have observed this vertical taper on six examples, all personally examined (**CG.14**, **CG.15**, **CG.20**, **CG.25**, **CG.26**, **CG.63**). One pertinent point is, however, worthy of being stressed. On nearly every slide of probable authenticity that I have examined first-hand, I have found some degree, however slight, of vertical taper, while it has appeared on only a few of the numerous late antiquarian slides seen by me.

### Geometric Class

The largest group of excavated slides from the Western Han period belongs to the Geometric Class (Figures 9, 10).<sup>94</sup> However, all of these slides were recovered from tombs which may be dated in the later part of the dynasty, so that once again it becomes necessary to hypothesize the stages intervening between the most highly developed types of the Late Eastern Chou and those stages represented by the excavated specimens of the end of Western Han. The majority of the excavated slides (6) were recovered from Late Western Han burials at Lo-lang, Korea (Figure 7),<sup>95</sup> but in lesser numbers they were found at Lo-yang and Liu-chin-ch'ü in Honan Province (**CV.83**, **CV.84**, **CV.88**), Ch'ang-sha in Hunan Province (**CV.79**) and in Viet-Nam (**CV.80**).

In the discussion of the Late Eastern Chou, Geometric Class slides it was noted that all belonged to Type 1, Stage a, decor. The range during Western Han is much greater: Type 1, Stages b-d; Type 2, Stages a-b. All of the excavated slides of Type 1 belong to Stage d, excepting the example from Viet-Nam which is atypical and is certainly non-Chinese imitative work. Both Stages a and b are represented among the excavated slides of Type 2. Type 1, Stage a, appears to belong exclusively to the Late Eastern Chou period. Among the comparatively small number of unattested slides with known profiles which may with fair certainty be ascribed to Western Han, Stages b and c of Type 1 decor are represented.<sup>96</sup> Ten of the unat-

tested slides belong to Type 1 decor, while four belong to Type 2.

Before proceeding with an examination of the profiles in this class, several atypical elements in the surface decoration should be noted. Apart from the Viet-Nam imitation which naturally contains slight misinterpretations of the Type 1, Stage d, decor the craftsman endeavored to copy, two other elements of an atypical nature are introduced. These atypical features occur only on unattested slides, but are not of such a nature as to preclude authenticity. Along the right side of **CV.15**, and extending in openwork beyond the right side of the upper plate, is a sinewy hydra figure in an extended S-shape and with bifurcated tail, carved in relatively low relief, with the head at the upper end, the tail reaching approximately three-quarters of the distance down the slide. The hydra figure overlaps elements of the normal geometric surface decor as well as a portion of the animal mask at the upper end. Both the geometric decor, which seems to lie between Type 1, Stages b and c, and the profile suggest that the piece belongs to the earlier, rather than later, part of the dynasty, possibly mid-second century B.C. The lower end of the upper plate is similar to **CG.21** (Plate 7*b*), but the upper end is atypical. The forward end curves inward to meet the under side of the plate extended straight. Set slightly back from the forward end is a transverse ridge, triangular in cross-section.

At two points along the central vertical axis of **CV.20**, arched lines join the open ends of paired volutes.

Appended to the concave side of these lines and extending downward are comb-like striae. This "comb" pattern, which may first appear during the Late Eastern Chou, is commonly found on the flanks of carved jade animals during Han and immediately post-Han times,<sup>97</sup> and as a revival on comparatively modern pieces (see **CV.65**, **CV.96**).

The profiles of the Geometric Class, already more advanced in Late Eastern Chou than those of the Grain Class, perhaps developed still further during this period than I have been able to demonstrate on the basis of the few specimens known to me. I think in particular of **CV.34** which seems slightly more advanced than any I was able to include. At any rate, the sudden, almost startling, development in the form of the Geometric Class slides as reflected in the earliest Western Han piece on hand (**CV.22**, Plate 2*a*) suggests that at least one intermediate stage is lacking. Likewise, it is impossible to place this earliest Western Han slide chronologically with precision owing to its rather significant advance over known Late Eastern Chou types and its seemingly more immediate relations to slides of known, later Western Han date. I suggest only that it belongs to the earlier half of the Western Han period, to the second century B.C.

In its earliest adducible stage (**CV.22**, Figure 9), the Western Han Geometric Class scabbard slide exhibits a taut and powerful, yet rhythmic form hardly equaled at any other point in the development of this object. In its proportions, it is both sturdy and graceful. The subtly

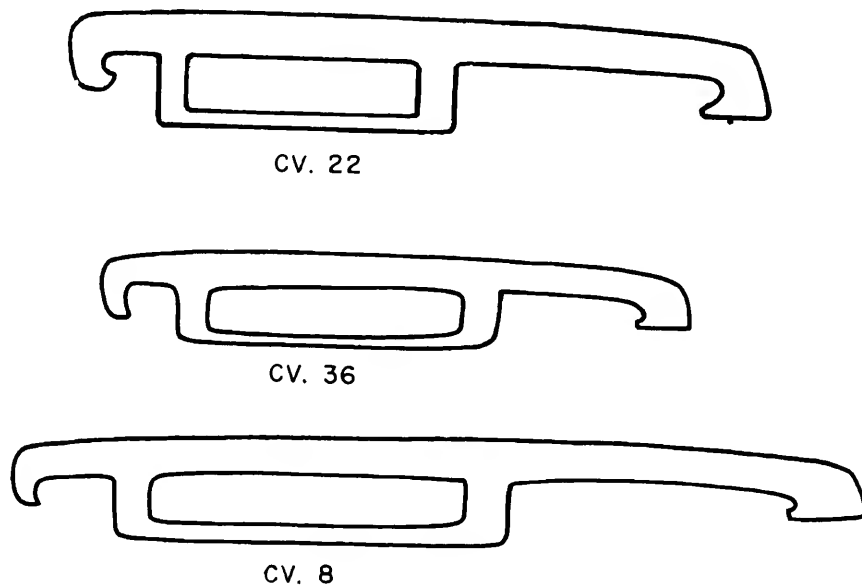


FIGURE 9.—Chinese Form I scabbard slide profile typology: Western Han.

flowing lines do not diminish the sense of compact design. The earliest demonstrable stage of the Geometric Class scabbard slide, falling sometime during the second century B.C., clearly represents the finest stage in the centuries-long development of this object. Always more dynamic in its development, both as regards surface ornamentation and basic form, than the slides of the Grain and Hydra classes, the early Western Han Geometric Class scabbard slide, in beauty of design, is at no point equaled by slides of other classes.

Though it is fairly evident that stages are missing between the profile of CV.22 and the latest Late Eastern Chou profile, still the logical progression in the development of the form may be apprehended. Characteristics begun in late Chou are here elaborated. The upper plate, still slightly arched, is extended to greater lengths above and below the aperture. At the upper end the plate curves inward, the forward edge is back-sloped and undercut so that an involuted hook-ridge of graceful proportions is formed. At the lower end, the upper plate curves inward rather abruptly and is undercut to produce a squared, forward-projecting wedge. Among Grain Class slides a corresponding stage (more clumsy in appearance) is not reached before the later part of the Western Han period. The surface decor is Type 1, Stage b.

A second stage is probably represented by CV.36 (Figure 9), an unpublished slide in the Musée Cernuschi. Though in most respects similar to the preceding piece, it is slightly weaker in conception. The lower end curves inward still more abruptly, but is undercut with a forward-

projecting squared wedge. The upper end, still back-sloped, is less gracefully formed, with practically no undercut, so that a more softly contoured inward-projecting wedge, rather than sharp hook-ridge, is formed. The surface decor is Type 1, Stage c. CV.103 (Plate 2*b-e*) belongs to the same stage.

A final stage in the development of the Type 1, Geometric Class scabbard slide during the Western Han is best represented by CV.8 (Figure 9 and Plate 3*b*), from Lo-lang, Korea, the first slide to have been found *in situ*. The characteristics of CV.36 are here still further elaborated. The slide has lost its compact design and has become elegantly elongated with a corresponding weakening of the design. The lower bay, much extended, is closed at the lower end by the sharply turned-in upper plate, again undercut to form a squared, forward-projecting wedge. This inward extension of the upper plate, which earlier did not surpass in thickness the depth of the upper plate, is now nearly twice its dimension, in keeping with the elongated form of the slide. The upper end is curved inward, but hardly, if at all, back-sloped and only slightly undercut. The surface decor is Type 1, Stage d.

Development of the Type 2 decor, if one may judge from the profiles of these slides, belongs to the later part of Western Han. No scabbard slides with Type 2 decor have profiles which logically should much precede the final Western Han development of the Type 1 slide.

The earliest discernible stage is represented by CV.24 (Figure 10 and Plate 4*a*), a slide in every respect nearly

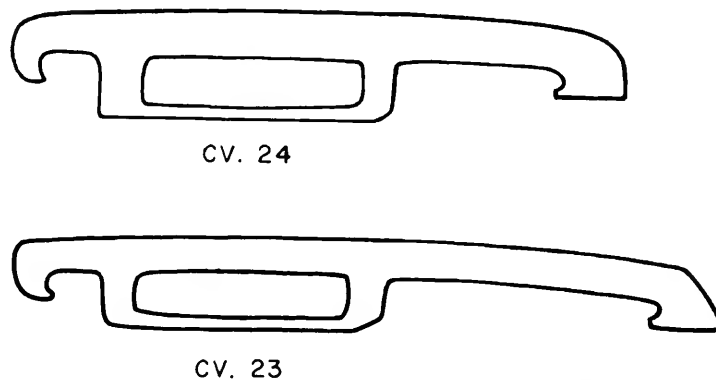


FIGURE 10.—Chinese Form I scabbard slide profile typology: Western Han.

identical to SR.1 (Plate 19*c*) believed to have been found in a South Russian tomb datable in the third or fourth century after Christ. Rather shorter and more solidly constructed than the languidly proportioned CV.8, it otherwise exhibits many of the same qualities. In profile it seems to fall between CV.36 and CV.8 of Type 1. The

upper end, curved inward, is not back-sloped and is only slightly undercut. The lower end, though somewhat less thick in proportion to a deeper upper plate than that of CV.8, curves inward abruptly, almost at a ninety-degree angle, and is undercut to form a squared, forward-projecting wedge. The surface decor is Type 2, Stage a.

At first sight, it would seem difficult to account for the profile of **CV.23** (Figure 10 and Plate 4e) as a logical development from the preceding slide. Its nearest analogy would appear to be **CV.22**, placed in the earlier part of the Western Han. Yet, a close examination reveals that those elements which it seems to have in common with **CV.22**—the back-sloped forward edge undercut to form a hook-ridge, the undercut lower end with forward-projecting wedge—constitute essentially a “streamlined” version of that form. The aspects of form which it shares with **CV.22** are exaggerated: the forward edge is more severely back-sloped, the upper plate more strongly arched and disproportionately thick in relation to the depth of the slide, the thickness of the aperture walls and lower aperture plate, the whole construction of the lower end less integral to the generally weakened design. While its form is certainly more immediately derived from that of such pieces as **CV.22** than from what I believe to be contemporary forms, the exaggeration and consequent weakening of this type appears to approach the decorative, suggesting that the craftsman may have had an awareness of producing an object of art independent of utilitarian function. This seemingly self-conscious conventionalization of an earlier form of greater integrity suggests the possibility that **CV.23** might, in fact, carry us a stage beyond Western Han, into the early decades of Eastern Han. The surface decor is Type 2, Stage b. (See also **CV.14**, Plate 4d.)

We may observe, I believe, a gradual alteration in the

form of the Geometric Class scabbard slide, both in profile and in decor, during the Western Han that amounts to a decline in the perceived usefulness of the object. While I do not mean to suggest that the later forms have evolved into strictly ornamental objects—the late Western Han Geometric Class slides are finer shapes than ever produced in either the Grain or Hydra classes—there is a marked tendency, after the superb attainment of the earlier part of the period, toward a concern for thinner, longer, more elegant and ultimately languid, shapes, or for exaggeration in reinterpreting the earlier form. This tendency is not discernible solely in the profile of the slides, but also in the gradual conventionalization of the surface decor which is transformed from a coherent design of energetic, interrelated geometric forms, interacting with the undulating surface of the slide itself, into a rationalized, formalized, and traditional grouping of conventionally reproduced geometric forms on flat surfaces. The scabbard slide itself is still rather far from its ultimate dissolution into a purely decorative object, but the late Western Han slides offer the first hint of characteristics to be reiterated and still further elaborated in succeeding centuries.

### Hydra Class

The number of Hydra Class (Figure 11) slides exhumed from tombs of Western Han date is smaller than that of

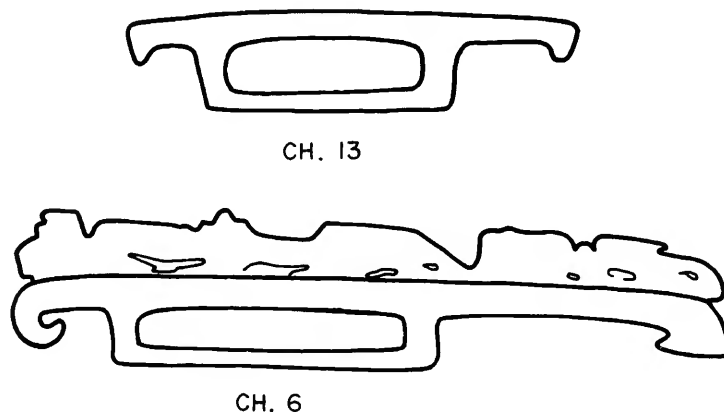


FIGURE 11.—Chinese Form I scabbard slide profile typology: Western Han.

either the Grain or Geometric class. Once again these slides were found only in tombs ascribed to the later part of the period, at Lo-lang, Korea, and at Ch'ang-sha in Hunan Province.<sup>98</sup> Equally unfortunate is the fact that the profile of only one of these slides (*CH.6*) is known.

While the ornamentation of Late Eastern Chou Hydra Class slides seemed to consist of a single hydra only, carved

in moderately high relief, most of the Western Han slides are ornamented with the figures of a larger and smaller hydra, carved in high, rounded relief, and in one case at least (*CH.6*) undercut in places so that the figures are in nearly full round. On two of the slides (*CH.3*, *CH.7*) the smaller animal is placed at the upper end and faces downward toward the larger hydra oriented upward in



an extended S-curve. In both cases the animals have bifurcated tails and no horn. On *CH.6* (Plate 10a), on the other hand, the smaller hydra is placed at the lower end of the slide and faces upward toward the larger hydra which is oriented upward in an S-curve, its shoulders and neck doubled back so that the head faces toward the left side of the slide. The body of the larger hydra is rather heavily marked with sculpted and incised linear patterning probably intended to suggest musculature, or a writhing motion. The relatively simpler and more organically conceived hydra forms on *CH.3* and *CH.7* may indicate a slight chronological priority.

Our knowledge of the development of the Hydra Class slide profile is hardly increased by the introduction of those slides which, by their general agreement in decor with the excavated examples or by their still earlier qualities, may with some certainty be ascribed to the same period.<sup>99</sup> Among this group, the profile of only one (*CH.13*) is known, and being molded in glass we are accordingly less reliably informed on the development of the stone shape. Consequently, it is necessary to hypothesize the probable course of development not only of the profile, but of the surface ornamentation as well.

It has been noted that during the Late Eastern Chou, the single hydra figures ornamenting the surfaces of the slides have single-stemmed tails. This characteristic may carry over into Western Han. *CH.8* (Plate 9b) and *CH.12*, both relatively short, have smaller hydras at the upper end and larger below, oriented upward in extended S-curves. Both of the larger hydras, quite powerfully conceived, have single-stem tails and both are carved in only moderately high relief, similar to that of Late Eastern Chou forms. These two slides may belong to the earliest part of the dynasty. The glass slide (*CH.13*), also comparatively short, is decorated with a single hydra oriented upward in an extended S-curve. Molded in very low relief, this highly simplified animal with single-stem tail probably does not reflect very accurately contemporary designs on stone. The profile, however, of this somewhat shorter, deeper slide is virtually identical to that of *CG.25* (Figure 8) which is probably to be placed at least two stages preceding the final form of the Western Han Grain Class slide and it may belong to approximately the earlier half of the first century B.C. Between this stage and the final form as expressed by *CH.6*, there is little evidence of the significant changes which must have occurred. *CH.54*, with smaller hydra at the lower end, larger above, may have a profile similar to *CV.24* (Figure 10) and represent a stage very close to the end of the period, but this piece is known only from a slightly oblique top/profile photograph and these frequently distort the appearance of the profile. *CH.18* has a fully rounded upper end characteristic of the later stages in the development of the scabbard slide and probably does not precede *CH.6* in

date. Both *CH.18* and *CH.11*, with single hydra figure in low relief, have atypical features which require placing them outside any regular, or typical, Western Han series.

*CH.6* carries the development of the scabbard slide form a bit beyond the most advanced stage of the Geometric Class which was, in turn, more advanced than the Grain Class. Hence, the relative development of the three classes stands, at the conclusion of the Western Han period, in the same relation as at the conclusion of the Late Eastern Chou. The upper plate is nearly flat, the aperture walls perpendicular to the upper plate. The upper end is curved inward in a regular rounded arc and is deeply undercut to form a hook-ridge more severely involuted than that of any other Western Han slide. This thin, weakly pendant hook marks a stage not reached in the Geometric Class where, toward the end of the period, the degree of undercutting tended to be lessened rather than increased. The lower end exhibits every characteristic of late, perfunctory, meaningless imitative design. The inward curve is abrupt, but imprecise, the exterior line bows outward in a regular arc. The inner face of this projection, earlier flat or very slightly arched, is here more rounded; undercut on the inner side, it has no precise, squared, forward-projecting wedge, but only an angular ridge.

Among the many late antiquarian scabbard slides of the Hydra Class that I have examined, there is a marked tendency for the body of the slide to be more carelessly carved than is the case with slides of either the Grain or Geometric class. This is possibly the result of the greater attention lavished upon the carving of the complex surface ornamentation which in turn conceals the surface of the slide more than does either the Geometric or Grain Class decor. Consequently, the body of the slide may more easily be accepted as the under support for the surface design and correspondingly less exacting attention paid to its carving. This tendency, so pronounced in later imitations, may possibly have begun before the end of Western Han.

Before attempting to summarize the evidence afforded by the above scabbard slides of three classes relative to the development of this object during Western Han, two excavated examples of different classes should be described briefly. *CZ.1* was recovered from a Western Han tomb in Kwangtung Province. In terms of profile (Figure 12), it falls between *CG.10* and *CG.21* (Figure 8), and its surface decor of fine grains framed by wide borders formed of dissolved animal parts links it more closely to this class than to any other. Two similar pieces (*CZ.2* and *CZ.3*) had previously been ascribed to Late Eastern Chou; these must also be ascribed a Western Han date. While the decor may be slightly archaic in design, the profile clearly belongs among the earlier Western Han types. Probably *CZ.1* was not carved in Kwangtung Province, but brought

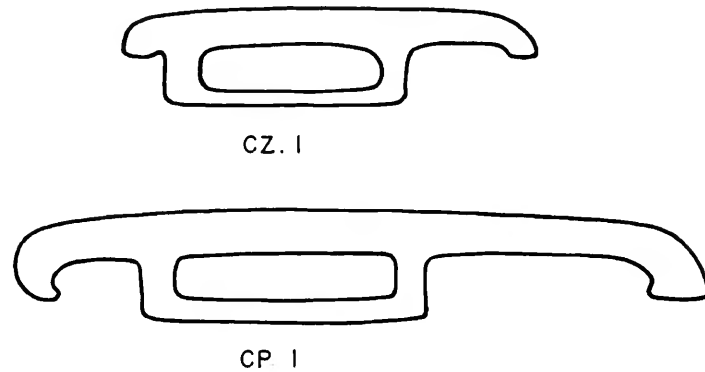


FIGURE 12.—Chinese Form I scabbard slide profile typology: Western Han.

there from some more northern locality. *CP.1* (Figure 12 and Plate 1*a*), from Shih-chai-shan in Yunnan Province, may be fairly certainly ascribed to the end of the second century B.C. Cut from a lustrous black stone, the slide is not of Chinese manufacture but imitates the contemporary Chinese form. It seems to be more nearly related to either the mid-Western Han Geometric or Hydra types than to the somewhat more conservative Grain forms. Fortright in conception, the inward-curving terminal parts of the upper plate are rather naively handled and no attempt was made to copy the surface ornamentation of the Chinese slide. This slide was made for suspending a Chinese-type sword, some of which were probably imported into this region before it fell under Chinese domination. The local sword was of an entirely different type and probably used a different form of suspension device (see *CP.1*).

Some generalizations on the development of the Western Han scabbard slide may be made. The wider distribution and greater number of examples discovered in burials implies a more extensive use of the object during this period than in the preceding Late Eastern Chou. Whereas during the Late Eastern Chou the majority of excavated slides were associated with bronze swords, in Western Han slides were almost exclusively found, or associated, with long iron swords with either separately

cast bronze guards, or with jade guards imitating the form of the contemporary bronze guards. There is a tendency for the slide to become longer (see Table V), while the width and depth measurements, restricted by the functional requirements of the slide, do not significantly change (see Table IV). The average length of the Han scabbard slide (combined Western and Eastern) is nearly one and one-half inches longer than the Late Eastern Chou slide (see Table V). Allied with this increase in length is a greater elaboration of aspects of the slide's basic form, a development seemingly not equally shared by all of the classes. The Grain Class slides tend to be more conservative in their development though their gradual progression points toward stages more swiftly evolved in the Geometric and Hydra classes. The Geometric Class slides, probably chiefly carved in the more sophisticated jade carving centers of North China, exhibit the most dynamic development. They move rather swiftly from a stage of superb power and refinement into a condition of languid and conventionalized elegance by the end of the dynasty. The Hydra Class slides, though least well-known and possibly of southern origin, apparently never attain a stage of high refinement in their basic form, perhaps because of their elaborate surface decor which tends to conceal the basic slide. But by the end of the period, they seem to share with the Geometric Class a significant and somewhat less graceful decline.

## EASTERN HAN

No scabbard slide has ever been found in a post-Han burial and we may assume, therefore, that after the Eastern Han a sword suspension device of a different sort was used.<sup>100</sup> It is possible, even likely, that the scabbard slide became obsolete before the end of Eastern Han as

there is a sharp decline in the numbers recovered from tombs of this date and a correspondingly small number of unattested slides which seem to reflect authenticity either by similarity to an excavated example or through some other factor—logical profile development, iron-

oxide stains, quality of carving, and decor form.

There is a marked constriction in the geographical distribution of the excavated slides, though the small

number precludes the formation of any firm conclusions from this evidence (Figure 13). Five Form I scabbard slides only are known from tombs of Eastern Han date

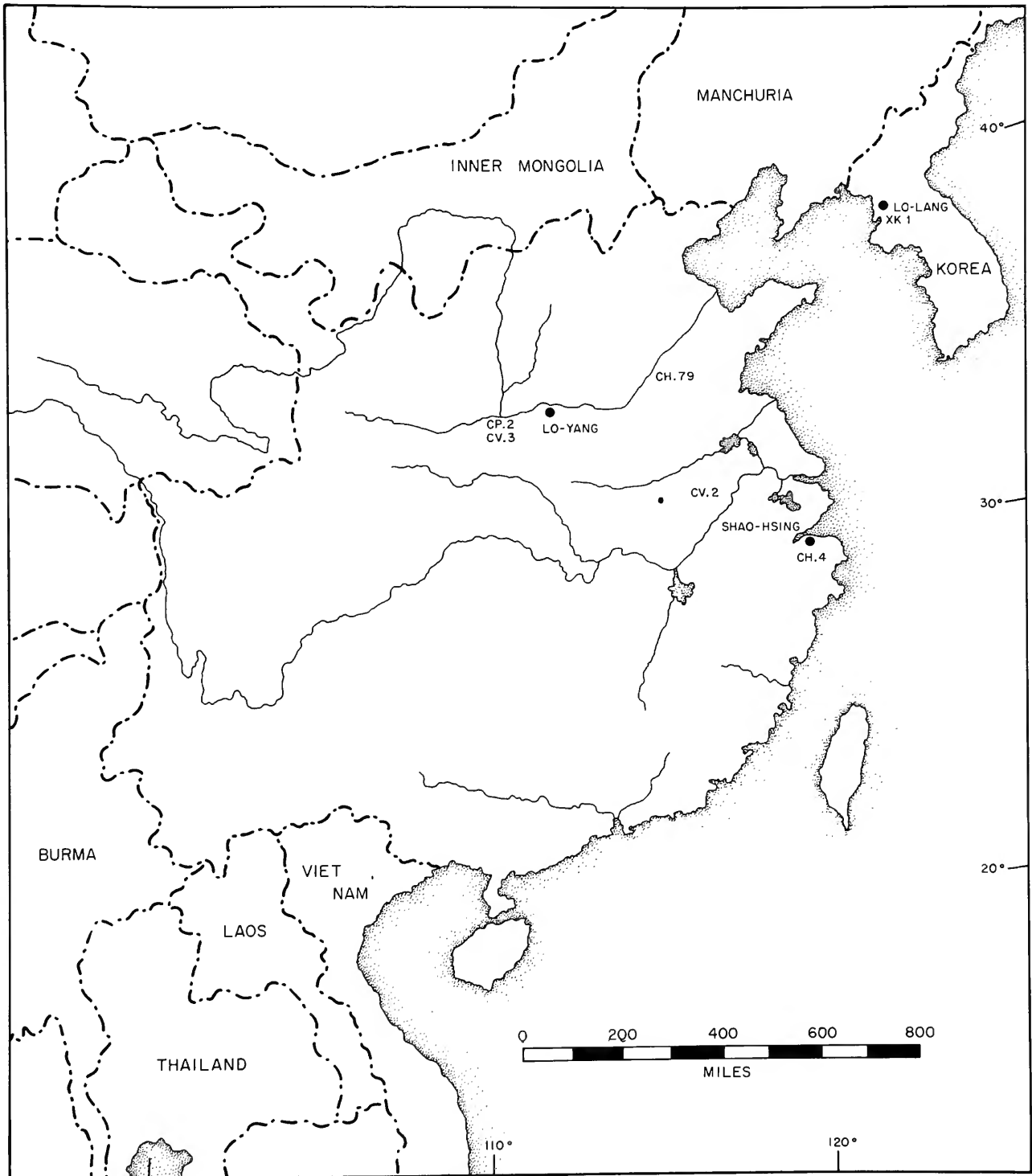


FIGURE 13.—Distribution of Eastern Han excavated scabbard slides.

and, with the exception of *CH.4* from Chekiang Province in central China, they belong to northern provinces.<sup>101</sup> The Grain Class is missing from this group, though the Unornamented class, first encountered in Western Han, is again represented.

The swords found associated with two of these scabbard slides. (*CH.4*, *CP.2*) are revealing specimens.<sup>102</sup> With *CP.2* was a bronze sword about seventeen inches in length. In form it resembles the classic Chou sword (e.g., Figure 35), with blade, guard and hilt cast in one piece. The solid hilt is girt by two bronze rings, the guard projects slightly beyond the blade. That this sword does not reflect the type in use during the Han dynasty is clearly enough shown by reference to the swords found in the Western Han tombs. Two explanations only are possible for its appearance in a tomb of Eastern Han date: (1) the sword was a treasured antique at the time of its burial, or (2) it is a conscious archaistic revival of a Late Chou type intended for ceremonial use. Whether the former or the latter is, in fact, the true explanation hardly matters. The ceremonial implication is equally strong in either case. No one during the Eastern Han period actually fought with a short bronze sword against adversaries equipped with iron swords up to a meter or more in length.

The sword found with *CH.4* is equally anomalous. Again, it is of bronze, but it rather faithfully reproduces a common Eastern Han type of single-edged, ring-

pommeled, iron sword. Since swords of this type originated in iron (Chapter 3), the bronze sword is clearly an imitation, and like the sword with *CP.2* must therefore be considered as having been intended for ceremonial use. The sword is provided with a typical bronze guard of the type shown in Figure 37, but since the single-edged sword has no shoulders where the blade meets the hilt, the blade side of the guard was furnished with a serrated collar to provide additional adhering surface. Probably both slide and guard were adapted to a sword whose ceremonial character is emphasized by the reproduction in the "lovely metal" of an element of military equipment which by this time was exclusively manufactured of the "ugly metal."<sup>103</sup>

Meager as is the evidence afforded by only two swords, it points uniquely toward a function of the scabbard slide of which the preceding periods provided no hint. The swords heretofore found with scabbard slides basically conformed to contemporary development of that weapon form.

### Grain Class

In the absence of any excavated pieces of this class (Figure 14) the final stages in its development may be hypothesized only on the basis of a small group of unattested slides which seem to carry forward in a logical manner preceding developments of the class, or to reflect

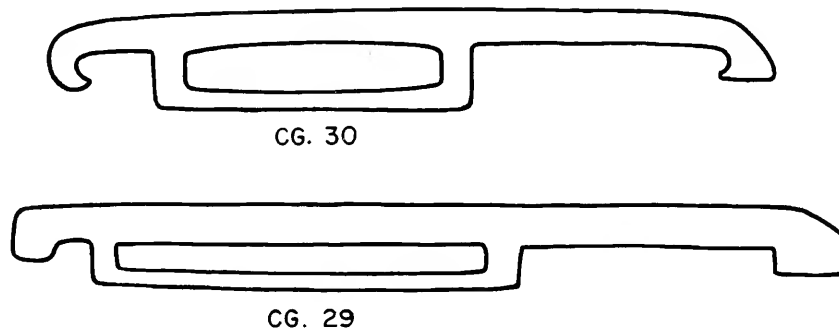


FIGURE 14.—Chinese Form I scabbard slide profile typology: Eastern Han.

certain eccentric characteristics more clearly represented in presumably contemporary slides of the Geometric and Hydra classes. Of the unattested Grain Class slides which seem to belong to the Eastern Han period,<sup>104</sup> the profiles of three only are adequately known (CG.29, CG.30, CG.66 [Plate 6e]).

The upper surface is in every case ornamented with a type of knob grain, either moderately large hemispheric forms or extremely small, fine grains which may be irregular in formation. Two of the basic decor schemes known from Western Han seem to carry over into this period:

(1) grains joined in pairs by curved incised lines arched to the right and below pairs of grains (CG.28), forming a diagonal step pattern across the parallel vertical rows of grains; and (2) a combination of such incised line patterns on the surface of a single slide (CG.30), grouping grains into units of six, with other patterns in incised lines spaced along the central vertical axis and separating the above units. CG.24, CG.27 and CG.66 are molded in glass and ornamented with round knob grains in parallel vertical rows. The manner in which the surface decor was applied to glass slides is revealed by CG.27

on which the entire framed pattern of grains is offset on a diagonal to the parallel vertical sides of the slide, thus clearly indicating that a single die was used to press the decor into the soft surface of the slide after it had been poured into an open one-piece mold.

The animal mask, which appeared at the upper end of several Western Han Grain Class slides, is absent from the Eastern Han specimens. However, sculpted in relief on the forward edge of CG.28, wholly outside the framed decor panel, is an animal figure which has been described as a hydra. Flat planes and perpendicular joins seem to predominate, but at the same time edges which formerly were sharply pointed are now beveled so that in spite of flatter upper plates and perpendicular aperture walls with squared exterior corners, the slides have softer, imprecise contouring, lacking in vigor.

Separate stages in the development of the Grain Class slides of Eastern Han are probably not represented by the three known profiles. All represent final stages, though CG.30, longer and rather broader than earlier slides, has clearer relations to contemporary slides in other classes. The forward end curves inward in a regular arc, the under side is undercut in a complimentary arc so that a rather weakly formed pendant hook-ridge is produced. The lower end curves inward abruptly, but in a regular rounded arc, and is undercut to form a forward-projecting sharp wedge. The aperture walls are perpendicular to the upper plate, the exterior corners squared.

CG.29, its upper surface ornamented with fifty-six horizontal rows of fine, closely set grains, cannot be related in profile to any preceding type. Virtually flat on top, the upper end turns inward abruptly at ninety degrees and the inward-projecting blunt end is slightly rounded. The lower end likewise curves inward abruptly, through a series of two brief flat plains set at forty-five degree angles to each other. The inner side is perpendicular to the upper plate and not undercut. This exceptionally long, angular scabbard slide is provided with an equally exceptionally long but shallow aperture, the walls of which are perpendicular to the upper plate, the outer corners squared. The upper bay is disproportionately small.

The profile of CG.66 (Plate 6e), a glass slide, is in part dictated by its cast rather than carved manufacturing technique. But the thick, fully rounded upper end, and the angular lower end, similar in form to that of CG.29,

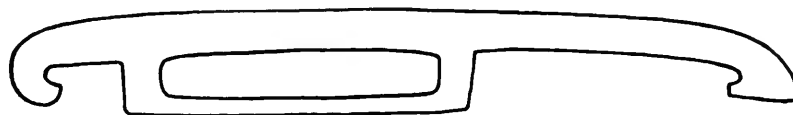
suggest that it belongs to this Eastern Han terminal group.

It is questionable whether any of these three slides represents a final development of a still meaningful form. As a class, grain-decorated slides exhibited a more conservative development throughout Late Eastern Chou and Western Han. At the end of Western Han, the forms were still executed with an integrity that bespoke concern for utilitarian qualities. The aperture of CG.29 is too thin to have served its intended function well (see Chapter 3). It is, in effect, a stylized scabbard slide, perhaps already a kind of ceremonial or conventional souvenir of a formerly useful object. Though the sword with which this slide may have been associated is not known, one is reminded at once of the essentially ceremonial swords equipped with scabbard slides found in Eastern Han tombs.

CG.30, on the other hand, is not a "stylized" scabbard slide, but represents a comprehensible terminus in the development of the form. Possibly no less conventional and ceremonial than CG.29, it shares, at least, a common form with slides of other classes. That is, its development ceased to progress logically when the form itself had largely lost its meaning; it was suddenly given the long, and what must have been thought graceful, shape Geometric and Hydra slides had earlier achieved. It hardly seems possible that the conservative Grain Class forms could have disintegrated immediately with the advent of Eastern Han. Probably there are intermediate stages still poorly known. But both CG.29 and CG.30 may represent a condition reached by the end of the first century after Christ.

### Geometric Class

The Geometric Class (Figure 15) is represented by two excavated examples (CV.2, CV.3, but see CV.102 recovered from a tomb of Eastern Han date), but the profile of neither is known and a photograph of the surface decor of only one (CV.2) has been published. Poor as this photograph is, it may be determined that the decor differs sufficiently from that of Western Han slides to constitute an additional stage (Type 1, Stage e). Probably slides with Type 1, Stage d, decor were still current in the earlier Eastern Han, but none of this stage can be clearly identified. And as far as I have been able to determine, no



CV. 18

FIGURE 15.—Chinese Form I scabbard slide profile typology: Eastern Han.

development beyond Stage e can be traced. Among unattested scabbard slides are two only with Type 1, Stage e, decor. Their profiles are likewise unknown.

This disappointing lack of evidence for the final stages in the development of the Geometric Class is somewhat mitigated by a single known profile of a scabbard slide with Type 2, Stage c, decor. Again, it is probable that slides with Type 2, Stage b, decor were also carved during the earlier part of Eastern Han (CV.90, Plate 5*b*, may be an example), but evidence to support this is presently inconclusive. The profile of CV.18 (Plate 5*c*) is similar to that of CG.30 (Figure 14) described above, but with greater exaggeration of the languid and conventionalized aspect. The upper plate, slightly arched, terminates above in a pendulous involuted hook-ridge with a suggestion, weakly expressed, of a back-sloping forward edge in the lower part of the exterior curve. The lower end slopes inward gradually in a broad, fairly regular arc and is undercut to form a large, awkwardly proportioned, forward-projecting squared wedge. The aperture is long and rather clumsily formed. The development from such late Western Han profiles as CV.8 (Plate 3*b*) is clear. Equally clear is the increased sense of arbitrary execution of the basic slide form. Whereas CV.8 exhibits conventionalizing tendencies following the superb achievement of such forms as CV.22 (Plate 2*a*), CV.18 carries this gradual process into a stage of conventional imitation in which originally meaningful form related to utilitarian purpose seems scarcely apprehended.

### Hydra Class

We are scarcely able to judge the development of the Hydra Class (Figure 16) more adequately than that of the preceding two classes. It is represented by two excavated examples (CH.4, CH.79) and by a larger group of unattested slides which seem, chiefly on the basis of surface decor, to belong to the Eastern Han period.<sup>105</sup> The profile of only one slide is accurately known (CH.4), and from what may be judged from published oblique profile photographs of other pieces, it is atypical.

It is as unlikely that definite changes in Hydra Class scabbard slides correspond to political chronology as it was that the Geometric and Grain classes should show clearly Eastern Han characteristics as opposed to Western Han ones. It must be assumed that the development in all three classes was more or less regular, with certain features only that can be isolated as being more characteristic of one period than another. During the Eastern Han, the majority of Hydra Class slides were probably ornamented with two hydra figures as before (e.g., CH.14, Plate 9*d*), but there are tendencies toward both conventionalization of the pattern and consciously contrived variations. In most cases, the animals are carved in nearly

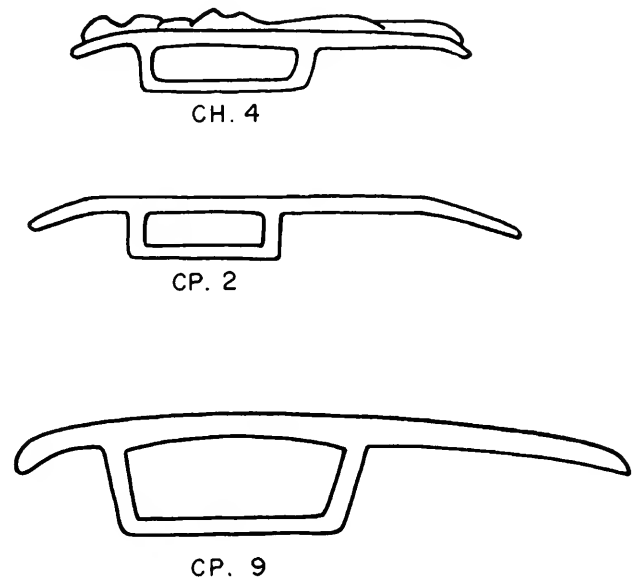


FIGURE 16.—Chinese Form I scabbard slide profile typology: Eastern Han.

full round, being undercut from the surface in several places, or touching the surface only with the paws, tail, and neck. The smaller hydra is placed at the upper end, sometimes projecting in relief slightly beyond the upper end; the larger hydra sprawls in an elongated, extended S-curve over the major portion of the slide below and generally has a bifurcated tail, the longer stem occasionally marked with curved lines suggestive of a twisting motion. Along the sides are thin, plain borders set off by incised grooves interrupted at intervals by the bodies of the animals which reach to, but do not extend beyond, the sides of the slide. These are the conventionalizing slides. Their profiles seem in the main not to differ much from late Western Han types, though there is perhaps still less attention paid to the carving of the basic slide as correspondingly more attention is given to the sculpting of the surface designs. The bodies of the hydras are more heavily patterned with incised and sculpted details suggestive of musculature, the heads are more fully articulated, and a single small horn may protrude from the center back or top of the head. In the main, such pieces do not bespeak continued development of a meaningful form, but imitation of a traditional one. Such imitation of traditional form in a conventional manner, extending over centuries, is a particular phenomenon of the jade-carvers' art.

It is possibly in the seemingly atypical Hydra Class slides that the true innovations of Eastern Han were more clearly expressed, and if these more inventive and luxuriant forms are indeed the chief contribution of the

Eastern Han craftsman to the development of the scabbard slide, then they point once again toward a dissolution of the utilitarian form into a largely ceremonial and decorative object. The upper surface of these slides is usually ornamented with multiple hydra forms, often nearly in full round, with heads and shoulders raised considerably above the surface (e.g., CH.36). Less organically conceived, these stylized creatures are portrayed plunging in and out of the surface of the slide which is treated as a body of water, their bodies interlocked and overlapping. This idea was already current at the end of Western Han; the hydra or dragon forms on a large gold buckle from tomb 9 at Lo-lang, the tomb in which CV.8 was found, are represented coursing through water or clouds.<sup>106</sup> It is possibly a reinterpretation of the motive of squirming, interlocked serpents employed on the backs of certain mirrors during the late Chou, a motive which occurs as well on the atypical lacquered-wood scabbard slide CZ.10 (Plate 10d) belonging to this same time. In the best examples these multiple hydra forms are handled skillfully enough to give the overall design a certain rhythmic quality. In others, however, such as CH.17 with an extravagant, flamboyant luxuriance of complex, poorly articulated interlocking forms laid on a heavily patterned surface, the craftsman not only sacrificed clarity of design in his effort to create intricate and decorative surface effects, but almost totally obscured the basic form of the scabbard slide. Such a piece, almost certainly Eastern Han in date, cannot be viewed otherwise than as a

clear indication that the scabbard slide had already ceased to fulfill its earlier utilitarian function and was regarded chiefly as a semi-meaningless traditional form, a vehicle which within certain now vaguely defined limits of shape and decorative scheme provided jade craftsmen surfaces upon which to display their virtuosity through the elaboration and stylization of conventional forms.

The single adequately known profile (CH.4) belonging to this group tells us comparatively little about the final form of the Hydra Class scabbard slide. It cannot be related to any earlier type and probably represents but a single Eastern Han variety, for it may be assumed that with the gradual transformation of the scabbard slide from a useful object into one of largely ceremonial or decorative function, less care in reproducing the older forms was taken. It is worth noting, however, that the profile of CH.4 (excavated in Chekiang Province), basically a thin-walled aperture surmounted by an upper plate which simply inclines inward slightly at each end without inward-projecting hooks or ridges of any sort, is essentially identical to the plain, gilt bronze slide CP.2 (Figure 16) from Shensi Province. The sword with which CP.2 was associated is not known, but the ring-pommeled bronze saber with CH.4 could—as has been noted already—only have been ceremonial. The rare bronze scabbard slide from Shensi has a near counterpart in CP.9 (Plate 1b and Figure 16), and the similarity in profile of CP.9 to CP.2 and CH.4 suggests an Eastern Han date for this slide as well.

## SUMMARY

Precise dates for the foregoing proposed stages in the development of the scabbard slide cannot be given, though I believe the beginning and terminal dates for the useful life of the object may fairly certainly be established, and there are a few intervening stages to which tentative dates may be affixed. In proposing a series of stages in the development of this object, sometimes supported by chronological reference points and at other times only hypothesized, I do not intend to imply that the stages were always consecutive. In some unidentifiable instances they may have been so, but probably there was considerable overlapping. The series of stages is outlined simply as a key to the typological development of the slide.

While it is possible that the concurrence of various stages in this development may account for the evident, or seeming, disparity in the sequence of stages of separate classes which could be studied only in terms of the comparatively few adequately known examples in each class and period, there emerges a certain overall pattern which is relatively consistent throughout all the classes. Hence,

the development of the Grain Class slides may, in fact, have been somewhat less conservative than the examples we have been able to adduce permit us to demonstrate. In the same manner, the clearly distinguishable stages of the Geometric Class slides may in some instances represent early phases of highly developed forms which continue well beyond the particular point at which they have been isolated.

The reasons for discrepancies between one class and another in terms of profile development may also be contingent upon another factor which cannot be accurately assessed on the basis of available information. The Grain Class slides which appear consistently to be more conservative in form seem also to have been the earliest type. The earliest Grain slide on hand (CG.58), which may be as early as the mid fifth century B.C. and which we tentatively advance as the possible *terminus a quo* for the appearance of the Form I scabbard slide in China, is fully a century earlier than any slide of either the Geometric or Hydra class presently known. That the Geometric

Class slides consistently demonstrate a more sophisticated form than the Grain slides could in part be owing to their later arrival on the scene, progressing rapidly toward graceful and refined shapes while the earlier and more primitive form of the Grain Class slide was altered more slowly. Whether or not the restricted decor schemes employed on the upper surface of scabbard slides carried any symbolic meaning associated with the function of the object, is not known. The likelihood is that, at least in the beginning, they did, and it is then possibly significant that the earliest slides, decorated with the grain pattern, retained their more functional appearance after types developed later had already begun to decline.

Finally, the geographical factor should be taken into account though it is most inadequately known. The original center for manufacture of Grain Class slides is least certainly known. Though *CG.1* from Ch'ang-sha evinces a more primitive form than *CG.58* from Lo-yang, the latter is almost certainly the earlier of the two. The basic form of both is essentially the same and probably they bring us very close to the initial stage in the development of this object in China. But in the most sophisticated jade carving centers of North China, it is logical that the workmanship should exhibit qualities of refinement never equaled in the south. Such a view is strengthened, on the whole, by the consistently more unrefined aspect of the Hydra Class slides which were possibly a particular southern development in the beginning. Only later, when they were doubtless produced in the north, is there a standard of excellence in carving equivalent to that of the Grain and Geometric slide, though the basic form is never as powerfully perceived, possibly owing to a preoccupation with the more elaborate and concealing surface ornamentation. The Geometric Class slides are almost certainly a development of North China; fewer have been found in South China tombs than either of the other two classes.<sup>107</sup> As a particular northern lapidary type, it is reasonable to presume it might have had a more dynamic development in the hands of the more skilled and inventive craftsmen of this region. Such geographical phenomena are not restricted solely to the production of scabbard slides. During the Late Chou and Early Han periods the ateliers of Honan Province, principally, produced the finest works in jade of all types of form, and it is largely the production of these Honan craftsmen which has been taken to represent the typical, or standard, "Late Eastern Chou

style"—the meticulous, exacting workmanship and unerring sense of design which is often considered to have elevated the art of jade carving to unexcelled heights.<sup>108</sup>

In its earliest attested stage the scabbard slide is a simple enclosed aperture; the upper plate may be flat or only slightly arched, extending for a short distance below the aperture but fused with the upper aperture wall. Gradually, as the plate below the aperture lengthens, a projection of the plate above the aperture emerges. First the lower end of the upper plate is curved inward, defining an open bay between the aperture and the lower end of the slide; later, the forward projection of the upper plate, never as long as the lower projection, is curved inward also to form an upper bay. These terminal inward projections then develop in several subtle ways and are undercut to form hook-like ridges (above), or forward-projecting wedges (below). Early in the Eastern Han period the orderly process of development appears to break down; eccentric and atypical forms appear which suggest the earlier design, largely dictated by functional requirements, is no longer a determinant in the fashioning of these pieces. The surface decor, already formalized and conventionalized by the end of Western Han, continues this uninspired imitative course into Eastern Han, but a new luxuriance and flamboyance affects the ornamentation on a number of the pieces of this date and emphasizes the ceremonial and decorative nature of the object, an emphasis seemingly corroborated by the clearly ceremonial nature of the swords associated with these slides. A precise *terminus post quem* for the slide as a meaningful and functional object cannot be established; but the available evidence suggests that possibly before the beginning of the second century after Christ, slides were no longer manufactured with a clear awareness of a utilitarian function.

The earliest slides are associated with short swords of typical Late Chou type, cast in bronze. Before the end of the Chou dynasty, there is evidence of their association with a wholly different type of weapon—a long, double-edged iron sword. Throughout the Western Han period scabbard slides are almost exclusively associated with long iron swords; but at the beginning of Eastern Han we find they are once more associated with bronze swords, either archaic types or ceremonial imitations of contemporary iron types. This pattern coincides quite well with the development of the slide itself.

## LATE ANTIQUARIAN SCABBARD SLIDES

Before proceeding to a consideration of the function of the scabbard slide, the possible reasons for its appearance in China, its use and later discontinuance, and the

historical context and significance of the scabbard slide not only in China but over vast tracts of Asia and Europe, something must be said concerning the later



production of the scabbard slide in China.

Though I believe some evidence has been put forward to indicate that the scabbard slide was no longer produced as a utilitarian object after the first century after Christ (and more evidence will be brought forward in subsequent chapters), it is equally obvious that scabbard slides were carved after this time, and indeed, have been, and undoubtedly are being, produced in the present century. That such should be the case is not surprising. In the conservative art of jade carving, shapes far older than the scabbard slide, shapes whose original meaning and purpose surely had been forgotten long before the scabbard slide appeared, are still being carved today. Hence, jade dagger axes imitating Shang dynasty bronze weapon forms, perforated jade disks whose primordial function probably terminated before the end of the Neolithic period, and countless other forms whose original function and meaning are unknown, are still carved and cherished today. I am not the first by far to note this, and to explain this phenomenon as a reverence on the part of the Chinese not only for the jade minerals but for the traditional shapes, a fondness for the combination in a single work of art of ancient symbolic forms or simple utilitarian shapes which have acquired *de facto* symbolic qualities through long ignorance of their mundane use with a material already embodying for the Chinese symbolizing qualities, is not here an original observation.<sup>109</sup> What is important here is to identify certain criteria by which these late antiquarian scabbard slides can be distinguished from authentic early ones.<sup>110</sup>

Careful, meticulous copies can, of course, be made at any time and there is no certain way to distinguish every antiquarian piece from authentic ones. But the majority, presumably, of the late antiquarian slides exhibit certain characteristics which render them easily distinguishable. In some instances these features may have been revealed unintentionally by the carver, though again certainty in this regard is impossible. In the majority of instances, however, there seems to have been no conscious attempt on the part of the carver to "forge" a piece indistinguishable from an authentic slide. Such deception is not the usual intent of Chinese antiquarian productions which are meant only to embody an archaic reference in response to contemporary tastes.<sup>111</sup> Hence, scabbard slides such as those with supplementary hooks centrally placed in the lower bay (see **CV.13**, **CG.49** [Plate 13a], **CH.45** [Plate 14a], C.6, and Introduction) are easily identified as antiquarian objects produced without understanding even the scabbard slide's uniquely functional original form. Easily identified also are the many slides employing decorative schemes on their surfaces which bear little or no relation to late Chou and Han designs, or to the extremely limited number of motives represented in the relatively large corpus of reli-

ably authentic scabbard slides, designs which in the main reflect in some aspect fashions contemporary with the period of their manufacture.<sup>112</sup>

But in a relatively large number of cases distinctions between authentic and antiquarian slides are uneasily and uncertainly made. These are the slides which faithfully reproduce the form and decorative schemes of slides produced during the determined period of authenticity and our attention should be directed primarily toward these more ambiguous pieces. To develop here decisive criteria for identifying the skilled antiquarian imitation scabbard slide would require a discussion in length at least equal to that devoted to the authentic slide and would constitute a diversion far from the historical period of concern.<sup>113</sup> I propose only to generalize on the most outstanding characteristics of this group.

### Form and Size

We have observed in the discussion above of the authentic slide a tendency for a gradual increase in length. Since the most natural point of departure for the antiquarian slide would be the later examples more plentifully at hand, we might expect the antiquarian slide to be as long as the later authentic slides, or even to exaggerate this aspect, ungoverned as it would be by utilitarian requirements. Such does, in fact, appear to be the case. By reference to Table V and Table VI, it will be seen that on an average the antiquarian slide is one-half to one and one-half inches longer.<sup>114</sup> This evidence of exaggeration in form can be noted in other aspects as well and provides a not unexpected continuum of characteristics apparent in the final stages of the authentic slide. Table IV shows that although those aspects of the authentic slide most closely tied to its function remained highly constant throughout the period of its use—width, depth, aperture length and depth—these same aspects were significantly altered in the antiquarian slide. It became significantly wider, deeper; the aperture became longer and, no longer of any use, rather shallower, the slide thus evolving gradually into a broader, longer, and relatively lower object. This lack of concern for the functional qualities is echoed in the generally degraded apprehension of the basic form. End protuberances, often merely amorphous inward-projections (**CG.45**, Plate 12e; **CG.64**, Plate 13c; **CV.89**, Plate 12c) at times reach inward to a depth equivalent to the depth of the slide, sometimes even exceeding it (**CH.45**, Plate 14a and **CH.60**, Plate 13d) so that the lower aperture plate clearly could never have been inset on the wall of a scabbard as were the authentic specimens. There is a tendency to avoid the crisp angularity of the finest authentic pieces, to bevel edges and to render all transitions in curves.<sup>115</sup> Apertures are frequently less carefully cut and polished, leaving

jagged interior ridges and unconcealed file and saw marks which would have produced excessive wear on the leather sword belt had such been the case with authentic slides. The aperture became, apparently, a difficult and tiresome—because meaningless—detail of the traditional shape.

### Ornament

While the traditional classes of ornamentation observed on authentic slides are often retained on antiquarian copies, these are usually altered to conform with identical or similar forms on contemporary works, the way in which they are perceived and executed, the use to which they are put, and their position within decorative schemes having little or nothing to do with the earlier periods.<sup>116</sup> Thus grains are larger, softly rising mounds, or they are given deeply incised perimeters (CG.50, Plate 13*b*), or they are too widely spaced; geometric forms are combined in ways to form new patterns (lateral C-spirals curling upward; CV.89, Plate 12*c*), are exceptionally elongated, and new elements are introduced such as large grains bracketed by long, flat C-spirals (e.g., CV.48, Plate 12*b*); hydra figures become more complex, patterned, decoratively mannered and inorganic, and sometimes appear on the underside of the slide.<sup>117</sup> Where limbs or appendages join the body there are often deeply incised, tight C-spirals.

On the basis of the number of antiquarian slides personally examined, it would appear that the Hydra Class was the favored type of the antiquarian carver. The developments of Eastern Han in which there is observed an ever-increasing concern for the elaboration and stylization of these forms would logically support this evidence. Indeed, antiquarian slides of the Hydra Class were evidently so common in China several decades ago that they were thought to be the exclusive form. A writer of the time reported that the scabbard slide "is usually decorated with a double headed hydra or dragon . . ." <sup>118</sup> In the Hydra Class only is the tendency among antiquarian slides for shallower forms reversed, and as the carving of the animal figures grows more imaginatively extravagant and the relief, in the best pieces, higher, they may be deeper than they are wide, an equally unsatisfactory characteristic as regards the functional aspects of the slide. While grain and geometric patterns as we find them on the authentic slides seldom if ever occur in the same forms after the Han dynasty, the hydra enjoyed an increasing popularity during later periods and was liberally employed in the decoration of all types of objects. This predilection for the hydra form in later periods probably accounts for its prevalence on antiquarian slides.

### Stone Quality and Evidence of Age

The antiquarian scabbard slide cannot be distinguished from the authentic by any easily apprehended qualities of stone, nor by superficial evidence of age. The makers of antiquarian objects were not only careful at times to select pebbles with veins of naturally decomposed material, but fresh stones as well could easily and quickly be stained and given the superficial appearance of antiquity by the application of oxides, acid stains, or heat.<sup>119</sup> Style of carving and the manner in which the basic form has been executed are the sole reliable guideposts to dating the antiquarian slides. Much depends on the smallest details and variations in techniques of carving and these qualities are often difficult to apprehend from photographs. Many of the scabbard slides I have considered to be antiquarian on a stylistic grounds are carved of gray, white, or dull greenish gray translucent stone (e.g., CG.64, Plate 13*c*). Stone of this coloration is relatively common in later periods and to my knowledge is unrepresented among the excavated, or reliably authentic, slides. A taste for natural imperfections and for utilizing the "skin" of jade pebbles in carvings is characteristic of jade connoisseurship during times later than that of the authentic slide, and we may assume that those few slides which reflect this taste belong to later periods. Wear at the upper left interior corner of the aperture, produced by prolonged use on the leather sword belt and detected on several specimens, is the only reliable tangible evidence of antiquity. Until recently wear never occurred on antiquarian slides, since the use of the object was not known. Likewise, until the last few years no antiquarian piece had iron or bronze oxides or stains on the exterior of the lower aperture plate. Though there is no reason why these might not be added to any recent piece by a skillful forger, association of the scabbard slide with sword blades was not understood until recent times and such stains noted earlier would have been considered accidentally acquired rather than indicative of authenticity.

In keeping with the interest in the collection, study, and reproduction of antiquities during the Sung dynasty, it may be assumed that the scabbard slide was copied this early, and probably still earlier, as an antiquarian object. But the vast majority of the antiquarian pieces known today were undoubtedly carved in the nineteenth and early twentieth centuries, perhaps especially for an undiscerning Western market. Jade was not so rare during the Ch'ing dynasty in China as it often had been earlier.<sup>120</sup> Except in times of rebellion when the roads to the jade quarries of East Turkistan were closed, improved methods of quarrying and transport enabled tons of jade to reach China yearly so that craftsmen might fashion single objects weighing as much as 640

pounds, an extravagant use of the mineral hardly possible at earlier times.<sup>121</sup> The scabbard slide was surely well represented among the countless thousands of perfunctory productions without the slightest merit which flood-

ed the jade markets of the larger cities of China during this period and which are now to be found in great numbers in the collections of the Western world.

## The Long Sword and Scabbard Slide in China

### FUNCTION OF THE SCABBARD SLIDE

The identity of this object which perplexed so many scholars in China, Europe, and America for so many years should no longer be in doubt. Sufficient numbers have been found *in situ* to put to rest further speculation. Yet mere knowledge of its association with sword scabbards and presumption that it was related in some way to the suspension of the sword at the wearer's side is not sufficient to explain either how it served its intended purpose, or why it was favored over some other form of suspension device. Hence, speculation regarding the function of this object has persisted.

On the basis of several examples recovered from tombs in China and elsewhere (see, e.g., *CV.8*), we know that the scabbard slide was attached to a flat, or-ribbed, wall of the scabbard, the wall facing away from the body of the bearer of the sword. The exact position on the scabbard wall varied somewhat in accordance with the length of the sword, its form, weight, and balance, and probably also in accordance with the wishes of the man who would bear the sword. Generally, the aperture of the slide is situated at a point about two-fifths of the distance downward from pommel to chape (Figure 17). The thin, rectangular lower aperture plate was inserted into a shallow socket on the lacquered wood or leather scabbard (Plate 8c and Figure 5). The depth of this socket probably did not exceed the thickness of the lower aperture plate so that, when inserted in the socket, the inner surface of the lower aperture plate formed a continuous line or surface with the scabbard wall, as shown in Figure 17.

Since scabbards were slender, their walls often very thin, it was necessary for the lower aperture plate of the scabbard slide to be as thin as the stresses to be placed upon it would permit. In some instances, the scabbard wall was elevated to either side of the slide to accommodate the lower aperture plate without its intrusion into the interior of the scabbard (Plate 8c). Probably some kind of adhesive material was used to secure the slide in the socket (see *XM.3*), but silk threads were undoubtedly also bound around the scabbard wall, passing through the aperture of the slide along the inner surface of the lower aperture plate and then rendered firm by painting over them with lacquer or some other adhesive matter.<sup>122</sup> There is evidence that in some instances a thin metal band was used to bind the slide to the scabbard wall (*CV.101*, *XCH.17* [Plate 24a]). The base socket prevented the slide from slipping upward under the weight of the sword, or to either side with the movement of the bearer; the cords, or metal band, secured the slide to the scabbard wall. The shorter extension of the upper plate projected upward, the longer downward. In some cases, the curved terminal inward projections of the upper plate must have rested against the scabbard wall; in other cases (Plate 8c), they clearly were raised above it. At any rate, these inward projections could not extend inward to a depth greater than that of the level of the inner surface of the lower aperture plate without requiring that the scabbard wall be cut out to accommodate them. No authentic slide has

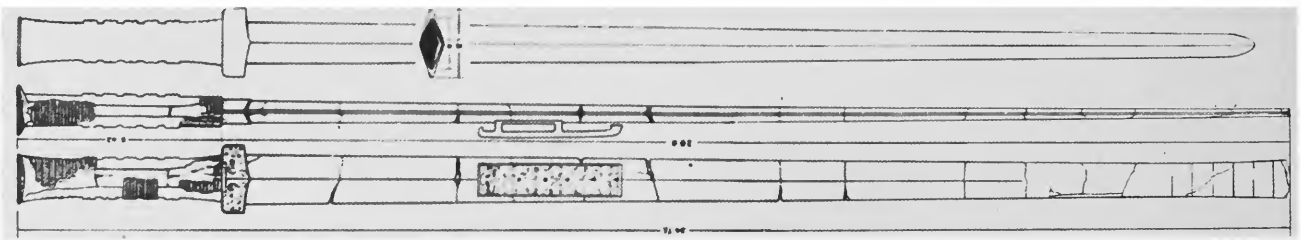


FIGURE 17.—Chinese iron rapier from Lo-lang, Korea. [After Yetts (1926), plate E.]

such deep terminal inward projections, but they are not uncommon on antiquarian pieces, as also are thick lower aperture plates.

As we have seen, the earliest scabbard slides were essentially enclosed apertures with no extension of the upper plate above the aperture and only a short straight or slightly in-curving extension below. The purpose of the extended upper plate cannot be accounted for in terms of the function of the scabbard slide and probably its gradual development was one of evolving design and aesthetic. It was the only part of the slide which could be altered, modified, elaborated, without impairing its function.

Once the identity of the scabbard slide had been revealed, that it was neither a girdle clasp, nor a sword guard, nor any number of other useful objects (see Introduction), but a device for bearing a sword, there emerged several theories regarding the manner in which this object was put to such a use. There is no need to recapitulate here all of the theories put forward in the past to explain the manner in which this object in one way or another served to facilitate the suspension of the sword.<sup>123</sup> Most of these theories involved either the passage of the wearer's garment belt through the aperture of the scabbard slide, thus attaching the sword directly to his person, or the suspension of the sword more loosely from cords hung over the slide and attached to the garment belt. Some authors devised theories by which the scabbard slide served as part of a sling for bearing the sword on the back over the right shoulder, the manner in which they believed the sword to have been carried in ancient China. I illustrate two of these theories only, by writers who devoted considerable attention to the matter. Both theories were formed in full cognizance of at least the excavated specimens from Lo-lang, Korea.

R. P. Hommel, writing in 1928, was correct in placing the slide on the side of the scabbard and binding it by cords passed through the aperture and about the body of the scabbard (Figure 18).<sup>124</sup> The scabbard is then borne by passing the wearer's belt through the lower bay. The upper bay was used "for the passage of a cord," for what purpose is not revealed. Writing only a short while after the publication of the Lo-lang finds, Hommel was at least partly correct in his reconstruction.<sup>125</sup>

Writing in 1960, Na Chih-liang ignored the evidence of more numerous excavated specimens and proposed a totally unsatisfactory reconstruction (Figure 19),<sup>126</sup> though we shall see that there is a logical explanation for his error in terms of later weapon developments. Na removes the slide from the scabbard and envisions it worn vertically at the waist, the bearer's garment belt passing through the aperture. A chain, passing through the upper bay and resting against the forward aperture wall, hangs

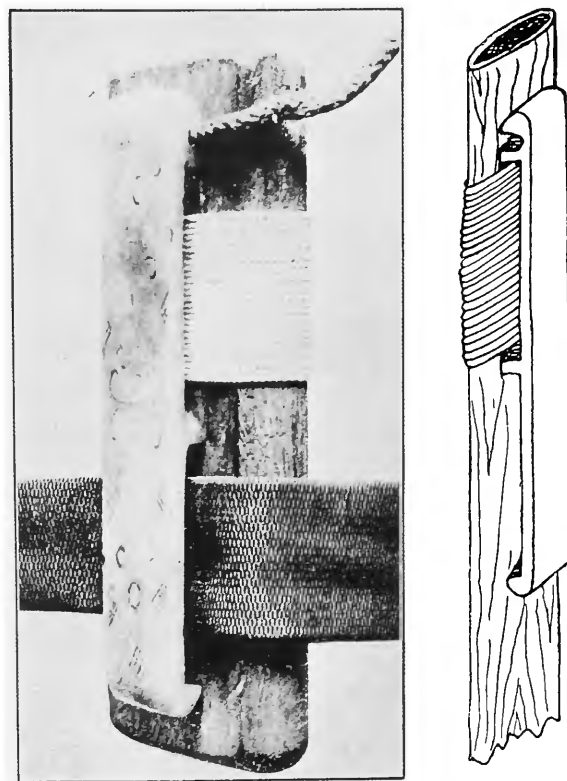


FIGURE 18.—Theoretical reconstruction of placement and use of scabbard slides. [After Hommel (1928), figure 2, facing page 4.]

down to either side of the slide. The sword, not shown in his reconstruction, is attached by means of eyes at two places on the scabbard edge to the ends of this chain. The hook-ridge at the forward end prevented the chain from slipping off the slide. The slide was curved so that it would cling closely to the body as the weight of the sword exerted a downward pull.<sup>127</sup>

John Goette remarked in 1936 that "since no pictorial representations of its use have been preserved, settlement of the argument over the Sui must remain in abeyance," and this in some way, at least insofar as China is concerned, excuses the incorrect theories put forward by earlier writers.<sup>128</sup> It must be noted, however, that Hsü Ch'ieh 徐鍇 (A.D. 920-974), in his commentary to the Han dynasty dictionary *Shuo Wen*, remarked that "the *chih* is said to have been on the side of the sword case, and there was a part of it through which passed a leathern thong."<sup>129</sup> The theories of later writers can hardly claim the same handicap to a correct understanding of the function of the scabbard slide.

There are numerous representations from late Chou and Han China of men equipped with swords, but the majority of these are not very instructive in the matter

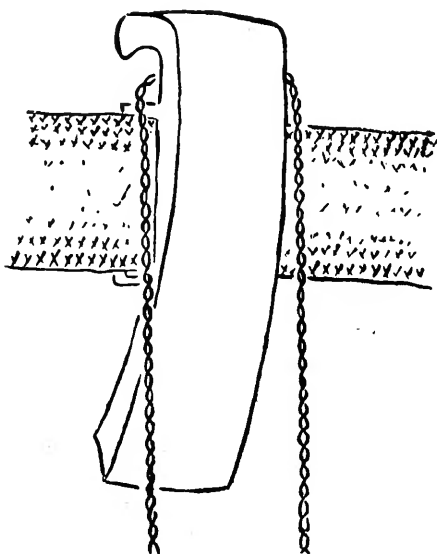


FIGURE 19.—Theoretical reconstruction of placement and use of scabbard slide. [After Na Chih-liang (1960), page 464, figure 6.]

of suspension, either because the suspension device is not represented or it is concealed under full sleeves, or, because the sword is shown hung on the bearer's side away from view. There are, however, a few representations of swords which reveal the manner of suspension quite clearly, and a careful examination of these permits a meaningful interpretation of at least some of the examples where the suspension device is not seen.

In 1938 Alfred Salmony published a photograph of a small jade statuette (2.06 inches high), then in the Oscar Raphael Collection, London, and now in the British Museum (accession number 1945 10-17 86) which he ascribed to the Late Eastern Chou period (Figure 20).<sup>130</sup> Extravagantly coiffured and amply robed, the man holds a sword vertically against the center of his body. The right hand is placed on the hilt just above the scabbard mouth, the left hand grasps the scabbard lower down. On such a small statuette (here quite enlarged), it is surprising to find so many details carefully rendered. The clearly depicted sword and scabbard are typical Late Chou types. The lacquered scabbard, contracted toward the lower end, is fitted with a prominent jade chape of the customary rhombic form. The sword, undoubtedly of bronze and of moderate length, is furnished with a broad disk pommel of the type frequently inlaid with a circular concave piece of jade. Just below the left hand, in the center of the scabbard wall, there is a rectangular protuberance which is evidently intended to represent a scabbard slide. How the sword is attached to the waist is not shown; perhaps it is not slung at all,

but merely held. But if it is indeed slung, then we may be assured that the garment belt did not pass through any part of the scabbard slide for this belt is shown above the left arm, passing across the body just below the scabbard mouth.

In 1939 Bishop White published rubbings of a large



FIGURE 20.—Chinese jade statuette of a man holding sword equipped with scabbard slide. [After Salmony (1938), plate LIII,5.]

series of stamped tomb tiles from Honan Province, belonging to the late Chou period, probably the third century B.C.<sup>131</sup> The designs were pressed or incised into the soft clay before the tiles were fired. The figures and designs are quite limited in kind, but were repeatedly stamped to form a variety of compositions. One of these representations is that of a man holding a halberd before him and wearing at his left or right side a sword carried on a scabbard slide (Figures 21 and 22).<sup>132</sup> Again the sword and scabbard are clearly Late Chou types. The

presumably through the scabbard slide rather indistinctly rendered, but seen more clearly in the Figure 22 photograph.

The belt on which the sword is hung is clearly not the garment belt; the latter is seen passing in a straight line from back to front above the sword belt. The two belts are also clearly not of the same type. The broad garment belt is probably a silk sash, passed through a ring at the right side and knotted, the ends falling down the side, or secured with a belt hook in front. This is



FIGURE 21.—Rubbing of a Chinese tomb tile slab depicting a guardian figure. [Courtesy Royal Ontario Museum, Toronto, Ontario.]

sword, undoubtedly of bronze, has a disk pommel and a hilt girt by at least two rings. The silk cords with which hilts of this type were wrapped are clearly depicted.<sup>133</sup> The scabbard is similar to that described on the preceding figure, and is again provided with a chape ornament, here represented as a rectangle at the lower end of the scabbard. Just below and to the right or left of the man's elbow a belt, slung in a downward arc along his side, passes over the outer side of the scabbard and



FIGURE 22.—Stamped Chinese tomb tile depicting a guardian figure. [Courtesy Royal Ontario Museum, Toronto, Ontario.]

the standard garment belt of late Chou and Han.<sup>134</sup> The sword belt is possibly narrower and presumably flat, if it passes through the slide aperture, as the average depth of the apertures is but a quarter of an inch (Table IV), and part of this depth is taken by the thin cords we must assume normally were used to bind the slide to the scabbard wall. It is equally certain that the belt did pass through the slide aperture, for not until Western Han does the lower bay develop sufficient length to accommodate a belt and on many examples the inward-projecting lower wedge is of insufficient depth to have provided a second enclosed area necessary to secure the scabbard to the belt. The typological development of the scabbard slide described in Chapter 2, from a simple enclosed aperture such as *CG.1* or *CG.58*, has adequately shown that the gradual development of the upper plate can have nothing to do with the basic function of the slide. The only consistent element is the enclosed aperture, and on typologically early forms there is no other place the belt could have passed except through the aperture.

An interesting argument put forth by one writer opposed to the idea that the belt passed through the scabbard slide set low on the scabbard wall was that in such an arrangement "the end of the hilt will certainly be at least eight or nine inches above the belt, reaching as high as the chest or the armpit. It is easy to conceive what inconvenience this would give to the bearer of the sword."<sup>135</sup> While he was thinking specifically of the higher placed garment belt rather than a low slung sword belt in this regard, the representations on the tomb tiles do rather justify his concern; the sword pommel is on a level with the man's shoulder. From a desire to depict both the wrapped hilt above the wide sleeve and the scabbard slide below, the artist rather exaggerated the distance between pommel and slide. As it appears here, with the slide low on the scabbard, the sword would surely have fallen forward. As shall be seen, this did in fact sometimes happen.

The broad, flat belts worn by these figures on the tiles, then, must be either of leather or of webbed cloth. Belts of both types, though probably not themselves sword belts, have been found in late Chou tombs. A fragmentary leather belt was found in the same tomb with *CG.1*. This belt, found outside the coffin, was 2.36 inches wide and was probably not the sword belt as the aperture length of *CG.1*, though not known, is surely not so great. Apertures rarely exceed two inches in length. On the other hand, a leather belt somewhat wider than the aperture length might serve its purpose better. A belt bowed slightly as it passes through the aperture would provide a slight tension, holding the sword at a desired position along the belt. It would also reduce edge wear on the belt. A flat webbed cloth belt, recovered from a

late Chou Ch'ang-sha burial, is illustrated in *Ch'u wen-wu* (1954), Plate XXI. Only 29 inches long, including overlapping ends, this belt is probably too short to have served as a loosely slung sword belt.

O. Karlbeck reports the finding of a well-preserved leather belt at Ch'ang-sha in the mid 1930's.<sup>136</sup> The belt is 33.0 inches long, 2.16 inches wide, and was "bone dry" at the time of discovery. Karlbeck, who believes the belt to be of Han age, or even earlier, is probably correct in assuming that originally this belt was slightly longer and wider. At the right end of the belt (as worn round the waist) is a narrow horizontal slit and a silver belt hook 2.36 inches in length was found firmly attached to the belt, its small button through the slit in the belt end. The left end of the belt is provided with a large, thin, open loop of leather once attached at the upper and lower edges of the belt, but now loose from one edge. Karlbeck believes the loop was placed over the hooked end of the belt hook and that we must assume the gentleman who wore this belt to have had a generous girth of some 40 inches, if we allow for approximately 2.00 inches of belt hook exposed between the belt ends, and some 5.00 inches contraction and shrinkage in the leather. This reconstruction must be questioned. The thin loop at the left end of the belt is too fragile, the opening much too large, to provide a secure closing. The loop could neither withstand tension nor, owing to the largeness of the opening, could it be expected to contain the small head of the belt hook without a considerable and constant tension. The belt would either break under tension, or come unfastened when slack. Furthermore, there would be no means of adjusting the length of the belt. Near the left end of the belt is a series of six small, vertical crescent-shaped slits. The first of these slits is 7.88 inches from the end. The crescent shape of these slits and their size seem ideal to receive the head of the belt hook. The end loop, I should imagine, was simply an eye-loop, or "rider" to travel the loose end of the belt—the excess length—along and under the right end as it passed over the left end, through the loop and was hooked into the crescent slit, dipping under through one and hooking out through the next left. If this was true (the first slit from left exhibits signs of wear), allowing the same measure for contraction and shrinkage and reach of hook, we arrive at a waist size of 32.13 inches which seems ample if we concede that Han Chinese were, on an average, more slight than those of today (see p. 277, n. 192). Hooking in the crescent slit makes more sense both in terms of normal girth and in terms of the belt construction itself, in the form and spacing of the slits which appear intended for adjusting belt length rather than for suspending objects as Karlbeck supposed. A sword belt must be longer than a girdle. Depending upon the size of the man, this belt might have served to suspend a sword in accordance with the



shorter reconstruction. Certainly it could never have sustained the weight of a sword if worn in accordance with Karlbeck's reconstruction.

I am inclined to believe that the sword belt was customarily of leather, for a third line passing along the center of the belt of the figures on the tomb tiles could only represent a tooled line. Properly, there should be such a line near each edge of the belt; some license has been taken in the representation here. These impressed, or tooled, lines along the edges of leather belts compress the fibers and prevent the edges from softening and fraying. Leather belts are frequently treated thus today, and reference will be made to early examples from other parts of Asia later.

It is possible, therefore, that the men depicted on these late Chou tiles wear a belt hook, a leather belt, and a scabbard slide. Maenchen-Helfen's contention that leather belt, belt hook, and slide belong together may be supported by these representations.<sup>137</sup> Corroboration for his theory is, however, provided by *CG.I* where all three articles were indeed found together in a single burial.<sup>138</sup> The significance of this conjunction will be discussed later.

The swords carried by the small jade figure and the men on the tomb tiles are perfectly consistent with what the typology of the slide has shown us. During the Late Eastern Chou period short bronze swords, usually of the "classic" Chou type, were carried on scabbard slides. Longer swords, chiefly of iron, were known before the end of Chou and these, too, were carried on scabbard slides (*CZ.10*), but it is during the Han dynasty that the long iron sword was used almost exclusively. Therefore, it is not surprising to find that on the only Han dynasty representation of the slide known to me, the sword associated with this suspension device is one of extraordinary length, and undoubtedly of iron.

The guardian figure in Figure 23 is from a stone tomb relief located just north of Ch'eng-tu 成都, Szechuan Province, and belongs to the first century after Christ, in the early part of the Eastern Han period.<sup>139</sup> The composition is similar to that on the late Chou Honan tiles. The man leans forward slightly on a halberd held vertically before him by his two raised arms. Once again, the full sleeves of the long robe fall across the sword concealing its central part. It is evident, however, that the sword is of quite a different type from the preceding two, extending from just below the man's chin to below the calf of the leg. The long hilt seen above the arm terminates in a round knob probably suggesting a ring pommel such as that on the sword on Figure 36g. Below the sleeve the scabbard sides are straight and parallel; they do not contract toward the chape which is represented as a broad rectangle exceeding the width of the scabbard. The sword inside this scabbard has a



FIGURE 23.—Chinese stone relief depicting a guardian figure. [After Rudolph (1951), plate LXVIII.]

straight, hardly tapering blade, as opposed to the "tongued" blade of the bronze Chou sword. The man's garment belt is not represented; probably it is concealed by his full sleeve. The sword belt, however, is plainly shown descending in an arc across the left side. Where it crosses over the sword scabbard, it passes through a scabbard slide.

The small jade figure in the Raphael Collection, four or five figures on the Honan tiles, and the above figure from Ch'eng-tu are the only representations of the scabbard slide in Chinese art, so far as I know. The swords carried by these figures agree perfectly with those found associated with scabbard slides in the tombs of the same periods. There are, however, hundreds of representations of people bearing swords where we may assume the existence of a scabbard slide was taken for granted by the artist. The swords carried by the Honan tile figures and the Szechuan relief figure do not hang vertically; the pommels are somewhat forward while the lower part of the scabbards extend behind the figures. This inclined position is probably owing to the placement of the scabbard slide at about two-fifths to three-

sevenths of the distance down from pommel to chape. We may presume that this position is relatively near the balance point between the heavier hilt and lighter chape. It may be assumed, then, that swords represented in such an inclined position, apparently suspended from a point somewhere near their center, are carried on scabbard slides.

I am not convinced that we may presume the existence of the scabbard slide in any of the mythical scenes on the numerous so-called "hunting bronzes" of the Late Chou dynasty. The sword is invariably short, and though it lies perpendicular to the body, it is fastened directly at the waist. It is reminiscent of the sword worn by the bronze figures from Shih-chai-shan (*CP.1*) and is probably attached to the garment belt by some fixture on the scabbard wall which clings close to the body

(Figures 24 and 25).<sup>140</sup> Several of the small bronze servant and performer statuettes ascribed to the later part of Eastern Chou also wear short swords at the back, either passed under the garment belt, or attached to their belt by some unknown fixture (Figure 26). These representations suggest that a different method of wearing the short sword preceded the introduction of the scabbard slide, and though the majority of the bronze vessels with such representations were undoubtedly made within areas where the slide was known, and during periods when it was already in use, they may reflect a somewhat conventional and earlier mode, or a contemporary local fashion.

The normal position for the sword is at the left side. In the various representations, however, the sword appears on both the right and left side. While in some



FIGURE 24.—Bronze vessel lid from Shih-chai-shan, Yunnan Province. [After *Yün-nan Chin-ning Shih-chai-shan* (1959), plate LI.]

instances this may perhaps be accounted for on artistic grounds—the desire either to show the full sword irrespective of which way the figure faces, or conversely the desire to simplify the representation by concealing most of the sword—the scabbard slide and its leather belt, unlike fixed suspension devices, make it possible to hang the sword on either side, and doubtless it was on occasion worn on the right side. Maenchen-Helfen's contention that an ability to slide the sword from one side to the other was one of the determining factors in the development of this suspension form simply cannot be so.<sup>141</sup> He suggests that the ability to shift the sword from side to side was “particularly convenient for the horseman.” It seems to me that this would be an especially difficult maneuver on horseback with a meter-long sword. Passing across either the front or the back would be virtually impossible owing to the necessity to

hold the sword out horizontally to clear the neck or hind quarters of the horse while the body of the bearer obstructed passage of the hilt and scabbard area above the slide. Since bow case, quiver, and probably a short knife or dagger were also hung from the waist by means of a complex system of belts and straps, the swinging about of the sword becomes an impossible maneuver.

Aside from the fact that there would be little advantage in this to any but the ambidextrous, there is another reason it is unlikely. The sword belt ends had to be fastened together at some point. Where and how the Chinese fastened their sword belts is not known. But if the position was similar to that seen on numerous representations from western Asia (see Chapter 4 and, e.g., Figures 52 and 53), it was in front or slightly toward the left side. The sword could, then, be hung at either side, but unless it was slung around the back—



FIGURE 25.—Detail of bronze vessel lid in Figure 24. [After *Yün-nan Chün-ning Shih-chai-shan* (1959), plate LI.]



FIGURE 26.—Chinese bronze statuette of entertainer with bear.  
[Courtesy Freer Gallery of Art, Washington, D.C.]



an awkward maneuver with a sword whose pommel reaches nearly to the shoulder—the belt would have to be unfastened, the sword removed from it and passed onto it again on the other side. If the form and position of this belt fastening served a function in the West, as I believe it did, it probably served the same function in China and would, therefore, have been situated in the same place.

If we are correct in assuming that use of the scabbard slide generally declined after the middle of the Eastern

Han period and had perhaps been wholly discontinued by, or before, its end, it becomes difficult to assess the many Eastern Han representations of the sword where the suspension device is not visible. The reason for this lies in the fact that the suspension device which replaced the scabbard slide (see pp. 94 ff.) held the sword in an analogous position so that without clear representation of the method of suspension, it is hazardous to speculate on the pertinence of an individual representation to the study of the scabbard slide. In a few cases, however, the

existence of the scabbard slide may be safely assumed.

A small pottery figure of the Eastern Han period from a tomb in Szechuan wears a sword at his left side (Figure 27). As we should expect, the sword has a ring pommel. The figure has been identified as that of a miner because he holds a shovel erect in his right hand,<sup>142</sup> but it is unusual, I should think, for a miner to wear a sword.



FIGURE 27.—Chinese pottery statuette of man wearing sword belt and sword. [After *Izobrazitel'noe iskusstvo Kitaya* (1960), page 3, lower.]

The figure may represent a sapper. He wears a tunic which falls to the knees and is closed left side over right. Probably he wears trousers and soft boots below. Over the tunic there is an outer coat, slightly open in the center and through the opening can be seen a section of his garment belt. Another belt, however, descends sharply from above the waist at the right to hip level at the left where the sword is hung. This belt is clearly passed around the outside of his outer jacket and hence cannot be hooked to the garment belt. The point at which the sword belt reaches the sword is concealed by the left hand which holds a scoop-shaped pan or basket, but we see the long hilt of the sword, seemingly inclined slightly forward. The sword must be provided with a scabbard slide.

Another example is even more revealing of certain characteristics of the belt and slide. On a wall in a tomb in the Wang-tu 望都 District of Hopei 河北 Province, belonging again to the Eastern Han period, paintings depicting a group of dignitaries were discovered.<sup>143</sup> At least four of these courtiers wear swords of prodigious length, which is not in itself remarkable. What attracts attention is the position of the swords (Figure 28). Unfortunately, all are represented hung at the left side, while the figures are seen from the right. It is therefore impossible to verify the suspension device, but certain peculiarities in the representations suggest that the swords are worn on scabbard slides.

We have noted before that the slide was situated on the scabbard at what must have been a point close to

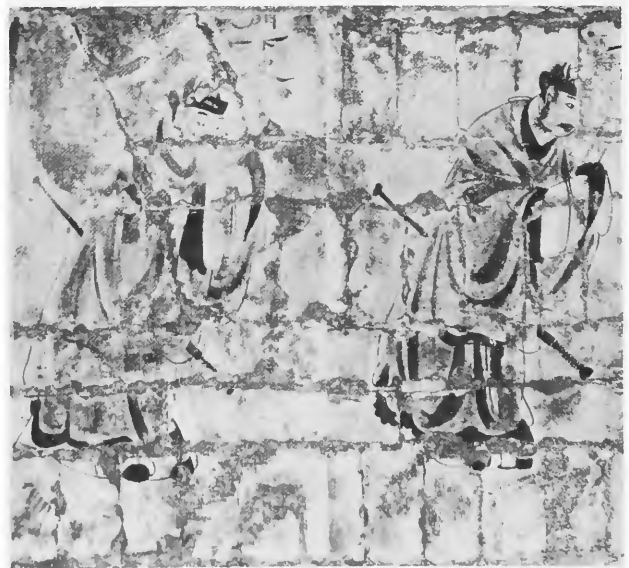


FIGURE 28.—Chinese wall painting from Wang-tu, Hopei Province, depicting courtiers. [After *Wang-tu Han mu* (1955), plate VIII.]

that at which the sword in its scabbard may be balanced between the weight of the upper and lower parts. Situated thus, a slight motion or nod of the body might easily cause the sword to swing. The courtiers depicted in these paintings bow slightly forward. This forward motion has been communicated to the swords through the sword belts and they have tilted forward. Thus, the chapes are seen rising behind the figures, the pommels near the ground before.<sup>144</sup> The suspension device which replaced the scabbard slide, at least by the end of Eastern Han, would not have permitted the sword to fall forward. John Haskins has described the type of sword shown in these paintings somewhat inaccurately (note 143) and failed to mention their most peculiar aspect, the extraordinary form of the grip, a long, thin, straight "rod" marked by twelve short perpendicular lines on each side. Hilts of this type are not otherwise known.

The matter of the balance point was evidently of some concern to the Chinese and must have created some problems and constituted an undesirable feature of this suspension device. While the desired and normal position of the sword was to rest at a slightly forward inclination, that is, hilt high before and chape projected slightly behind, we know from representations of swords most probably worn on the slide that imbalance (hilt falling down forward and chape rising behind) must have been a fairly common occurrence.<sup>145</sup> Even more preposterous and awkward positions have been represented.<sup>146</sup> Fairly common also is the representation of the sword in a horizontal position, the bearer's hand upon the hilt before, as though to prevent the sword from tumbling still further down, or holding the weapon in readiness to be drawn.<sup>147</sup>

Another example is interesting not because it reveals anything new concerning the suspension of the sword, but because it depicts the manner in which the short ring-pommeled iron knives, so frequently encountered in Han tombs, sometimes in association with swords, were suspended.<sup>148</sup> The relief from Szechuan depicts a guardian. Seen from the right side, his sword is revealed only by the lower part of the scabbard and chape ornament projecting behind. Fastened to his right side is a scabbard containing a short ring-pommeled knife. The sheath is attached by a flat leather strap between its mouth and the belt (garment or sword ?), thus dangling vertically and free at the side.

Before leaving the matter of the representation of swords suspended on slides, attention should be drawn to two common ways in which the sword is represented when carried by mounted equestrians. One of these equestrians is represented in low relief on a tomb brick excavated near Ch'eng-tu in Szechuan in 1952 (Figure 29); it is dated Eastern Han.<sup>149</sup> The horseman is seen

from the right side and is wearing his sword on that side. His full sleeve covers the central portion of the weapon, but we can see clearly the flat disk pommel and rhombic chape. The sword inclines forward, the hilt before his arm, the scabbard pointing toward the horse's flank. The sword, then, except for possibly being represented on the wrong side, rests in an extremely convenient position, hilt readily accessible to the grasp. The second equestrian appears on a relief from the Wu Liang tz'u 武梁祠 shrines in Shantung 山東 Province and may be dated around the middle of the second century after Christ.<sup>150</sup> The silhouette technique of representation does not permit us to be certain on which side the sword is hung; it hardly matters. There has been little consistency in this regard anyway. What is more interesting is the cant of the sword. Here, the hilt of the ring-pommeled sword points upward beyond the man's back; the scabbard, therefore, must lie along his leg, the chape resting near the foot. In such a position the sword could not be drawn.

In Han China, the sword was represented in just about every conceivable position in which a sword hung loosely on a belt could possibly rest. While some of the excessively awkward positions may at times be attributed to unfamiliarity or license on the part of the artist, some of these curious and unserviceable positions occur with too great a regularity to be at all times imputed to such causes. They probably reflect the perceived flexibility of the weapon suspended in this manner, and they may also and more unconsciously reflect a certain degree of ineptitude on the part of the Chinese in managing this device. The people of the reliefs and paintings are all mythical creatures, dignitaries, courtiers, gentlemen equestrians, ennobled guardians. It is most unlikely that the common soldier had so much apparent difficulty managing his sword. Whether or not this common soldier carried his sword on a scabbard slide identical to that of his lords is a question which will be investigated later.

The scabbard slide was possibly the sole device used for suspending a sword for about six hundred years in China. If it did, indeed, become obsolete before the end of the Han, it should not be surprising to find representations of swords carried on slides after this time, as a form of archaic reference perhaps, on objects which themselves reflected older shapes or were decorated with historical or traditional scenes. In China a motive derived from meaningful or utilitarian forms seldom disappears from the repertoire of art at that moment the form ceases to be meaningful or useful to the society that created it. Its function and meaning in art may be altered slowly, but its outward form may remain virtually unchanged for long periods.

Thus we find figures on the backs of the so-called *ch'e-ma* 車馬 bronze mirrors from the end of Han or the immediate post-Han period wearing swords whose



FIGURE 29.—Chinese molded tomb brick, Szechuan Province, depicting charioteers and equestrians. [After *Chung-kuo ku wen-wu* (1962), plate CCLII.]

eccentric position (hilt down forward, chape up behind; hilt up behind, chape down forward) could mean only that they are worn on scabbard slides and that they copy in form and position the representations current and numerous a century or two earlier.<sup>151</sup> Probably still later are the rock reliefs at I-nan 沂南, Shantung 山東 Province.<sup>152</sup> The figures in these third- and fourth-century reliefs exhibit almost every sword position described thus far, yet it is absolutely certain that the scabbard slide, at least in the form we know it, was no longer used at the time these reliefs were carved and it is equally certain that the swords as depicted are carried on slides or some fixture fulfilling an identical role. (The suspension device that seems to have followed the scabbard slide

normally allowed only two basic positions and hence cannot be the one implied by the sword positions in the reliefs.) Just what this curious attachment was is revealed by one of the figures in these reliefs (Figure 30).<sup>153</sup> The narrow leather or cloth sash, loosely slung about the waist in the fashion of the leather scabbard slide belt, is knotted about the center of the sheath. The hilt is represented as extending before, but is lower than the scabbard which rises behind. Whether or not scabbards were ever really thus carried is a point for which there is no material corroboration. It certainly is not the suspension device which followed the slide; probably it is an inept recollection only of the manner in which swords on slides hung after knowledge of the device by



FIGURE 30.—Chinese engraved stone from I-nan, Shantung Province. [After *I-nan ku hua-hsiang* (1956), plate LV.]

which this position was achieved was no longer current. As shall be seen, analogous misunderstandings of the slide appeared elsewhere in Asia, in territories where the slide had formerly been known and used. In this regard, it is interesting to note that no swords suggestive of being carried on scabbard slides are to be found in the reliefs at the Late Eastern Han site of Hsiao-t'ang Shan 孝堂山.

It seems fairly certain, however, that the idea of carrying the sword on some kind of a fixture serving the same purpose as the scabbard slide and situated in the same relative position on the scabbard wall must have survived for some time after another suspension form had come into vogue. That this lingering on of the scabbard slide was something more than an antiquarian artistic convention is revealed by a small ceramic figure probably belonging to the Northern Wei period (A.D. 386–535).<sup>154</sup> The sword is represented in a vertical posi-

tion before the standing man whose hands rest on the elaborate, baroque hilt. Just above the center of the scabbard is a curious device which must represent a lingering memory of the scabbard slide (Figure 31). No belt is seen, but since the sword is raised above the ground the existence of a belt—or cord, perhaps, in this case—may be assumed. Seen face on, it is difficult to distinguish the form of this object on the scabbard wall, but small nodules probably indicating nailheads suggest that it is of metal and hence the slide may be formed by no more than a convex metal plate riveted to the scabbard wall, a form which would have contemporary counterparts in western Asia and even in Europe (e.g.,



FIGURE 31.—Chinese pottery statuette of figure holding sword. [After Sirén (1942–1943), volume I, page 424, figure 308, left.]



E.6). If the object on the exterior of this sheath is indeed a scabbard slide it constitutes a late survival produced at a time when specific knowledge of the earlier shape was lacking.

The questions *who* wore the sword belt and scabbard slide, and *why* it was worn remain still to be answered. The former question is, I believe, relatively simple to answer: between the fifth century B.C. and at least the end of the first century after Christ, with probably few and insignificant exceptions, everyone who wore a sword carried it on a belt by means of a scabbard slide.

A number of points raised by such a generalization must be amplified and clarified. It is clear from the hundreds of swords found in burials in China that only a small percentage were equipped with scabbard slides when found. One reason for this is revealed in a poem written about A.D. 289 by Chang Tsai 張載, entitled "The Desecration of the Han Tombs." I quote only the pertinent passage.<sup>155</sup>

When the dynasty was falling, tumult and disorder arose.  
Thieves and robbers roamed like wild beasts.  
Of earth they have crumbled more than one handful,  
They have gone into vaults and opened the secret doors.  
Jewelled scabbards lie twisted and defaced;  
The stones that were set in them, thieves have carried away.

Another, and perhaps still more pertinent, reason may be that the majority of the scabbard slides were not made of stone, but of wood. Only one wooden slide from China is known (CZ.10, Plate 10*d*) and it was probably preserved only because the wood was coated with lacquer. In the dry sands of Inner Mongolia wood is more commonly preserved, and it is therefore interesting to note that the only slides yet recovered from this region are of wood (XM.1–XM.5). Furthermore, these slides were found not in tombs but in frontier defensive localities where it is reasonable to assume they had been in military use.

There is still a third reason for the disparity between the numbers of swords and slides found in burials. If scabbard slides were made of wood as well as of jade, it follows that less costly wood rather than jade must have been more commonly used by the fighting troops. In recent times, the value placed on jade has been more of an aesthetic than a monetary one. Improved transportation and methods of quarrying, hard tools, and systems for mass producing identical objects, as well as increased demand, brought enormous quantities of the mineral into China during the late Ming and Ch'ing dynasties.<sup>156</sup> We may be equally certain that in Chou and Han times jade, which had to be brought from the quarries of the Khotan and Yarkand oases regions of East Turkistan at great hazard, was a far more precious item. While it would be gratifying to think that the Chinese, like Julius Caesar, equipped their troops with jade-ornamented

swords as a safeguard against their throwing them away in battle, given what we know of Chinese military history and service in armies, it is highly unlikely that any similar psychology prevailed.<sup>157</sup> Furthermore, a jade scabbard slide would be easily shattered by a blow on the scabbard, and the efficacy of the sword greatly impaired by the loss of its sheath.

The tombs in which jade sword ornaments are found are usually amply furnished with luxuries of other sorts as well. These are not tombs of ordinary people who might have been conscripted into military service and of whom Juvenal (*Satire* III, 260) so poignantly observed "obtritum vulgi perit omne cadaver more animae," but the tombs of officials and gentry. The swords buried with them are ceremonial or presentation swords. Swords were struck to commemorate deeds and events; they were awarded for distinguished services. Sometimes the swords were inscribed with phrases laudatory of commendable acts or of the weapon's superior quality; in the late Chou, these inscriptions are sometimes inlaid in gold on the blades of bronze swords. These, for the most part, are the swords found in the tombs; meant not for battle, but for ceremony. This is not surprising. Since Shang times, at least, the Chinese fashioned all manner of weapons, not only in bronze but also in jade, which were intended solely as ceremonial pieces.<sup>158</sup> "In the Han Dynasty swords were worn by the Emperor, as well as by officials, when in ceremonial or official dress."<sup>159</sup> By Chin 晉 times (A.D. 265–420) these ritual swords were sometimes fashioned of wood, or had no sharpened edge.<sup>160</sup>

Other evidence as well agrees with the ceremonial function of these jade-adorned swords: the numerous representations referred to above depicting officials and gentry wearing swords, and the virtual absence of significant wear on all but three or four scabbard slides. It must be assumed that in normal position the sword was worn at an angle at the left side, the pommel rising before, the chape extending behind. In such a position, the belt passing through the aperture would be in slight or occasional contact with the lower right interior corner of the aperture, but not with either the lower left or upper right interior corners. It would slide over the left upper interior corner chiefly (Figure 32). The few scabbard slides that exhibit wear (e.g., CV.33, CV.82, CV.103, Plate 2*d,e*; CG.65, Plate 6*c*) corroborate this wearing position. Though made of stone, prolonged use during which the sword slips slightly on the belt at each movement of the bearer wears this material away. Both CV.82 and XCG.11 are quite deeply worn at the upper left interior corner of the aperture with correspondingly less wear at the lower right corner. The scabbard slide that most clearly demonstrates the erosive effects of prolonged use comes not from China, however, but from South Russia (SR.1, Plate 19*c*). The slide is Chinese, nearly identical

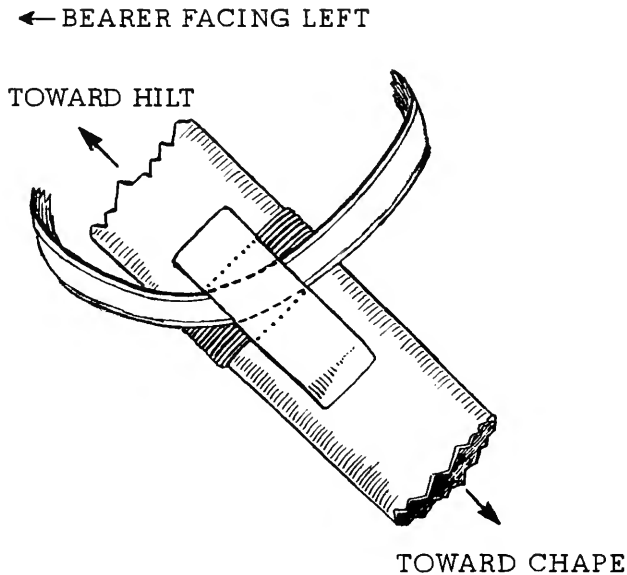


FIGURE 32.—Ordinary angle of repose for sword suspended by a scabbard slide.

to two others (CV.24, CV.32) from China. It was carved around the middle of the Western Han period, but not finally interred until around the fourth century after Christ, and in a tomb several thousand miles from its place of origin. How it got from China to South Russia shall never be known for certain, but the mere fact that it was transported certainly by the beginning of the second century after Christ when the slide disappeared in China and not buried for another two hundred years suggests that it was highly valued by its generations of owners in the West. Its condition indicates that it was also used by them. The surface decor is almost completely obliterated; the ornamentation is scarcely visible

except in light obliquely reflected across its surface. The upper left interior corner of the aperture is worn nearly through the aperture wall.

These scabbard slides which reveal evidence of wear are the rare examples. All of the others show not the slightest sign of ever having been used, not the slightest rounding of edges or effacing of decor through wear. We are, therefore, drawn to the conclusion that as elements of aristocratic paramilitary fashion, the vast majority of jade scabbard slides and their swords were used for occasional ceremonial purposes and probably had single owners with whom, at their deaths, the swords with their jade ornaments were buried. It is possible, even likely, that some pieces were carved especially for the occasion of burial. This would help to explain why we find in the tombs of both Western and Eastern Han archaic bronze sword types associated with slides. The ceremonial sword could not be affected by obsolescence; indeed, the archaic reference was probably preferred as all relation of the weapon to possible utilitarian functionalism was removed.

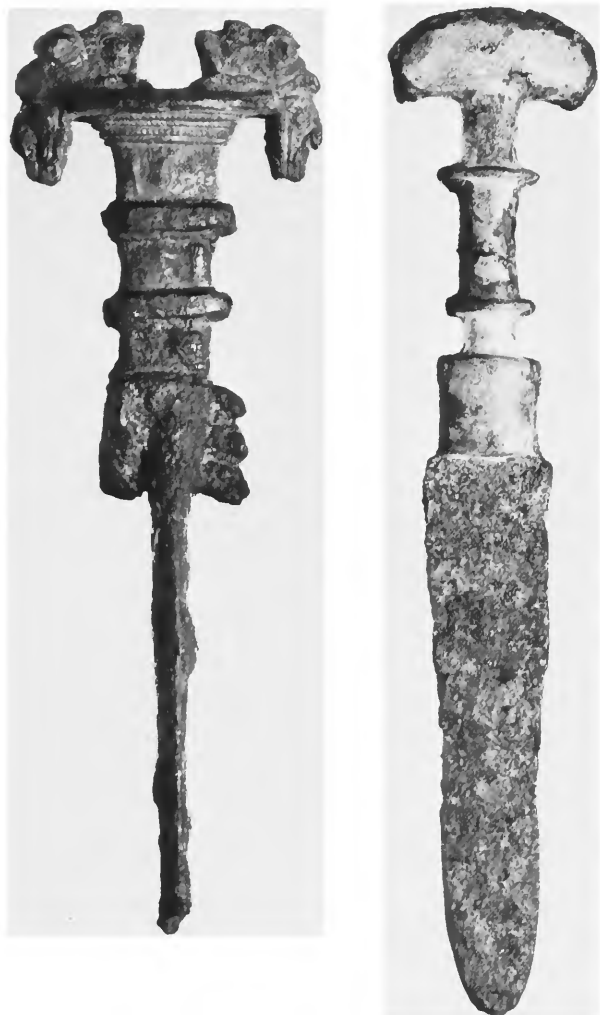
The question of *why* the Chinese suspended their swords on belts by slides is more complex and difficult to answer. If we may judge from the representations of the belt and slide in use, we must conclude that the system had some drawbacks for the Chinese who seem to have had troubles managing their swords. Why then should they have favored the use of such a contraption? In the case of the short bronze swords of the Late Eastern Chou period, it seems also unnecessary to suspend the sword from a point far down the scabbard so that the hilt projects awkwardly before one. Hung by a short sling from the belt to the scabbard mouth would have seemed the more convenient arrangement for such swords. To answer this question, the form and development of the Chinese sword must be examined.

## THE LONG SWORD AND FORM II SCABBARD SLIDE

Whether, as Max Loehr maintains, the sword was independently conceived and developed in China,<sup>161</sup> or whether it was introduced into China from some outside area as Janse, Watson, and several others believe,<sup>162</sup> is a question which need not concern us here. Late as the sword certainly was in appearing in China—long after the dagger, spear, arrow, knife, axe and dagger-axe, the weapon *par excellence* of bronze-age China—it was well established before the time we believe the scabbard slide to have appeared. The very fact of its late arrival in China, centuries after it was known in western Asia, speaks in favor of the impetus to make swords having come from outside. But whatever its origins, the Chinese

sword exhibits from its earliest appearance a form and development which cannot easily be related to sword types outside China. The ringed hilt—known from twelfth to seventh century B.C. bronze and iron swords from the Luristan region of Iran (Figures 33 and 34)—hints at a possible precursor of this Chinese hilt form, though no links between these both earlier and contemporary forms and the Chinese sword are presently known.<sup>163</sup>

By the end of the fifth century B.C., when we first find the sword associated with the scabbard slide, it has already attained what has been called its "classic" form (Figure 35). Swords of this type were described in Chapter II.



FIGURES 33-34.—Fragmentary iron swords. Luristan, Iran.

During at least the last two centuries of the Chou dynasty this sword was ubiquitous in China, though as observed earlier, seemingly more archaic types with hollow hilt existed alongside the classic type. In either case, the hilt was provided with a circular, concave pommel which frequently contained an inlay of jade, and typically the sword together with its scabbard was fitted with three pieces of jade: pommel inlay disk, chape, and scabbard slide. These swords generally range in length from 15.75 to 21.50 inches. How these short swords were suspended before the scabbard slide came into use, that is from the eighth century B.C. (if they appear so early) to the sixth, and likely through most of the fifth century B.C., is not known. Probably they were thrust through the belt or hung from the waist by a cord as knives and daggers were

worn, and for a short weapon either mode of suspension makes more sense than the scabbard slide which thrust the weapon up and forward into an awkward position. It seems logical, in fact, to consider that a weighted chape of jade stone appeared at the same time as the jade scabbard slide in answer to the need for a counterbalancing weight at the foot of the scabbard.

During the last century of the Chou dynasty, or perhaps earlier, the Chinese sword, heretofore quite constant in form and length, was affected by the introduction of a type radically different in form and length, though the classic type continued alongside these newcomers. These bronze swords were much longer, in some instances double, or more than double, the length of the classic Chou sword type.<sup>164</sup> The ringed hilt was replaced by a bronze tang that was pegged into a wooden grip on the end of which the traditional concave pommel socket of bronze was fastened. Frequently the guard, formerly cast in one piece with blade and hilt, was replaced by a heavier one of jade having the same form, fitted over the shoulders of the blade, the wooden grip over the tang holding it in place. One reason for this sudden change in the size and form of the bronze sword was certainly the introduction of iron into weapons manufacture.

The origin and chronology of the iron industry in China is still a matter of considerable speculation. The general consensus seems to favor the sixth century B.C. as the time when iron was first cast in China,<sup>165</sup> though a date as early as the seventh century B.C. has been proposed by some authors.<sup>166</sup> An axe and a dagger-axe with bronze hafts cast into iron blades, in the Freer Gallery of Art, suggest that knowledge of iron properties may have been understood at a still earlier date.<sup>167</sup> The blades of these weapons, the hafts of which on stylistic grounds may be dated in the tenth or ninth century B.C., appear to be meteoric iron which was hammered into the desired shape.

Though iron was known and worked at a much earlier time in western Asia, the case for an independent development of an iron industry in China is superficially convincing. From the beginning, the Chinese cast iron, perhaps as a logical extension of their highly developed bronze-casting industry, whereas in Europe and western Asia the technique of casting iron was not introduced until the thirteenth or fourteenth century.<sup>168</sup> Cast iron, more brittle than forged iron, is unsuitable for weapons where toughness and suppleness and ability to take a sharp edge are required. Before effective weapons could be made from iron, techniques of forging had to be developed.<sup>169</sup> In the late Chou period, cast iron was used quite extensively to strengthen the rims of farming tools in which position it increased the durability of these wooden implements while not necessarily having to sustain severe blows or be given a sharp cutting edge.<sup>170</sup> By



FIGURE 35.—Chinese bronze sword, Late Eastern Chou. [Courtesy Freer Gallery of Art, Washington, D.C.]

the fourth century B.C. at least, steel of some sort, whether forged from cast or from wrought iron, was produced on a limited scale and iron swords were made (e.g., CZ.10).<sup>171</sup> Iron did not immediately replace bronze in the manufacture of swords, perhaps because skilled knowledge of its potential spread slowly or the process was difficult, but

more likely because the Chinese instinctively held bronze in higher regard.<sup>172</sup> But the gradual ascendancy of the iron sword effected significant modifications of the bronze sword.

There are no short iron swords and the likelihood is that there were no long bronze swords before the introduction of the iron sword.<sup>173</sup> The earliest iron swords are just under, or over, a meter in length. The iron swords, therefore, do not constitute a logical technological advance from a short bronze weapon into a similar weapon in an improved material, but seem to represent a response to a sudden desire or need for a significantly different kind of sword. It may be assumed that the technique of transforming cast or wrought iron into a crude steel was developed specifically to meet this need for a long sword and that, even though the evidence is quite strong for the earlier independent development of an iron industry in China, the forging and annealing of iron and manufacture of long swords may represent stimuli from regions outside China where both were known at an earlier date (see n. 169). I do not mean to suggest that the Chinese imported not only a foreign iron-working technique, but also the weapon produced by this process. I mean to suggest only that there is a strong likelihood that the impetus to produce an iron sword of much greater length than the contemporary bronze weapon was of foreign origin. The Chinese produced a weapon suitable to their own needs and tastes, one which has perceptible relations to their contemporary bronze swords.<sup>174</sup>

Possibly the ratio of iron to bronze swords during the last century or so of the Chou dynasty was greater than our findings thus far permit us to estimate. Iron corrodes much more rapidly than bronze and in those cases where jade sword ornaments have been found in tombs with no recorded trace of a sword, we may assume that the sword was of iron and had completely oxidized. Had the weapon been taken by grave robbers, the jade parts would not have been left behind.

The typical iron sword of the end of Chou and Western Han period is usually approximately a meter long. The double-edged blade, 1.00 to 1.30 inches wide at its base, had faceted edges and gently hollowed areas to either side of a low median crest, and tapered gradually to a point. Though longer, this is essentially the blade form of the classic bronze sword. Cast with the blade was a flat tang which was probably either pegged into a wooden grip,<sup>175</sup> or wrapped with braided cord and lacquered.<sup>176</sup> A round, concave disk pommel of bronze was usually attached by a central nail or by means of a ring socket to the wooden grip, or, in the case of swords with long pointed tangs, possibly pegged (not cast) onto the tang. A sword of this type is illustrated on Figure 36b.<sup>177</sup> Resting on the shoulder of the blade and pierced by the tang was either a bronze guard of the type illustrated on

Figure 37,<sup>178</sup> or a larger one, similar in form but carved in jade (e.g., Plate 9d).<sup>179</sup> The guard was held in place by whatever wrapped the tang. The sword was carried in a scabbard usually of lacquered leather or wood, or even of shark's palate, often with an interior cloth lining.<sup>180</sup> All of these parts have not been found with every specimen; scabbards have frequently rotted away, jade guards and pommel disks were stolen by robbers or removed before burial. Likewise, in some cases bronze guards seem to have been removed.

Apart from blade length, the distinction between these long iron rapier types and the classic bronze sword is to be noted chiefly in the hilt. On the bronze sword, guard, hilt (round or oval in cross-section) and pommel disk are cast in one piece with the blade, but both pommel disk and guard are the same as those taken over by the iron sword save that on the iron swords the separately cast bronze guards project beyond the base of the blade laterally whereas on the classic bronze sword the guard rarely exceeds the width of the blade. The hilts of the classic swords were wrapped in a diagonal criss-cross fashion with braided cord (see n. 133); probably they were never encased in wood. The bronze rings which characterize the hilts of the classic bronze sword never appear on the tangs of iron swords.<sup>181</sup>

In other words, the iron sword is a simplification of the classic bronze type, and a significant simplification which I believe speaks in favor of the iron swords being forged. The iron sword is simple, consisting of a blade flatter than that of bronze swords, and flat tang only, parts which could be hammered. The guard and pommel disk which had to have been cast were added as separate bronze pieces. The double-edged sword is primarily a thrusting weapon. Hence, the long iron rapiers probably served essentially the same function as their shorter bronze predecessors and contemporaries.

In spite of the fact that more complicated shapes were possible in cast bronze than in forged iron, bronze swords were in turn influenced by the iron forms and in some cases acquired a simplified shape equivalent to that of the iron swords, consisting of nothing more than a blade and flat tang (Figure 36e).<sup>182</sup> It may be assumed that, as with iron swords, the hilt was provided with separately cast bronze (or carved jade) guard and pommel disk socket, the grip encased in wood or wrapped with cord. The chief distinction between such bronze swords and their iron counterparts is to be noted in the length and width of the blades, sturdier proportions being given the bronze swords. The base of the blade is broader (usually 1.75 inches, or more) and, to be serviceable, the blades are shorter as a general rule. The influence is clearly that of the iron sword upon the bronze, even though initially the form of the iron sword was derived from that of the bronze.

Of course, not all bronze swords of the Late Chou and Western Han periods were so strongly altered to conform with iron models. The classic form, not only traditional but manufactured of the "lovely" metal intrinsically more appealing to the Chinese, remained current and unchanged, even, as has been observed (CP.2), as late as the Eastern Han period. In between such late conventional forms, which could only have been ceremonial pieces during a period when the fighting weapon was twice its length and of iron, and those bronze swords which copy as closely as possible contemporary iron forms, is a wide variety of types of bronze sword, most of which seem to suggest degrees of conservative reference to the traditional forms. Hence, we find tanged bronze swords with cast-on guards (Figure 36c), or ringed tangs;<sup>183</sup> and perhaps the strangest phenomenon of all, a long bronze rapier in the form of the classic short bronze sword but in all other respects imitating the contemporary long iron sword (Figure 38).<sup>184</sup> The base of the blade of this sword is only 30 mm. (ca. 1.20 inches) broad and the bronze guard, cast together with blade and hilt, projects beyond the edges of the blade in the manner of the separately cast bronze guards on iron swords. We may, I believe, attribute to the desire to produce a sword comparable in length to contemporary iron specimens the curious elongation of the hilt which permitted a somewhat shorter and stronger blade. This hilt, nonetheless, is given the traditional form of the classic bronze sword and provided with two widely separated bronze rings. Max Loehr, who has held and studied the weapon, believes that it could have served ceremonial purposes only.<sup>185</sup>

The course of development during the Late Eastern Chou and Early Han periods seems, then, to be one of gradual change from bronze to iron swords, without clear typological stages, but with clear reference on the part of the iron swords to earlier bronze stages. For effective military purposes iron was probably preeminent before the beginning of Han, though bronze swords, largely ceremonial in nature, continued to be made. That the archeological record does not strictly support such a view is owing to two circumstances already mentioned: the total decay of more iron than bronze swords; and preference for bronze in the manufacture of ceremonial weapons and the likelihood that these, more than the utilitarian iron sword, commonly constituted an element of tomb furnishings of the gentry whose tombs are the more conspicuous.

We have observed that the long iron sword appeared in China at least by the fourth century B.C.<sup>186</sup> Since the earliest known scabbard slide is, at most, barely a century earlier (CG.58), it may be that the long iron sword was manufactured still earlier than any of the examples on hand permit us to say. From the evidence available, there are no clear transitional stages between the short bronze

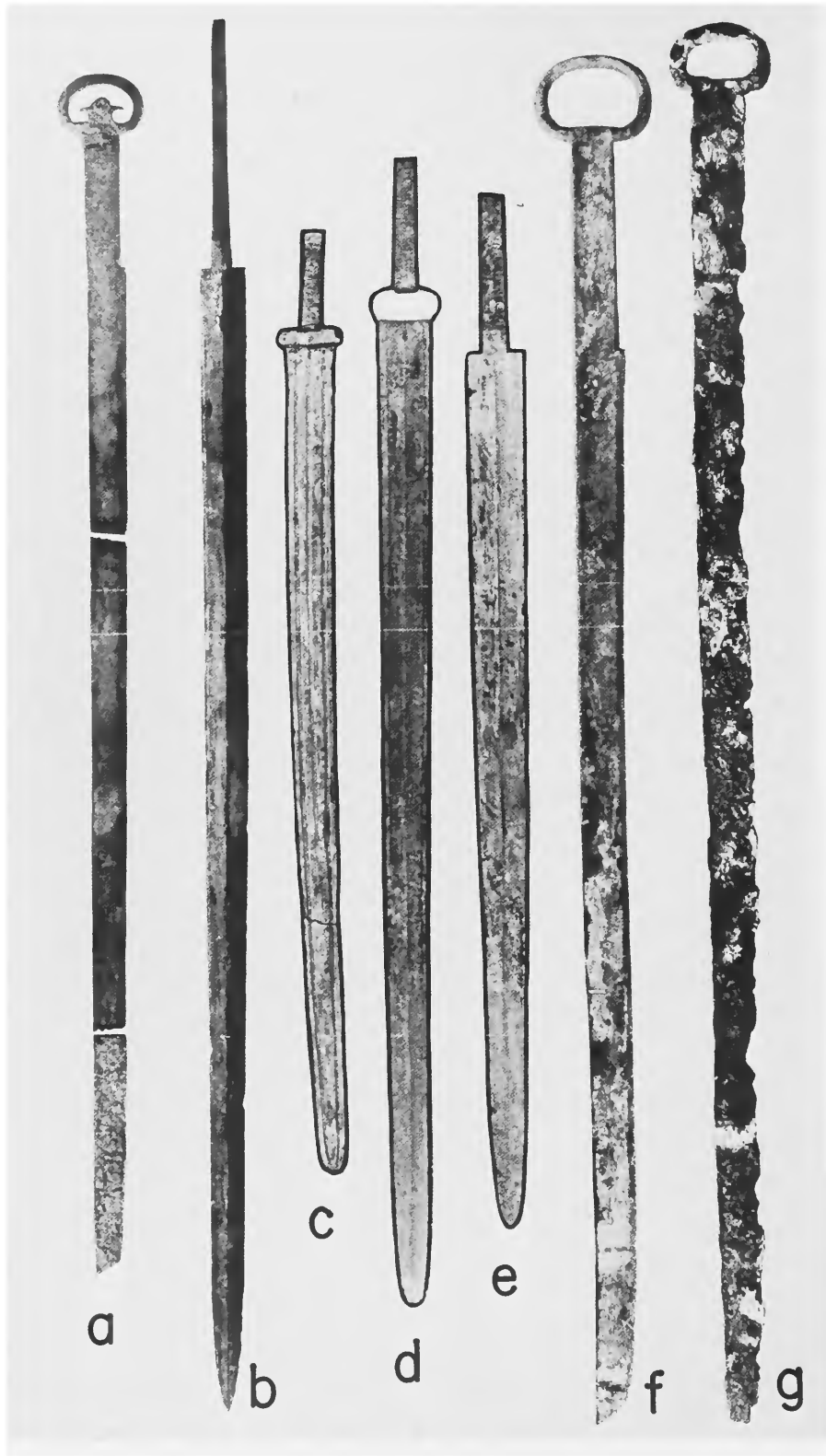


FIGURE 36.—Chinese bronze and iron rapiers and sabers, Han dynasty. [After Janse (1930), plate XV.]



FIGURE 37.—Chinese bronze sword guards, Han dynasty. [After Janse (1930), plate XVII,3 and 6.]

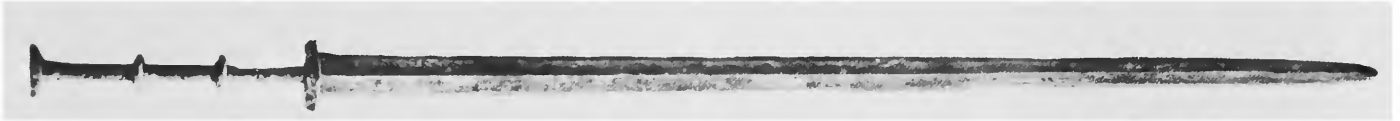


FIGURE 38.—Chinese bronze rapier, end of Chou dynasty or early Han dynasty. [After Loehr (1956), plate XXXIX, 102.]

swords and the long iron ones. The earliest scabbard slides on hand were associated with bronze swords, but in one case, at least, a bronze-hilted iron sword 35.00 inches in length (*CH.2* and Figure 4) was found and offers a possible suggestion of the nature of the transition from bronze to iron which might have taken place during the late Chou period.<sup>187</sup>

We have observed also that during the late Chou period the scabbard slide was associated with both short and long swords. If we may believe the *Chou Li* 周禮, there is a simple explanation for this: “Les grands glaives sont portés par les grands soldats . . . (les) petits glaives sont portés par les petits soldats.”<sup>188</sup> Whatever basis in actual usage there may have been for this disarmingly naive statement, it makes more sense to carry a long sword on a scabbard slide than a short sword. The bearer of a short sword is only handicapped by having the hilt thrust forward. He must extend his reach unnecessarily to draw the sword, or, he must perform the additional act of grasping the scabbard with his left hand to thrust it back on the loose belt while drawing the sword with his right hand. This motion, more complicated than it need be with a short sword, is a matter of necessity with the long sword. If a sword a meter long is suspended at the scabbard mouth vertically from the garment belt, the lower end of the scabbard is at most a few inches above the ground. Held thus in a fixed position the scabbard would knock against the legs in walking, and it would be awkward or impossible to draw the sword with a right arm of normal length. The leather sword belt and the scabbard slide were designed to obviate these problems of carrying a long sword, and it is difficult to conceive of the existence of one without the other. It must be assumed

that the long sword and scabbard slide are of the same age, if not in China, then elsewhere.<sup>189</sup>

Hung on the loose leather sword belt passing through a scabbard slide set low enough on the scabbard so that the sword, when at the side, inclines slightly forward, the scabbard projects behind and is out of the way of the legs. In drawing the sword, the left hand grasps the scabbard which lies at the most convenient angle for the hand extended straight from the slightly flexed arm at the left side of the body (Figure 39). Thrusting the scabbard back as far as the slack in the sword belt will permit, the bearer gains approximately fifty percent more drawing span.<sup>190</sup> The intricacies of the operation of this ensemble are rather tellingly revealed in a passage from the biography of Ching K'o 荆軻 in the *Shih Chi* 史記 of Ssu-ma Ch'ien 司馬遷. The passage recounts the attempted assassination of the King of Ch'in 秦 by Ching K'o in 227 B.C.

He [King of Ch'in] pulled at his sword, but the sword was long and clung to its scabbard . . . The sword (hung) vertically, and therefore he could not draw it out immediately . . . The bystanders then cried out: “Put your sword behind you, King!” (The King) did so, and thus (had room) to pull it out.<sup>191</sup>

One may wonder if anyone found this long, unwieldy sword any more convenient a weapon than did the King of Ch'in. One may ask also whether any significant advantage accrued to the Chinese infantry in battle carrying such a sword that rendered it superior to the earlier short sword. Why was it needed or desired? In hand-to-hand engagements it is doubtful that one fares better with a long than a short sword, unless, of course, one's adversary carries a long sword. In marching, also, it would have been necessary to stabilize the sword with the



FIGURE 39.—Chinese wooden statuette of sword bearer, Ch'ang-sha, Hunan Province. [After Cheng Chen-to, ed., *Wei-ta-ti i-shu ch'uan-t'ung t'u-lu* (Shanghai, 1955), volume I, plate 11.]

left hand to prevent a contrapuntal swinging motion as the sword hung on its loose belt. In sum, I think this an odd sword to have been developed for the foot soldier. This, together with its quite sudden appearance in China, entitles us, I believe, to seek other explanations for its existence.

Awkward as the long sword was for the foot soldier, and the numerous illustrations depicting this sword bear this out, both sword and mode of suspension are admirably suited to the requirements of the equestrian.<sup>192</sup> A man astride a horse cannot conveniently have either a short or a long sword suspended vertically by its scabbard mouth from his garment belt. His protruding hip and the

convexity of the horse's side would cause the sword to hang at an angle, the hilt pressing against the horseman's side, the scabbard projecting outward. The low-slung sword belt seems to have been designed to remedy this situation. Hung on such a belt by a scabbard slide, the sword may be moved backward on its belt by the horseman so that it rests upright behind his leg and along the horse's flank, or, when required for action, pulled forward so that it falls forward across the leg at about a 40-degree angle, with the hilt forward and within convenient reach of the right hand, the scabbard projecting behind, out of the way of the leg.<sup>193</sup> These must be considered the normal positions of the sword borne by an equestrian. The suspension of contemporary cavalry swords is designed so that they may be hitched in such positions (Figure 40). In cases where the sword is not suspended from the equestrian's person but secured to the saddle—as illustrated by the nineteenth-century Mexican *charro* saddle (Figure 41)—a convenient readiness angle is maintained. The cavalry rifle is carried in a boot set at an equivalent angle.<sup>194</sup>

The looseness of the sword belt, however, and nature of the scabbard slide which permits the sword to slip within limits on the belt makes it possible for the position



FIGURE 40.—Cavalry sword in vertical repose position. [After Wilkinson (1969), page 29.]



and angle of the sword to vary, either in accordance with the bearer's wishes or in response to the motion of the horse and the equestrian's body position. Thus, it can be noted that in some Chinese representations the horseman has moved the hilt of the sword to the rear where, presumably, it is held upright, or inclining even slightly backward, by his own body (p. 48). The sword cannot, of



FIGURE 41.—Mexican *charro* saddle with mounted sword. [After México, Museo Nacional de Artes e Industrias Populares (1954), page 45.]

course, be drawn in this position and it must, therefore, be concluded that it is not a normal position but simply one in which the resting equestrian then as today may place his sword. A small gold plaque from Siberia, of which more will be said later, illustrates the position into which the sword falls under the stress of a galloping horse with the rider leaning forward to release his bow (Figure 42). The motion of the horse and the sudden forward inclination of the rider produce a logical contrapuntal motion of the sword, the hilt swinging back, the rider's left leg locking over the scabbard to arrest the swinging motion of the sword.

As many authors have suggested, the long sword in all respects seems a more suitable cavalry than infantry weapon.<sup>195</sup> The sword belt and scabbard slide increase the utility of this weapon immeasurably more for the equestrian than for the foot soldier. But the long swords we have examined are rapiers rather than sabers, that is they are thrusting and piercing swords for infantry combat, not slashing swords for cavalry attack. Such a

single-edged slashing saber does exist side by side with the long piercing rapier in China, and it points more directly toward an equestrian use.

The single-edged iron sword in China did not evolve from, nor is it related to, the earlier bronze swords. It has a much simpler form consisting of a long blade blunt along one edge and sharpened along the other. The blade leads directly into the hilt at the dull edge and is usually stepped back slightly at the grip on the sharpened edge. The hilt is terminated with an oval ring of cast iron (Figure 36g). Swords of this type are rarely provided with guards. The hilts were probably wrapped with braided cord. The ring may be cast separately and locked in place by the folded-over hilt end, or in some cases it may be cast directly with the hilt.

Ring-pommel daggers and knives occur over a wide area of northern Eurasia at times much earlier than that with which we are here concerned. Probably the ring-pommel, in the form in which it appears in China, originated in southern Siberia, in the upper Yenisei and Minusinsk Basin regions.<sup>196</sup> During periods perhaps corresponding in part to the Shang dynasty in China, but surely to Western Chou, the ring-pommel knife is the most common variety encountered in the Ordos and Suiyüan regions north of China.<sup>197</sup> It is not, however, necessary to search outside of China for the origin of this pommel form on the long iron sabers which appear in great number in Western Han graves and which probably were already in use before the end of the Chou dynasty.<sup>198</sup> Small bronze knives of this type were relatively common in Shang China;<sup>199</sup> the form continued in use throughout the Chou period and with the introduction of iron into the manufacture of tools and weapons, such bronze forms were carried over essentially unchanged into the new material.<sup>200</sup>

The single-edged, ring-pommel saber is nothing but an enlarged, lengthened version of the typical late Chou iron knife and there is, I believe, no need to look elsewhere for its origin within, or outside, China. Owing to its apparent identity with similarly formed knives and the wide range of lengths, it is difficult to tell exactly at what point the knife becomes a sword.<sup>201</sup> During the Western Han period, however, these single-edged swords become common throughout China and they are nearly as numerous as the double-edged and generally equal to these in length.<sup>202</sup> If we consider that far more iron swords than bronze swords of Han age have entirely decomposed, the former must have been much more common than the latter. The blade tips have two forms: most common is the type with a straight flat side and cutting edge which curves back at the tip toward the unsharpened edge (Figure 43a); less commonly the tip has a form resembling the prow of a ship (Figure 43b).<sup>203</sup> Both point forms are found as well on the shorter knives of the Han

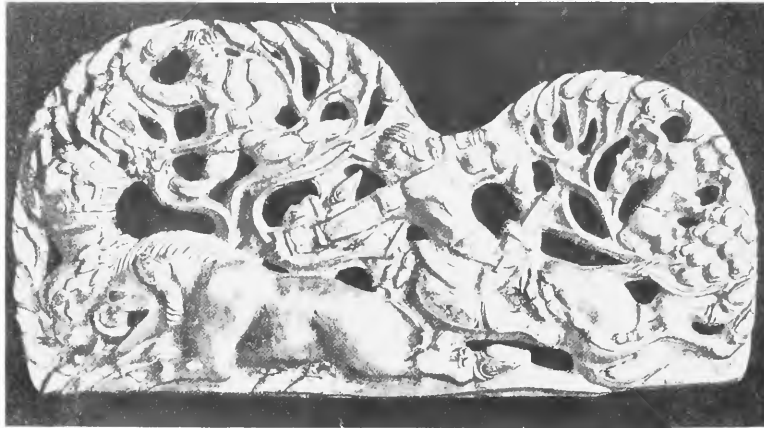


FIGURE 42.—Gold plaque from South Siberia. [After Rostovtsev (1929b), plate X.]

period.<sup>204</sup> Just as we observed in the case of the long rapier, that its form and length were imitated by contemporary bronze swords almost certainly uniquely ceremonial, so also were the iron sabers imitated in bronze (Figure 36f), and it is equally probable that these were intended for ceremonial use only.<sup>205</sup>

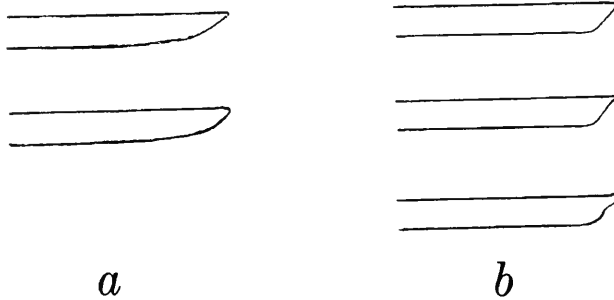


FIGURE 43.—Chinese iron saber blade tip forms.

Iron sabers are rarely found with jade parts. *CH.4*, a clearly ceremonial sword, is an exception. The jade disk inlay for the pommel of the rapier could not, of course, be used with the ring pommel. Possibly saber scabbards were occasionally provided with jade chape ornaments, but I am familiar with no such examples.<sup>206</sup> The blade, having no real shoulders but only a slight step back from the sharpened edge to the grip, cannot easily accommodate the roughly cardiform guard adopted by the iron rapier from the classic bronze sword which is, except for a few rectangular examples (Figure 99) the only kind found in China. Nevertheless, a few sabers have been found with such guards. In some cases it is unclear just how these were secured at the base of the blade, but in others it is evident that the usual form of the sword has

been altered somewhat, providing a shoulder at the back of the blade, to permit a guard to be attached.<sup>207</sup> One method of fixing a guard to the normal saber was to provide the guard with a bronze collar enclosing the butt end of the blade and providing a binding which the guard itself cannot do.<sup>208</sup>

In general, jade scabbard slides have not been found with sabers. It might be argued that since the other jade elements of sword furniture associated with the rapier and classic bronze sword also are not found with the saber—in part, because these objects seem to have been developed for the specific characteristics of the former types—that it is probable the saber sheath was not provided with this object. But since the iron sabers are comparable to the rapier in length, that is often exceeding a meter, it must be assumed that they also were carried on a sword belt and scabbard slide.<sup>209</sup> Furthermore, one of the rare representations of the scabbard slide in use shows it attached to the sheath of what is certainly a ring-pommel iron saber (Figure 23). We are, therefore, drawn toward the conclusion that the scabbard slide usually associated with the saber was not made of stone but of some more readily decomposing material, hence the lack of preserved examples. For a number of interrelated reasons which I intend to examine, I believe the scabbard slide normally associated with the saber of the Han dynasty to have been carved from wood.

Throughout the Eastern Han period long iron rapiers and sabers exist side by side, though ring-pommel types seem to outnumber the tanged varieties. Bronze swords in the form of the classic Chou sword are, as noted earlier, occasionally still found in the tombs of this date. These are, of course, strictly ceremonial, as are also the bronze rapiers and sabers encountered in Eastern Han tombs.<sup>210</sup> Sabers with plain ring pommels continue into the immediately post-Han periods in considerable number while

rapier types are noticeably scarce.<sup>211</sup> But sometime during the Eastern Han dynasty, perhaps after the beginning of the second century after Christ when the scabbard slide was being replaced by a different suspension device, the character of the saber changes. The ring pommels, heretofore simple cast ovals or rounded rectangles, become more elaborate, and the more ornate ones are cast in bronze. The latter are sometimes cast in the form of an animal, or the pommel encloses an animal head, usually a crested bird. Simpler ones are trilobed, or enclose a trefoil grip end (Figure 36*a*), or the two ends of the pommel ring are simply involuted where they join the tang.<sup>212</sup> Sometimes cast with these bronze pommels is a socket, or more accurately a sleeve, into which the iron grip-tang is fitted. Some of these bronze sleeves are ornamented with elaborate tracery of inlaid gold wire; others show traces of overall gilding.<sup>213</sup> These more elaborate pommel forms continue until at least the T'ang dynasty.<sup>214</sup>

The saber, like the rapier, is commonly represented in the stone reliefs and stamped bricks of Eastern Han age, and in post-Han reliefs up to the T'ang dynasty.<sup>215</sup> In no case is the suspension device represented on these reliefs, but I believe it may safely be assumed that on some of the earlier ones among them the scabbard slide was the intended suspension form, whereas some other device would have been indicated on the later reliefs. In terms of suspension position, it hardly matters which device was current. Normally, the sword would have hung in approximately the same position with either device. It is interesting to note that in the reliefs a pair of leather or cloth streamers is frequently knotted to the ring pommel.<sup>216</sup>

The observations which these reliefs permit are possibly less interesting as regards the history and function of the Chinese saber than they are revealing of Chinese representational conventions. As noted in connection with the representations of the rapier, the sabers hang on either the left or the right side, but usually on that side which is away from the viewer. Likewise, the swords are held in either the right or the left hand, and sometimes a small fending shield is carried in the other hand. Laufer considered that this ambivalence toward sword suspension reflected actual usage, that the soldier wearying in a prolonged engagement simply changed off hands, as it were.<sup>217</sup> One is inclined to doubt the existence of such widespread ambidexterity among the early Chinese and to account for such irregularities by a certain laxity in representational conventions.

One wonders, therefore, if other characteristics exhibited by these representations are any more reliable as regards reality in the situations they depict. We have already remarked on the characteristics of the saber which render it particularly suitable to the equestrian. Yet in the representations, the sword is rarely carried by eques-

trians who instead seem generally to use bow and arrow. It may be observed also that the swordsman, whether on foot as usual or more rarely mounted on horseback, wears a long outer robe reaching to between knee and ankle, whereas the archer or cross-bowman, whether mounted or on foot, wears a short belted tunic and trousers—a more suitable military dress. The unsheathed sword is carried upright, the dull side of the blade resting on the shoulder. When the sword is wielded, it is held firmly in the hand and projects at right angles to the forearm as though used in an underhand thrusting motion for which the saber is wholly unsuited. When wielded from horseback, it may be held aloft as a dagger. In no instance is it represented as extended before the bearer, prolonging his reach, as one would expect the saber normally to be used.

It is impossible to trace the development of the ring-pommeled saber from earlier Chinese swords. Unlike the rapier which has clear relations to preceding types, the nearest prototype for the saber is to be found in the short ring-pommeled knife known in China from the Shang dynasty onward. The saber, however, appears quite suddenly. It is rare in the late Chou period, but ubiquitous in early Han. Whether or not the Chinese developed the saber for use on horseback cannot be determined on the basis of the available record; the representations on the tomb reliefs seem to suggest that it was used more extensively by the foot soldier than by the equestrian. However this may be, the saber is a cavalry weapon and could hardly have been developed initially for an army fighting on foot. The identity of this weapon as a cavalry sword is, I believe, demonstrated beyond reasonable doubt by the numerous examples which exhibit a slight inward curve, a form which may be used effectively only by an equestrian striking downward blows and for whom parry-and-thrust actions cannot be effectively carried out. For a foot soldier, a single-edged sword, and more especially an inward-curving one, is much less useful than the straight double-edged blade which permits maximum versatility. These inward-curved blades are found only on sabers.<sup>218</sup>

If the long iron sword, and especially the saber, is essentially an equestrian weapon, we might hypothesize that it was introduced into China at the time the Chinese modified their military organization in accordance with that of the barbarians along their northern frontier, or that the Chinese were, at least, prompted to manufacture long swords because of the existence of such among their nomad adversaries. Among the changes instituted in Chinese military tactics and matériel was the introduction of cavalry. This very celebrated reorganization has traditionally been attributed to King Wu-ling 武靈 who ruled the small state of Chao 趙 325–299 B.C., abdicating in his son's favor five years before his death in 294 B.C. Chao occupied a precarious position, encompassing part of the

territory now included in the provinces of Shansi 山西 and Hopei 河北 (Figure 44). To their north and north-west the Chao people came into contact with horse-riding nomads who constantly menaced their frontier; to the south were larger, autonomous, and often hostile states of the disintegrating late Chou realm, and the survival of the Chao state was as much owing to the military and diplomatic cunning of Wu-ling as to its force of arms.

This famous decision by Wu-ling to adopt certain tactics of the barbarians, and their practical clothing of boots, trousers, and short jackets that facilitated equestrian maneuvering, is recorded as having taken place in 307 B.C., in the nineteenth year of his reign. Unfortunately, the credibility of this event hinges on the veracity of the account, or more properly tale, in chapter 19 of the *Chan-kuo Ts'e* 戰國策, where it is first recorded. This work is not an historic chronicle, but a group of semi-didactic historical anecdotes assembled in roughly chronological order by state and probably first appeared as a unified text in the early part of the second-century B.C.<sup>219</sup> While the value of the text as history would appear to be slight, its style was evidently much admired by the first-century B.C. historian Ssu-ma Ch'ien who, in addition to imitating stylistic features of the *Chan-kuo Ts'e* in the writing of his *Shih Chi*, incorporated the story of Wu-ling verbatim from the former text, thus elevating it to the status of history.<sup>220</sup>

Actually, the pertinent texts of the *Chan-kuo Ts'e* and *Shih Chi* are somewhat vague as to the nature of the innovations imputed to Wu-ling, especially with regard to their military orientation. It is chiefly emphasized that Wu-ling proposed the adoption of barbarian clothing, not just as battle attire but for court dress.<sup>221</sup> Possibly it is a justifiable assumption that the introduction of the barbarian riding costume implies acceptance of barbarian military tactics and equipment;<sup>222</sup> in so doing authors have probably interpreted Ssu-ma Ch'ien as he intended, that is, attaching a known historical circumstance or development to a discrete action and time.<sup>223</sup> Centuries earlier in Western Asia, the Assyrians effected a similar accommodation to nomadic military tactics in their efforts to cope with the intrusions of their horse-riding neighbors to the north.<sup>224</sup>

The probability is, however, that the story in the *Chan-kuo Ts'e* refers only to a condition increasingly widespread throughout the northern Chinese states during the last centuries of Chou and such an interpretation has been accepted by Wang Kuo-wei in his celebrated essay on barbarian clothing.<sup>225</sup> Quite apart from military considerations, the Chinese have, during several periods of expanded contact with other regions, been attracted by the novelty of outlandish costumes and the pursuits and habits of the peoples with whom the costumes originate.<sup>226</sup> Thus, during the earlier part of the T'ang dynasty

especially, the Iranian riding costume was favored by both men and women of the court and gentry.<sup>227</sup>

Wang Kuo-wei pointed out that, together with cavalry and the nomadic costume of short tunic, trousers, and boots, the leather belt and belt hook were adopted by the Chinese from their northern nomadic neighbors. Though the long sword is nowhere cited as forming a part of these innovations, we may hypothesize that it formed a part of the equipment of the equestrian nomads and that, if the Chinese did not directly borrow the long sword from them as seems unlikely, the stimulus to develop a comparable sword probably came from this quarter. Maenchen-Helfen has shown that the Chinese words for belt and belt hook are of foreign, ultimately northern nomadic, origin.<sup>228</sup> Unfortunately, the term by which the scabbard slide was known to the late Chou Chinese is not known; if it were, we might possibly trace it to a similar origin (see n. 17). But the intimate association of leather belt, belt hook, and scabbard slide, together with the greater suitability of the long sword and scabbard slide to an equestrian warrior, strongly suggests that the origin in China of both sword and slide may be traced to points beyond the Chinese frontier.

However this may be—and the matter of the origin of the long sword and scabbard slide will be considered more extensively in the final chapter—the influence of the nomads upon the organization of the Chinese military machine has probably been overemphasized to the exclusion of equally significant internal Chinese developments. It must be remembered that the more or less constant military activity which marks the closing centuries of the Chou dynasty was largely between the autonomous states. These wars had far more influence on the future course of Chinese history than did barbarian incursions from the north which remained a continuing nuisance throughout the Ch'in and Han dynasties which followed.

In his detailed study of Eastern Chou society, Hsü Cho-yün has pointed out that until the early sixth century B.C. war was still primarily the occupation of the nobility, attended by an elaborate etiquette.<sup>229</sup> As such, it was fought in chariots attended by a limited number of foot troops who probably had as their chief weapon the *ko* 戈 halberd. As the appeal of war as a noble sport was diminished by the increasingly earnest conflicts of the ever more jealously independent later Chou states, chariots were found too expensive and cumbersome, especially for maintenance by the smaller states. They were, as well useless in the swampy lands of the southern regions, notably in the Ch'u 楚 state, and in rocky terrain. Increasing involvement with nomad equestrians in the north border states doubtless pointed up to the Chinese the vulnerability of the chariot to the swift cavalry charges of the nomads. It became strategically necessary,

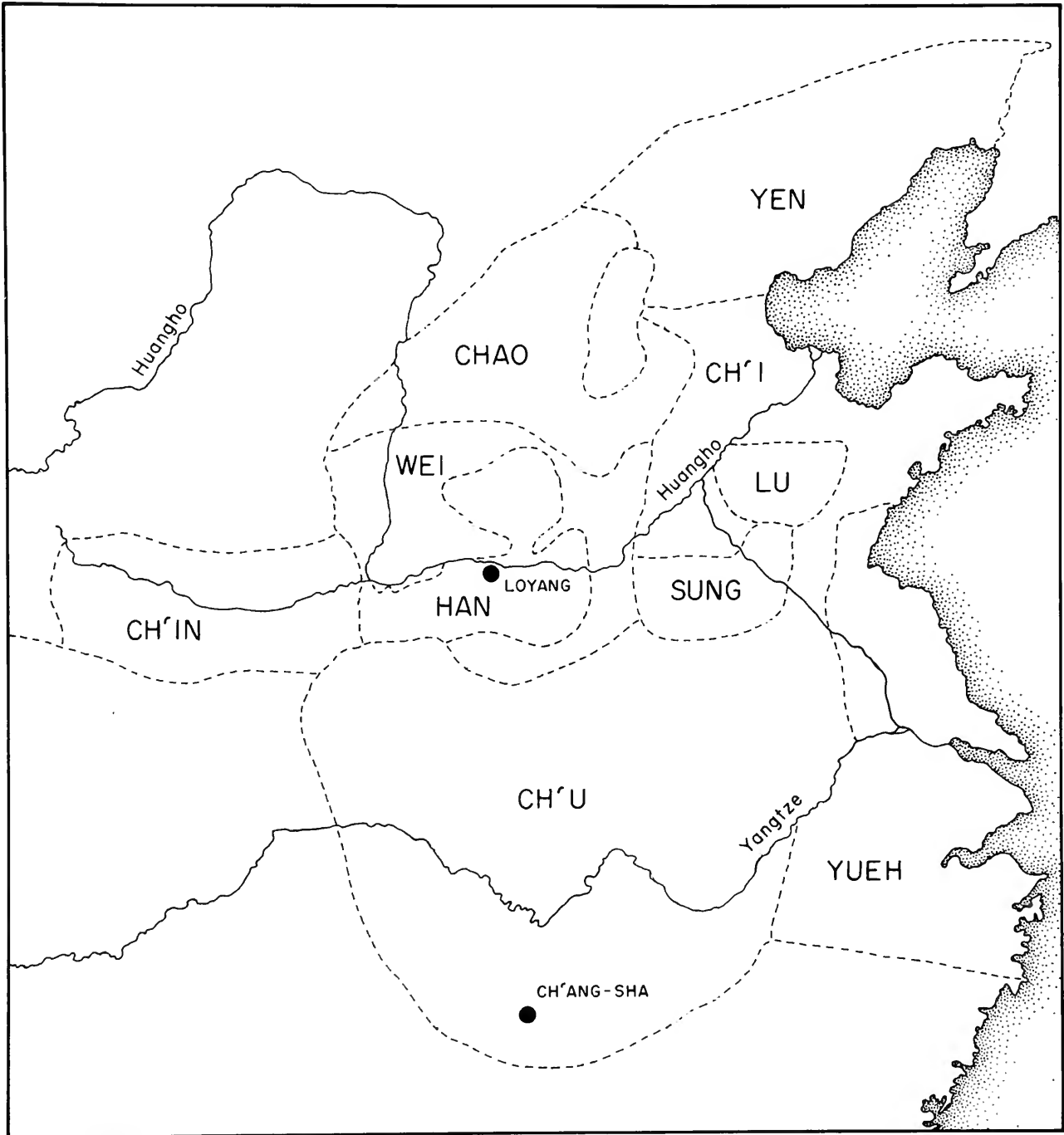


FIGURE 44.—Approximate boundaries of Late Eastern Chou states.

therefore, for the Chinese to create a cavalry force, not only to improve their defenses against the nomads but to replace the obsolete tactics of chariot warfare.

However effectively cavalry may have been used on the frontier against the nomads, there is nothing to suggest

that it ever became a major Chinese defense during either the late Chou or Han dynasty. The real transformation in internal Chinese warfare was from the war chariot with comparatively few foot troops to armies composed of masses of infantry. The well-appointed *Chan-kuo* military

force had one thousand chariots, ten thousand cavalry, and several hundred thousand infantry soldiers.<sup>230</sup> In the year 570 B.C., mention is first made of infantry as the sole force on the field.<sup>231</sup> Even during the Han dynasty cavalry seems neither to have been the major component of the forces attacking the Hsiung-nu 匈奴 barbarians nor, with such notable exceptions as the daring second-century-B.C. cavalry commanders Wei Ch'ing 衛青 and Huo Ch'ü-ping 霍去病, an especially effective one.<sup>232</sup> The dynastic annals record far more cavalry disasters and stalemates than successes for the Chinese.<sup>233</sup> Part of this was doubtless owing to the Chinese inability to equip a highly mobile force equal to those of the nomads. Typical was the spring campaign of 119 B.C. when 100,000 cavalry set forth for the frontier attended by baggage trains of 140,000 horses.<sup>234</sup> Thus encumbered, a cavalry can hardly realize the full advantage of the swift strike and diverting maneuver and is hardly better than a force of mounted infantrymen. One must, I believe, conclude with Berthold Laufer that the Chinese did not sit well upon horses.<sup>235</sup>

One encounters almost no reference to the sword in accounts of military engagements.<sup>236</sup> The chief weapon of the cavalry was the bow and arrow, but for close fighting, not only with opposing cavalry but against masses of infantry the Chinese also employed against the nomads, the sword must have been used. It could not have been a short sword similar in length to the classic bronze sword of Chou, but must have been a long saber of iron. In earlier Chou times the chief weapon of the chariot warrior was the bow and arrow; that of the attending foot troops, the *ko* halberd. The appearance of significant numbers of swords in China, hardly earlier than the sixth century B.C., corresponds well with the development of infantry as the major fighting force. Presumably the sword initially carried by the infantry was the earlier, rapidly evolving, short bronze sword. By the late fifth century B.C. the sword was suspended by a scabbard slide (CG.58), and the introduction of the long iron sword cannot have been much later. Whether or not the long sword and scabbard slide entered China in the same wave of influences which suggested cavalry and barbarian dress is not known. Since contact between the northern states and the barbarians was more or less a constant condition, acceptance of barbarian equipment and tactics by the Chinese probably occurred gradually along the entire frontier.

One of the most ambitious and warlike of these frontier states was Ch'in 秦 on the northwest frontier. Ch'in was continuously at war with the nomadic tribes in order to enlarge its territory, and to aid its program of military expansion introduced a military government.<sup>237</sup> By the middle of the sixth century B.C. Ch'in had realized the superior advantage of infantry over chariots in campaigns in mountainous regions.<sup>238</sup> In the middle of the third

century B.C., the reasons for the military superiority of Ch'in were succinctly set forth by Hsün Tzu:

As for the rulers of Ch'in, they have only a narrow, confined area on which to settle their people. They employ them harshly, terrorize them with authority, embitter them with hardship, coax them with rewards, and cow them with punishments. They see to it that if the humbler people hope to gain any benefits from their superiors, they can do so only by achieving distinction in battle. They oppress the people before employing them and make them win some distinction before granting them any benefit. Rewards increase to keep pace with achievements; thus a man who returns from battle with five enemy heads is made the master of five families in his neighborhood. In comparison with the other methods I have mentioned, this is the best one to insure a strong and populous state that will last for a long time, a wide expanse of territory that yields taxes. Therefore Ch'in's repeated victories during the last four generations are no accident, but the result of policy.<sup>239</sup>

Such effective centralized control enabled Ch'in to raise seasonal armies of one million peasants while smaller neighboring states might raise no more than 300,000.<sup>240</sup> The superior military power of a state is not necessarily contingent upon the size of its army. A state can afford to build armies only by taking men away from the land, and in this connection it would appear that Ch'in was able to do this more easily than other states owing to progressive and productive agricultural policies while other states, more conservative, lingered with older, less satisfactory methods.<sup>241</sup> Great attention seems to have been paid to efficient methods of irrigation and one author contends that to a great degree the stability that permitted the increase of wealth and territorial expansion during the Han dynasty was derived from the previous example of Ch'in agricultural policy.<sup>242</sup>

But even with a rigidly regulated economy and massive disciplined army, effective weapons are required if the army is to be victorious in battle; and there seems to be widespread agreement that the superior weapon with which the Ch'in conscript armies were provided was the iron sword.<sup>243</sup> Since a short iron sword, comparable in length to bronze types, seems not to have existed, it may be assumed that this weapon was the long iron sword wielded not in the hands of cavalry, but by infantry as their chief weapon. In this connection, it is significant to note that archeological record suggests that during late Chou, iron swords were most plentiful in the territories of Ch'in and its chief contender—the large state of Ch'u in south China.<sup>244</sup>

The territories occupied by the states of Ch'in and Ch'u were apparently richer in iron ores than other regions, or these states were quicker to develop these resources. Sekino believes that the techniques of forging were introduced into China from the West and that this knowledge passed first into the state of Ch'in on the northwest frontier, and that it was effectively employed by this growing power in its career of empire building.<sup>245</sup>

When we consider that steel (accidental or intentional) blades were known in western Asia possibly as early as the twelfth century B.C., but at any rate not later than the tenth (Figures 33 and 34), it is a reasonable assumption that this knowledge, evidently reaching China by the fifth century B.C., came from the West and that it was gradually perfected in a state such as Ch'in situated in a geographic position to receive such impulses first and where ample iron resources were to be found. Ch'in interest in the development of its iron industry is revealed by records of its efforts to capture wealthy iron founders to promote its own iron industry.<sup>246</sup> The states of Ch'u and Han 韓 both possessed a large number of working iron deposits, and it is perhaps significant that these states were among the last to succumb to the superior power of Ch'in.<sup>247</sup>

The enormous carnage of the final campaigns of the Ch'in state is also taken as evidence that the principal weapon was the iron sword. Between 364 and 260 B.C., Ch'in fought eleven wars and these accounted for well over one million slain. Though the numbers may be exaggerated in that they represent the victor's reckoning, the 450,000 soldiers beheaded in the defeat of Chao in 260 B.C. cannot be far from the truth as the entire fighting force of this state was massacred after surrender.<sup>248</sup>

The distinguished career of the long iron sword in China and the factors which made its use general throughout the country may, then, have had comparatively little to do with the nomads even if its ultimate origin is to be traced to them. The iron sword may well have been the weapon of victorious Ch'in, and if so, the swift successes of this state must have commended this weapon's efficiency effectively to Ch'in's enemies. If such be true, the adoption of the long sword was less contingent upon its being an effective weapon against horse-riding nomads—bows and arrows were surely better—than upon its being more effective in Chinese internal warfare. The tactically superior weapons of the conqueror are always admired and, if possible, adopted by the vanquished. Hence we note, with the collapse of Ch'in's brief hegemony, the founder of the Han dynasty, Kao-tzu 高祖, boasted that he had "conquered the world wearing the plain clothes of a humble citizen and wielding the three-foot sword."<sup>249</sup> The long iron sword became the standard weapon of the Han dynasty, and its use may have been a contributing factor to the strength and stability of the period.<sup>250</sup>

If, as I believe, the iron sword became during the last centuries of the Chou dynasty the principal fighting weapon—the traditional *ko* halberd becoming in consequence an increasingly ceremonial weapon possibly already acquiring symbolic values revered for their reference to a superior order of past dynasties—swords must have been produced in prodigious numbers approx-

imately equal to those of the massive armies of the period. All of these swords were suspended by means of a leather sword belt and a scabbard slide. The sword introduced by Ch'in, and the one to become ubiquitous in the Han, except for ceremonial varieties, was almost certainly the single-edged iron saber, a slashing sword probably originating among a horse-riding people of the frontier. It was a simply made weapon, essentially no more than a band of iron from which a sharpened edge was hammered out along one side, leaving a plain area at one end to be wrapped with cord to serve as the grip. From the apparent difficulty in providing such a sword with a guard, it must be assumed that normally they had none. The only refinement was the ring at the end of the hilt, generally attached simply by folding over the metal of the hilt end to secure it to the sword.

The double-edged rapier was somewhat more difficult to produce and, if dictated only by tradition and analogy, was furnished with a separately cast bronze guard and probably often with a concave bronze disk pommel pegged into the wooden grip which enclosed the tang. Such a sword could not as easily have served as the weapon issued to infantry troops by the hundreds of thousands. The majority of them must be considered as swords made for the gentry who may have esteemed the form imitative of the classic Chou bronze sword; or one which differed from that carried by the common peasant soldier; or as swords which, while reflecting a new knowledge of, and desire for, a long sword of iron, were made before knowledge of the simpler saber was widespread or the techniques of forging steel mastered. Metallurgical studies are still inadequate to determine whether in both cases the manufacturing technique was identical. It may be speculated, however, that the iron rapier evolved in a traditional manner from older casting techniques while the saber introduced a forged steel produced by a substantially different process. If such should prove to be true, and the forms of the swords suggest it may well be, the saber represents an effectively superior and more practical weapon, one which presumably could be manufactured quickly and with relative ease.

Quite obviously, all of these swords were not fitted with jade scabbard slides. It has been suggested that the ordinary scabbard slide was made of wood. The fully developed jade scabbard slide (e.g., CV.22, Plate 2a) would not be a shape easily excused in wood. Nor is it conceivable that the upper surface of the practical wooden slide would be ornamented with finely modeled grains, subtly modulated geometric patterns and animal masks, or contorted hydras in high, complicated relief. These are not wood carvers' designs. Whether they are essentially lapidary designs, or owe their origin to earlier cast bronze models, is a question which need not concern us here.

Two scabbard slides found in the ruins of Chinese frontier military structures in Inner Mongolia (*XM.2*, *XM.3*, Plate 24*c-d*) offer a clue to the nature of the wooden scabbard slide, and provide as well a significant hint as to the earliest form of this object. Both of these slides, of the type designated here as Form II and described in the first chapter, are simple rectangles, without any extension of the upper plate above or below the aperture. Yet they share with Form I slides sufficient similar characteristics that their identity as scabbard slides is certain: the thin lower plate which was inserted into a socket on the scabbard wall; the slightly arched upper plate. Others of the same form exhibit sides which slope inward toward the narrower lower plate, a feature observed on a number of Form I slides. Both are finely proportioned carvings in hard wood, and one at least (*XM.3*) was covered with black lacquer. Both have been placed in the Western Han period and probably belong to the first century B.C. Possibly the refinement of their form is related to contemporary pieces in jade.

But the treatment of the upper surface of these wooden slides is distinctly different from that of Form I jade slides. These are plain, except for parallel vertical ridges, one along each side on *XM.3*, and a narrow central ridge in addition to border ridges on *XM.2*. Form II slides of this class from China have been grouped into the Ridge (XCR) class. Inasmuch as this Ridge class seems more closely allied to wood carving rather than to intricate contemporary lapidary work, it is significant to note that this class of decor is found on a single Form I slide only (*CR.1*, Plate 5*d*). This sturdy, utilitarian specimen, typologically early, establishes not only the early coincidence of this decor in wood and jade, but points to the early occurrence, if not precedence, of wooden scabbard slides where actual examples are lacking.

Though a few authors have recognized the true function of the Form II scabbard slide,<sup>251</sup> most have considered these objects to be ferrules, that is decorative reinforcing to the mouth of the sword scabbard.<sup>252</sup> Aside from the fact that no known scabbard of Chou or Han date is now, or ever was, provided with a ferrule of any type, the shape of the object does not conform to that of scabbard mouths. Considering the thinness, delicacy even, of these lacquered leather or wood scabbards, the lack of reinforcement at the mouth is rather surprising.

It is not always possible to distinguish clearly Form II scabbard slides from similar objects undoubtedly intended for different use. Objects of approximately the same shape were worn as plaques passed onto belts at least as late as the Yüan dynasty.<sup>253</sup> Almost certainly all of those with type-C profile, and some with type B (Figure 1), described in the Catalog, as well as those ornamented on both the outer and inner surfaces, are not true scabbard slides.<sup>254</sup> Some of these are inept antiquarian imitations, others

may have been intended for a different use.

A rather high percentage of the Form II jade scabbard slides carved with surface patterns similar to those on Form I slides are, for technical or stylistic reasons, considered to be late antiquarian pieces.<sup>255</sup> A much higher percentage of the Ridge Class and Unornamented Class slides, however, are probably authentic.<sup>256</sup>

The comparative rarity of Form II slides in China, I would attribute to the likelihood that the majority were made of wood and, being the type furnished ordinary soldiers, were less suitable for interment than the more refined Form I slide worn by the gentry whose tombs are more frequently encountered and whose fashionable paramilitary accoutrements were more likely to be imitated at later times.

Of the seven authentic Form II slides with known provenance, four (*XK.1*, *XM.2*, *XM.3*, *XM.5*) were found in north and northwest border regions. The majority of these are unornamented, or of the simple Ridge Class. The implication is that these simple Form II slides, like the Unornamented Form I class (CP), were made chiefly for utilitarian purposes or by non-Chinese. The decor systems of the Form I slides are purely Chinese; no single element can be related to designs anywhere outside China. Regardless of how highly jade may have been esteemed by the outer barbarians, it was not possible for them to imitate the sophisticated patterns and techniques of the Chinese jade carvers. The numerous finds of plain or crudely worked jade ornaments from non-Chinese burials in Mongolia and Manchuria are adequate testimony to this.<sup>257</sup>

The chronological relation of Form II to Form I scabbard slides is not clearly revealed by the known dates of several Form II slides. Authentic examples are too few in number to permit a close study to be made of the relationship of their surface decor to those of Form I. It is furthermore quite unlikely that the highly simplified shape exhibits any significant, or even clearly discernable typological sequence. The majority of the authentic Form II slides belong to the Han dynasty.<sup>258</sup> Only six may with fair certainty be ascribed a Late Eastern Chou date and all of these belong to the later part of the period.<sup>259</sup> The three Hui-hsien slides (*XCG.1*, *XCG.2*, *XCG.15*) are too poorly published to be adequately described and the other three, of unknown provenance, have been dated Chou on the basis of their relationship to late Chou jade carvings of different types (*XCH.16*), or to Form I scabbard slides (*XCV.1*, *XCR.1*).

There are, I believe, sufficient grounds for considering the Form II scabbard slide typologically earlier than the Form I. The typology of Form I slides demonstrated quite clearly that the development of the slide's basic form was to be noted chiefly in the gradual elongation of the upper plate and in the refinement of its terminal



curves and angles. The earliest excavated Form I slides (CG.1, CG.58) very closely resemble Form II slides; that is, they are basically rectangles with no extension of the upper plate above the forward aperture wall and only a short projection below the lower aperture wall. The Form II slide is, therefore, the logical typological predecessor of the Form I, and the shape out of which Form I slides developed. We may assume then that somewhat before the emergence of the earliest Form I slide in the late fifth century B.C., the scabbard slide had only one shape, that designated here as Form II. The division here of the scabbard slides into two basic categories was necessary because the original form remained current and fundamentally unchanging throughout the entire period of the development of the Form I slide.

Such a circumstance is unlikely to be the result of pure chance. The explanation lies, I believe, in the interpretation of the Form I slide as a luxury, or semi-luxury object developed from the simple utilitarian Form II slide by the Chinese essentially for use by the gentry. In this sense, the scabbard slide as it is commonly known constitutes a purely Chinese invention; that is, in creating the Form I slide the Chinese altered its less often recognized original form in accordance with their own tastes. The simpler Form II scabbard slide continued to be produced after the Form I slide had emerged because it was the more easily made, less delicate, utilitarian variety used by the millions of common soldiers for the suspension of the sword. That the Form II slide which must have been much more numerous than the more elaborate Form I is now the rarer type must be taken as a kind of negative evidence that it was ordinarily made of wood. The simply carved but durable hardwood examples found in Inner Mongolia strengthen such an hypothesis. But these truly isolated examples may have passed unnoticed had the Chinese not, in spite of a preference for the more elegant Form I slides, also carved from jade a few slides of the simpler form.

The history of the long iron sword in China, the simple shape of the earliest scabbard slides and their probable relation to wood-carving traditions, the leather belt and the belt hook, all seem to point to an origin outside China. Though the arrival of all of these elements in China cannot be ascribed to a single date, they must have begun to appear sometime during the earlier fifth, or even late sixth, century B.C. Probably it is a case of continuous exposure over a long period of time. What is certain, however, is that Wu-ling's famous recorded introduction of barbarian elements into China in 307 B.C. misses the mark by well over a century. All of these "barbarian" elements had certainly been firmly established in China long before this time. The question is, then, if the long iron sword, scabbard slide, and various other barbarian accoutrements are to be considered as foreign innovations

in China, from where, or from whom, did they come?

Maenchen-Helfen has quite rightly maintained that they could not have come from the Hsiung-nu, or their related antecedents,<sup>260</sup> the prominent ethnic group that plagued China along its northern border throughout the Han dynasty.<sup>261</sup> That they were not without edged weapons of some sort is clear. Hundreds of daggers and knives have been found in their territories.<sup>262</sup> They must also have possessed a type of short sword, possibly akin to the "Perso-Scythian" *akinakes*. This weapon seems to have played an important role in their religious observances.<sup>263</sup> Their chief weapon, however, was the bow and arrow.<sup>264</sup>

Later, during the last decades of the Western Han period, some, at least, of the Hsiung-nu equestrians must have carried long swords. The swords from late Western Han Hsiung-nu burials at Hsi-ch'a-kou 西岔溝 in Inner Mongolia are almost certainly Chinese imports.<sup>265</sup> The graves contained numerous Chinese articles and it would appear, therefore, that they must give evidence of a heavily sinicized community. The swords are of both rapier and saber type; the long ones, especially the single-edged sabers, curve inward slightly along the sharpened edge and are certainly equestrian slashing swords. Alongside these Chinese swords were shorter ones of non-Chinese type which probably represent locally manufactured weapons.<sup>266</sup> In that their hilts are bronze while the blades are of iron, they represent an archaic manufacturing technique and suggest that the Hsiung-nu may not have had an iron technology sufficiently developed to produce their own long iron swords. The same condition may be noted at Lo-lang 樂浪 in Korea and at Shih-chai-shan 石寨山 in southwest China; the long iron swords are strictly Chinese types while the shorter weapons are frequently of non-Chinese, presumably local, varieties.

It is not only the length and curve of these swords that suggests equestrian use. The ordinary short sword, if we may judge from representations, was held within a firm grip at right angles to the arm. The grip area on these swords is extremely short, rarely exceeding three and one-half inches. An equestrian sword serves to protract the arm's reach and hence extends in the same line as the arm in delivering its downward blows. The hand, therefore, must loosen and the fingers spread to accommodate this position. A grip five to five and one-half inches long is required. The hilts of the iron sabers are invariably of sufficient length to allow such a grip and the long tangs of many Han dynasty iron rapiers suggest that they as well were intended for use as a slashing weapon.<sup>267</sup> There is even an instance where the grip of an archaic bronze sword was cut and an additional length of metal bonded in to bring the sword into conformity with contemporary types.<sup>268</sup>

If the Hsiung-nu borrowed the long iron sword from the Chinese during the Han period, they must also have



FIGURE 45.—Cast bronze plaque, Hsi-ch'a-kou, Inner Mongolia. [After Hsin Chung-kuo-ti k'ao-ku (1961), plate XC, 1.]

borrowed the scabbard slide. From the same group of tombs at Hsi-ch'a-kou are several openwork bronze plaques in the "animal style," most of which were "cast for, even if not invariably by, the Hsiung-nu."<sup>269</sup> One of these depicts two warriors riding fabulous beasts (Figure 45). At the left side of each hangs a long sword. The chape of the scabbard worn by the right-hand figure has the truncated pyramidal shape of the Chinese jade chapes. Below the guard on each sword, a belt may be seen to pass through a scabbard slide mounted on the sheath wall.<sup>270</sup> The Hsiung-nu, then, must have been familiar with the long iron sword and scabbard slide. But they were not the purveyors; they borrowed this equipment from the Chinese.

To the west of the Hsiung-nu in late Chou and the early decades of Han were another equestrian people, the Yüeh-chih 月氏. In the third decade of the second century B.C., Hsiung-nu equestrian archers defeated the Yüeh-chih in a number of decisive battles and drove them westward from the borders of China.<sup>271</sup> Whether the Hsiung-nu had already adopted the long Chinese sword is

not known; the evidence belongs to the following century. How long prior to this time the Yüeh-chih had resided on the northwest frontier of China, is not known. We know only that by the middle of the fourth century B.C., at least, they were inhabiting the Ordos region.<sup>272</sup> Maenchen-Helfen has convincingly demonstrated that the Yüeh-chih spoke an Indo-European language and that the Chinese words for belt and belt hook may be traced to an Indo-European origin.<sup>273</sup> If the scabbard slide belongs together with the belt and the belt hook, the probability is that they arrived in China at the same time and were brought by the same people. The evidence suggests that the Yüeh-chih may have been the purveyors. As far as is known, they were the principal nomadic group in contact with the northwest Chinese states throughout the Late Eastern Chou period. Whether or not these objects were original with them, we cannot say. Nothing is known of their earlier history. If, however, the Yüeh-chih had the long sword and scabbard slide at the time of their defeat by the Hsiung-nu and subsequent flight westward, they should have taken these with them.

### SUMMARY

From the late fifth century B.C. until the second century after Christ, the Chinese sword was suspended by means

of the scabbard slide passed onto a low-slung, leather sword belt which was distinct from the garment belt. The

manner in which this device worked is clearly revealed by several representations of sword bearers dating from the late Chou and Han periods. In spite of numerous, and at times incompatible, eccentricities in the representations of sword bearers on Chinese stone reliefs, wall paintings, stamped tiles, metal belt plaques, which suggest certain inadequacies in the function of the scabbard slide, it seems clear enough that the slide was designed as the suspension device for the long sword which generally was too long to be hung by the scabbard mouth at the waist. The contention that the loose belt and slide were designed to permit the sword to be passed from one side to the other cannot be supported logically or historically. The maneuver is impossible on horseback and extremely awkward and impractical for the infantryman.

The position of the scabbard slide, set in the scabbard wall approximately at the balance point, allowed the sword to hang in an inclined position, handy to the grip and away from the legs. The evidence of wear on several scabbard slides confirms this normal angle of repose. The loose belt allowed the sword to be drawn by thrusting the scabbard back with the left hand while drawing the sword with the right. With the scabbard in a fixed position, the long blades could not have been drawn from the scabbards by a normal, single arm's span. The difficulty encountered by the inexperienced in manipulating this sword from its scabbard is revealed in the biography of Ching-K'o in the *Shih Chi*. Though the scabbard slide seems poorly suited as a suspension device for the short bronze sword, there is ample evidence that these as well were carried by it.

The jade scabbard slides on hand from China cannot be taken as representative of the type worn by the ordinary soldier. Jade slides are retrieved from the tombs of the nobility and gentry classes; the tombs of common people are less often encountered. The evidence suggests that both the jade slides and their swords were basically ceremonial. Two wooden slides found in military localities in the Edsen-Gol region of Inner Mongolia suggest that the scabbard slide used by the soldier, and hence presumably the majority, was made of wood.

The sword appears late in China, long after other hand weapons. Though its development cannot be clearly related to types from elsewhere in Asia, the impetus to manufacture swords may have been of foreign origin. The early bronze swords ranged from 15.75 to 21.65 inches in length. In the fourth century B.C., or earlier, a sword double the length of the classic Chou bronze sword with double-edged blade and ringed hilt appeared, though the latter continued to be manufactured. These slender, long rapiers were provided with tangs which were inserted into wooden or bone grips, but otherwise they appear to be derived from earlier bronze models. The majority of these swords were probably made of iron, though comparatively

few of these remain, and hence it is possible that the long iron sword appeared somewhat earlier than the archeological record permits us to state. The bronze swords of this type were chiefly ceremonial.

At about the same time the long double-edged iron rapier appears, or slightly afterward, long single-edged sabers appear. They represent a wholly new type of sword whose form may have been suggested by simple ring-handled knives known in China since the Shang dynasty, but whose length, like that of the rapier, suggests outside influences. The saber, especially, is more suitable as a cavalry than as an infantry weapon and it may be, therefore, that the impetus to manufacture long iron swords was among the numerous impulses and accoutrements reaching China during the last centuries of Chou from the horse-riding northern nomads. It is suggested that the saber may have been introduced into the state of Ch'in first and that it was a forged and tempered iron, if not steel, weapon of simpler form and greater strength and efficiency than the iron rapier which seems to be more closely related to earlier casting processes. The saber is comparatively rare until the end of Chou which speaks in favor of its possibly geographically restricted use. Later, in the Han dynasty, it becomes the most common variety throughout China.

Though both the long iron sword and its suspension device seem more suitable to cavalry than infantry use, the Chinese appear to have adopted them for use by the latter. Cavalry troops played an important role on the frontier, but the major military force in the frequent and desperate internal conflicts in late Chou China was massive conscript armies of infantry. It is widely assumed that the chief weapon of these armies was the long iron sword, and that the success of Ch'in may be attributed to their early use of the superior saber whose manufacturing technique may have come from the West where steel blades were known at a much earlier date.

If the scabbard slide by which all of these swords were suspended was chiefly made of wood, it could not have resembled the sophisticated jade shapes, but must have had a simple shape similar to the wooden slides of Han age found in Inner Mongolia. These slides, designated as Form II, and consisting of a simple enclosed aperture, are typologically earlier than Form I slides, though none on hand can be dated before the earliest available Form I slides. The earliest slides in China, therefore, were probably of the Form II variety, and the more elegant and refined Form I slides represent a purely Chinese development effected gradually from the earlier form.

The long iron sword, leather belt, belt hook and scabbard slide, especially if it developed in a culture with wood carving traditions, all point to an origin outside China. They could not have come from the Hsiung-nu who seem not to have used a long sword until well into

Han times, and to have borrowed it from the Chinese. The words for belt hook and belt in Chinese are of Indo-European origin. Maenchen-Helfen has shown that the Yüeh-chih, situated on the northwest frontier of China by at least the fourth century B.C., spoke an Indo-European

language. If the belt hook and belt may be traced to the Yüeh-chih, the probability is that the slide and long sword intimately associated with these may be ascribed the same origin.

## Chapter 4

# The Long Sword and Scabbard Slide in Central and Western Asia and Europe

The use of the scabbard slide as a suspension device associated with long iron swords is widespread in other areas of Asia to the west of China during the period roughly corresponding to the later phases of its existence in that country and continuing for a considerable time after all evidence of it has disappeared from the Far East. However, extant examples of the slide are extremely rare outside China and in no region are there sufficient numbers to permit so detailed a study as has been offered for the Chinese slide. In no case, however, do these non-Chinese scabbard slides introduce features incompatible with the findings relative to the Chinese slide. In all cases their relationship to Chinese slides of Form I is clear; and since all are either contemporary with, or later than, related types within China, their derivation from the Chinese scabbard slide seems certain.

More important than the extant examples of the scabbard slide outside China, all of which are described in the Catalog, are representations of the slide in use. Examination of these representations suggests that in the majority

of cases the scabbard slide shown is basically related to the Chinese Form II. The existence, therefore, of slides related to Chinese Form I is demonstrated from actual finds; while slides of Form II, in all probability made of materials other than stone, are known only from representations. The absence of Form II slides outside China somewhat parallels their relative scarcity in that country, and the same reasons may govern the situations in both cases.

Obviously we cannot here enter into lengthy discussions of the military organization in all those areas of Asia and Europe where the scabbard slide has been found or is represented. Having described in detail the development, use, and association of the slide with long iron swords in China, our chief remaining concern is to elucidate its origin, mutation, diffusion, chronology, and the historical significance which attaches to these aspects. Hence, the discussion of the scabbard slide in areas outside China shall be focused on the clarification of these matters.

### THE TERRITORY OF THE KUSHAN EMPIRE OF NORTH INDIA, AFGHANISTAN, AND SOVIET CENTRAL ASIA

It was proposed at the conclusion of Chapter 3 that the long iron sword and scabbard slide had been acquired by the Chinese from the Yüeh-chih, a nomadic people known to have inhabited the north and northwest frontier of China from at least the middle of the fourth century B.C. until their defeat by the Hsiung-nu in the third decade of the second century B.C. The main group of the Yüeh-chih migrated westward, finally occupying the region of Bactria in northern Afghanistan and adjacent territories in Soviet Central Asia at the end of the third quarter of the second century B.C.<sup>274</sup> Following a period of consolidation concerning which little is known, the Yüeh-chih, now known as the Kushana, or Kuei-shang 貴霜 in Chinese sources, advanced their kingdom over the major portion of Afghanistan and conquered northern India as well. The

identity of the Kushana with the Yüeh-chih has long ago been conclusively demonstrated.<sup>275</sup> The chronology of their western conquests, and of their rulers, however, constitutes a complex and yet unresolved problem outside the limits of our concern here. The dating of nearly all monuments in the Kushan territories hinges upon the unknown accession date of Kanishka.<sup>276</sup> But whether those of concern to us here belong in truth to the first, second, or third century after Christ is of secondary importance. That they are essentially products of the Kushan kingdom is what matters.

From within the borders of the Kushan empire only two scabbard slides are known (*GP.1* and *GP.2*, Plate 17*d*). These were recovered at Sirkap in the excavations conducted by Sir John Marshall. Their find position in

the spoil earth close to the surface clearly indicated that they were brought into this city at the time of, or soon after, its conquest by the Kushana who shortly afterward may more or less have abandoned Sirkap in favor of the new city Sirsukh constructed by them about one mile north-northeast of it.<sup>277</sup> Both are carved from a whitish marble or marble-like stone, pebbles of which are found by the Haro River near the site.<sup>278</sup> Both may be considered as crude imitations of the Form I Chinese scabbard slide. It is impossible to relate them to a particular stage in the development of the Chinese slide, but their fully developed forward extension of the upper plate, with slightly back-sloped forward edge, suggests relationship

to slides not earlier than Western Han.

It is clear also that these scabbard slides do not represent a type normally used by the Kushana. The upper plates below the apertures are missing, but above the apertures the involuted terminals of the upper plates extend inward to a depth equal to that of the exterior sides of the lower aperture plates. Probably the lower terminals reached inward to an equal depth. The subtleties of practical form in the Chinese slide were thus not perceived by the Kushan carvers, and as a result these objects made less efficient slides. The lower aperture plate could not be inserted into a socket in the scabbard; the slide could be bound to the scabbard wall, but without a socket to lock it at the desired position it was liable to slip. Accordingly, they seem to have been secured in place by metal rivets passed through holes drilled in the stone.



FIGURE 46.—Stone statue of King Kanishka. [After Vogel (1930), plate I.]



FIGURE 47.—Stone statue of Kushan deity or royal personage. [After Vogel (1930), plate XXXIII, b.]

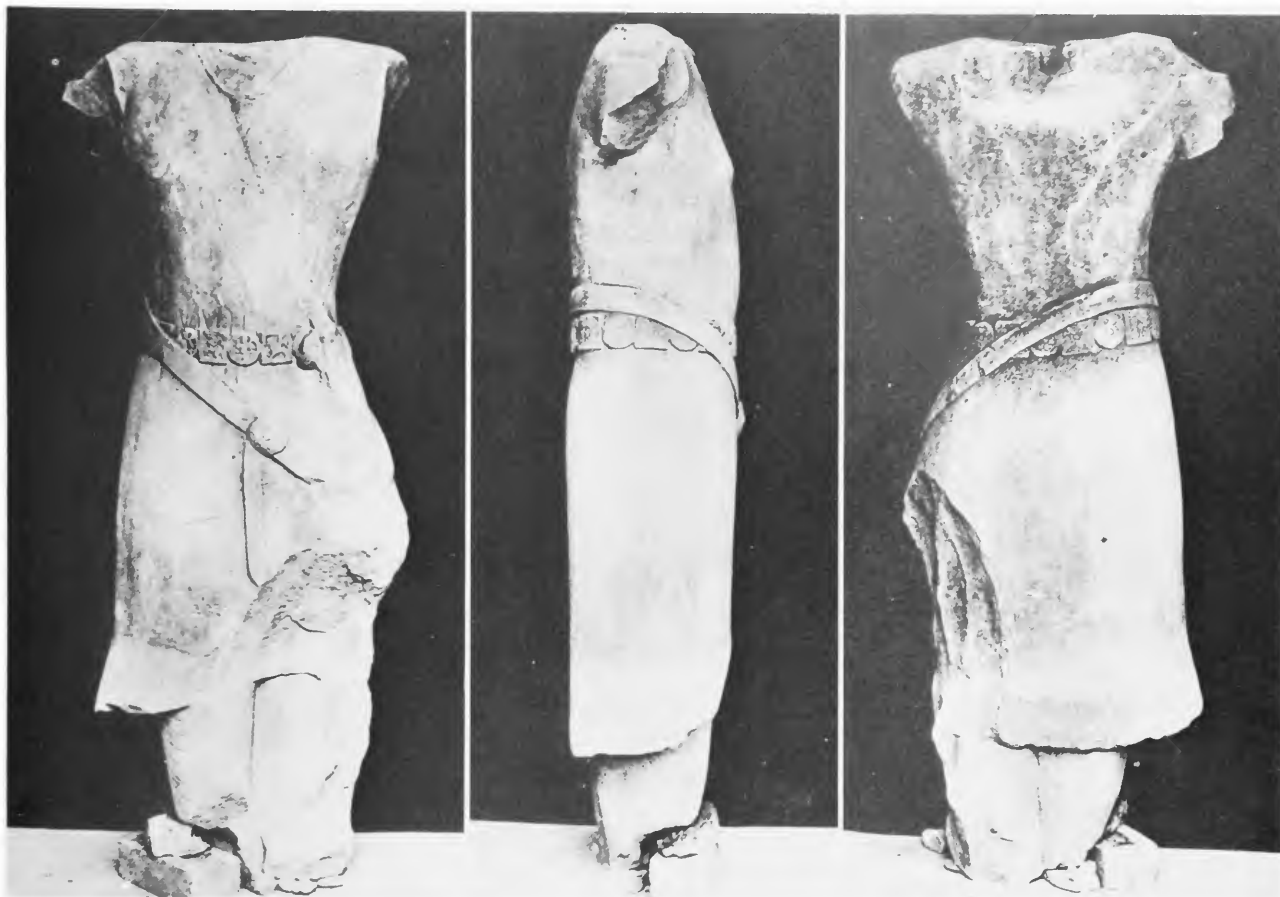


FIGURE 48.—Stone statue of Kushan king. [After Vogel (1930), plate III.]

The form of these slides suggests that the normal Kushan slide did not fit into a socket on the scabbard wall and that the protruding aperture plate of the Chinese slide was consequently meaningless to the Kushana. Therefore, these slides cannot be taken to represent the form of slide given by the Yüeh-chih to the Chinese (if they were the originators), or to be imports from China as Salmony supposed (see *GP.1*, reference), or even to be close copies of Chinese types. They must have been made in imitation of a Chinese slide by someone who had *seen* one, but one which probably was not attached to a Chinese scabbard; otherwise, one would expect that the functional aspects of its form would have been readily perceived and more accurately copied.

Evidence other than scabbard slides exists to indicate direct or indirect intercourse between Taxila and China, including Chinese bronze sword guards and a stone guard which may have been intended as an imitation of either a Chinese jade or bronze guard (see supplementary notes to *GP* category).<sup>279</sup>

One aspect especially of the form of these Taxila slides

separates them from their Chinese prototypes: they are widest at the upper end and taper regularly and quite pronouncedly toward the break in the upper plates at the lower aperture wall. While Chinese slides of this form are not unknown (e.g., *CR.1*, Plate 5*d*, *CG.19*, Plate 6*b*, *CH.8*, Plate 9*b*, *CH.11*, *CH.12*), they are quite rare and seem not to appear after the early Western Han.<sup>280</sup> The majority of Chinese slides are widest at a point between the center of the aperture and the upper aperture wall, tapering in barely perceptible arcs toward either end. The proportions exhibited by the Sirkap slides may, therefore, represent an archaic feature of the earliest slides known to the Chinese. The survival of this feature (which could not have been present in the Chinese model) in the Sirkap slides suggests the existence of an independent tradition among the Kushana, strengthening the hypothesis that the Chinese slide was acquired from the Yüeh-chih. It is perhaps significant to note that the majority of the non-Chinese slides from western Asia and Europe which superficially appear to imitate Chinese Form I slides have these same proportions.

If the Sirkap slides do not represent the form normally used by the Kushana, how did their slide differ from the Chinese type? To suggest an answer to this question, the monuments which depict the slide must be examined:

A. Statue in the round of King Kanishka, Lord Curzon Museum, Mathura, India; Figure 46.<sup>281</sup>

B. Sculpture in the round of seated Kushan deity or royal figure, Lord Curzon Museum, Mathura, India; Figure 47.<sup>282</sup>

C. Sculpture in the round of seated Kushan deity or royal figure, similar to B, but smaller and here less well preserved; Indian Museum, no. A25033, ca. 7.00 inches high, Calcutta, India; unpublished.

D. Statue in the round of a Kushan king, Lord Curzon Museum, Mathura, India; Figure 48.<sup>283</sup>

E. Small warrior figure with skirt of plate armor, from Gandharan relief of dark gray schist; from Kabar Kote, West Pakistan; British Museum 99.6-9.6; unpublished (?).

F. Lightly draped figure; gray schist Gandharan relief depicting the Dipankara jataka; British Museum.<sup>284</sup>

G. Warrior figure from gray schist Gandharan relief; from Buner, West Pakistan; British Museum; unpublished (?).

H. Group of figures garbed in jackets, trousers, and boots; Gandharan gray schist stair riser relief from Jamalgarhi, West Pakistan, depicting a scene from the Mahajanaka Jataka; British Museum.<sup>285</sup>

I. Naked warrior figure; Gandharan gray schist relief, Musée Guimet, Paris.<sup>286</sup>

J. Heavily armored warrior figure (a) bearing shield, spear and sword; Gandharan gray schist relief depicting attack of Mara's host on the Buddha; a second figure (b) in the same relief also carries a sword suspended by a scabbard slide; Central Museum, Lahore, West Pakistan.<sup>287</sup>

K. Lightly draped warrior figure; Gandharan gray



FIGURE 49.—Gandharan stone relief. [After Kansas City, William Rockhill Nelson Gallery of Art and Mary Atkins Museum of Fine Arts (1959), page 222, lower.]



FIGURE 50.—Gandharan stone relief. [After New York, Asia Society (1960), page 30.]





FIGURE 51.—Gandharan stone relief. [Courtesy Royal Ontario Museum, Toronto, Ontario.]

schist relief depicting a scene from the wanderings of the Buddha; William Rockhill Nelson Gallery, Kansas City, 55-105; Figure 49.<sup>288</sup>

L. Lightly draped warrior figure; Gandharan gray schist relief depicting two warriors from the host of Mara; Central Museum, Lahore, West Pakistan; Figure 50.<sup>289</sup>

M. Lightly draped warrior figure; Gandharan gray schist relief depicting victory over the black serpent at Rajagriha; Central Museum, Lahore, West Pakistan.<sup>290</sup>

N. Thinly draped figure of Nanaia, from Gandharan gray schist relief; Central Museum, Lahore, West Pakistan.<sup>291</sup>

O. Six figures in Kushan dress; Gandharan gray schist stair-riser relief; Royal Ontario Museum, Toronto; Figure 51.<sup>292</sup>

P. Six figures in Kushan dress; Gandharan gray schist stair-riser (?) relief; Peshawar Museum, West Pakistan.<sup>293</sup>

Q. Lightly clad warrior figure; fragmentary Gandharan gray schist relief, probably depicting figures from the host of Mara; Central Museum, no. 464, 14.00 inches high by 8.00 inches wide, Lahore, West Pakistan; unpublished.

R. Lightly clad fragmentary figure from Gandharan gray schist relief; Peshawar Museum, no. 776, 3.25 inches high, Peshawar, West Pakistan; unpublished.

S. Robed, headless male figure standing under arch; fragmentary Gandharan gray schist relief; Peshawar Museum, no. W.U. 1471, 8.50 inches wide, Peshawar, West Pakistan; unpublished.

T. Male figure in knee-length robe holding spear in right hand; fragmentary Gandharan gray schist relief depicting "Dream of Maya"; Peshawar Museum, no. 251, 14.25 inches wide by 5.50 inches high, Peshawar, West Pakistan; unpublished.

U. Two warrior figures, one (a) clad in *dhoti* (Figure 52), the other (b) in full armor (Figure 53); Gandharan gray schist relief depicting attack by host of Mara on the Buddha; Freer Gallery of Art, 49.9, Washington, D.C.<sup>294</sup>

V. Standing figure of Pancika holding spear in right hand; Gandharan gray schist.<sup>295</sup>

W. Armor-clad warrior figure; Gandharan gray schist relief depicting attack by host of Mara on the Buddha; Museum für Völkerkunde, Berlin-Dahlem.<sup>296</sup>

X. Figure of warrior; fragmentary Gandharan gray schist relief; Peshawar Museum, no. W.U. 1216, 6.50 inches high, Peshawar, West Pakistan; unpublished.

Y. Lightly clad, standing warrior figure; fragmentary gray-green schist relief from Butkara I, near Mingora, Swat, West Pakistan.<sup>297</sup>

Z. Fragmentary stucco figure of standing warrior with skirt of plate armor over trousers; excavated at Hadda, Afghanistan; Figure 54.<sup>298</sup>

AA. Standing figure in Kushan dress; flat, unfinished relief fragment, ca. 14.00 inches high, of a whitish stone; excavated at Surkh Kotal, Afghanistan.<sup>299</sup>

BB. Fragmentary stucco figure excavated at Hadda, Afghanistan.<sup>300</sup>

CC. Lightly clad warrior figure; gray schist relief exca-

vated at Shotorak, Afghanistan; Figure 55.<sup>301</sup>

DD. Standing figure clad in knee-length tunic; gray schist relief excavated at Shotorak, Afghanistan; Figure 56.<sup>302</sup>

EE. Standing figure of the sun god; wall-painting at top of niche of 38-meter Buddha at Bamiyan, Afghanistan; Figure 57.<sup>303</sup>

FF. Small standing figure of donor in knee-length tunic and trousers; fragmentary white marble relief excavated at Khair Khaneh, near Kabul; Kabul Museum, Dar ul-Aman, Afghanistan; Figure 58.<sup>304</sup>

GG. Fragmentary standing sculpture of figure in Kushan garb; excavated at Surkh Kotal; Kabul Museum, Dar ul-Aman, Afghanistan.<sup>305</sup>

HH. Standing figure of the moon god; wall-painting excavated at Fondukistan, niche K; Kabul Museum, Dar ul-Aman, Afghanistan; Figure 64.<sup>306</sup>

II. Fragmentary stucco plaque of seated figure in Partho-Kushan garb; excavated at Afrasiyab, Uzbek SSR; Hermitage Museum, Leningrad; Figure 59.<sup>307</sup>

JJ. Fragmentary stucco plaque of standing figure in Kushan garb; excavated at Afrasiyab, Uzbek SSR; Hermitage Museum, Leningrad; Figure 60.<sup>308</sup>

KK. Terracotta figurine of standing figure in knee-



FIGURE 52.—Gandharan stone relief. [Courtesy Freer Gallery of Art, Washington, D.C.]



FIGURE 53.—Gandharan stone relief. [Courtesy Freer Gallery of Art, Washington, D.C.]



FIGURE 54.—Fragmentary stucco figure, Hadda, Afghanistan. [After Barthoux (1930), plate CXI,d.]

length tunic, possibly wearing armor; excavated at Erkala (Merv), Turkmen SSR.<sup>309</sup>

LL. Silver bowl, Freer Gallery of Art, 45.33, Washington, D.C.; seated figure in relief wearing sword slung on baldric passing through slide.<sup>310</sup>

MM. Silver bowl, British Museum, London; two equestrian figures with swords on scabbard slides; said to have been found on the banks of the Swat river, West Pakistan; Figures 61 and 62.<sup>311</sup>

NN. Fragmentary warrior figure dressed in short tunic



FIGURE 55.—Fragmentary stone relief. Shotorak, Afghanistan. [After Meunié (1942), plate XIV,48.]

and trousers; stucco relief from Dharmarajika, Taxila Museum, KN 606-31, Taxila, West Pakistan; unpublished.

In addition to the above examples, the existence of the scabbard slide may be presumed in the representations on numerous Kushan coins, but the majority of these are so worn that the slide itself is not visible.<sup>312</sup> The position of the sword in most cases, however, makes it virtually certain that it is represented as suspended on a slide.

The monuments listed above do not belong to a single well-defined period. Reasonably precise dates may be ascribed to only a few of them. The majority belong to the Kushan period, but a few belong to a later time.

The scabbard slides depicted on these monuments vary greatly, but all are worn on belts loosely slung about the



FIGURE 56.—Fragmentary stone relief, Shotorak, Afghanistan.

hips, or on baldrics. On a number of examples (B, L, U(b), FF, Figures 47, 50, 53, 58) impressed or tooled lines along the edges indicate that the belts were leather, thus agreeing with the evidence from China. One belt (K, Figure 49) has a more elaborate tooled pattern. The method of wearing the belt suggested by Chinese representations is confirmed by the Kushan period examples. The sword belt was not fastened to the garment belt or to the clothing at any point, but was held in place above one hip by the tension produced by the weight of the sword at the opposite side. In the case of the nude or lightly draped figures (I, K, L, M, Q, R, U(a), CC, and Figures 49, 50, 52, 55) such a method of wearing the sword belt seems obvious enough. The sculpture in the round of a standing figure in Kushan garb (D), here shown in front, side and back views (Figure 48), clearly shows that the sword belt was not fastened to the garment belt.

The two ends of the sword belt are bound together by a small, round clasp, sometimes plain (D, U(a), U(b), Z, CC, and Figures 48, 52, 53, 54, 55), but often in the form of a rosette (A, E, K, N, and Figures 46, 49). The button usually does not join the two ends at their extremities, but is situated so that one or both ends of the belt hang down from the clasp (Figures 47, 49, 52, 53, 54). Presumably, therefore, the clasp or button served as a sort of

buckle and the length of the belt could be adjusted by means of perforations at intervals in each end of the strap (such holes are never shown), or by clasping the two parts of the belt together, as with a strong clip, at any point along its length.

In addition to joining the ends of the sword belt, the button may well have served another purpose. It may be observed that in all cases where the button is depicted and the sword is represented at the left side of the bearer, inclined forward as in China, with the hilt within easy reach of the right hand, the sword is worn to the left proper of the button (A, D, E, K, N, U(b), CC, FF [in this case knotted belt ends], GG). At other times, in positions of ease, the sword hangs vertically in front, directly in line with the center of the body (U(a), Z). The button then is to the left proper of the sword. This manner of representing the sword in two positions relative to the button is found as well in other areas where the scabbard slide and sword belt have been depicted. Probably the button served to restrict the slippage of the sword; when in combat, its desired position was at the left side. That is, it prevented the sword from sliding forward to interfere with the movement of the legs.

Though some fastening of this type may be presumed wherever the scabbard slide was employed in antiquity,

it is not always included in representations and, to my knowledge, only one fixture of this sort has been found with the sword and slide in the burial (see. *V.1*). It seems likely that certain Chinese objects classified as belt hooks may in fact have been clasps for sword belts. I refer particularly to the numerous small hooks which consist of little more than a button raised from the back of a stout hook by a post, such as the one attached to the leather belt described by Karlbeck (p. 42). Though generally similar in form to the more elongated belt hooks, they seem to constitute a class apart and to be far more



FIGURE 57.—Painting of sun god, niche of 38-meter Buddha, Bamiyan, Afghanistan. [After Godard (1928), page 21, figure 6.]

restricted in size and shape than the elongated types. Two such hooks were found in close proximity to iron swords in the tomb at Lo-lang, Korea, where slides *CV.8* and *CV.9* were discovered.<sup>313</sup> One of these has the shape of a miniature belt hook of normal form; the other consists of a semicircular bronze piece with post and button attached at right angles near one end. The latter could not easily have served as a garment hook, but might easily have served as a sword belt clasp, the scabbard edge

resting in the crescent-shaped bronze part. The association of both with iron swords suggests that both served as sword-belt clasps; and the suggestion is therefore presented that other such "miniature" belt hooks may in fact belong not to garment belts, but to sword belts.

Swords within the Kushan territories were not all worn on sword belts slung around the waist. If one may credit the representations with accuracy in this regard, swords were also worn on baldrics passed over the right shoulder and falling diagonally across the back and chest to the sword at the left side (F, M, Q, BB, LL).<sup>314</sup> Buttons are not seen on these baldrics though presumably the ends of the strap were held together by some form of clasp. The button would naturally have a less important function on a shoulder baldric where there was less possibility of the sword sliding from its position at the side. On the whole, the shoulder baldric, which must be considered here as an innovation from the Roman East and not the belt originally, or typically associated with the scabbard slide, was probably a more efficient arrangement for the foot soldier, the waist belt being more appropriate for the equestrian.

The various representations from the Kushan territories corroborate also what we hypothesized in our discussion of the slide in China with respect to the manner in which the sword was drawn. Hung loosely on the belt, the sword could not be drawn with the right hand alone; the sword would not come out of the scabbard, but draw the sheath along with it owing to the regulated tension between blade and scabbard necessary to prevent the sword from accidentally falling out of its sheath. In drawing the sword, the left hand grasped the scabbard at approximately midpoint, holding it firmly as the weapon was drawn (Figure 63).<sup>315</sup> If the sword was long and the length of the extended right arm provided insufficient drawing room, the scabbard could be thrust on its loose belt in the opposite direction. Such representations do, in effect, confirm the supposed meaning of the *Shih Chi* passage on the attempted assassination of Shih Huang-ti cited in the preceding chapter.

The swords recovered at Taxila, some fitted with Chinese bronze sword guards, are not generally as long as the Chinese iron swords.<sup>316</sup> They are a hybrid type seemingly related to Roman double-edged *spatha*, in the case of the longer swords, and *gladius* swords. They do not inform us of the Kushan sword, if such a type existed independently. The majority of the figures dressed in Kushan garb in the Gandharan reliefs, and carrying swords on belts and slides, carry a broader, shorter sword than those found in China (e.g., Figure 53).<sup>317</sup> The sword represented on the renowned statue of Kanishka (Figure 46) fits in well with those shown on the reliefs.<sup>318</sup> If we may generalize on the basis of *GP.1* and *GP.2*, scabbards were also heavier than the normal Chinese types, and made of wood sufficiently

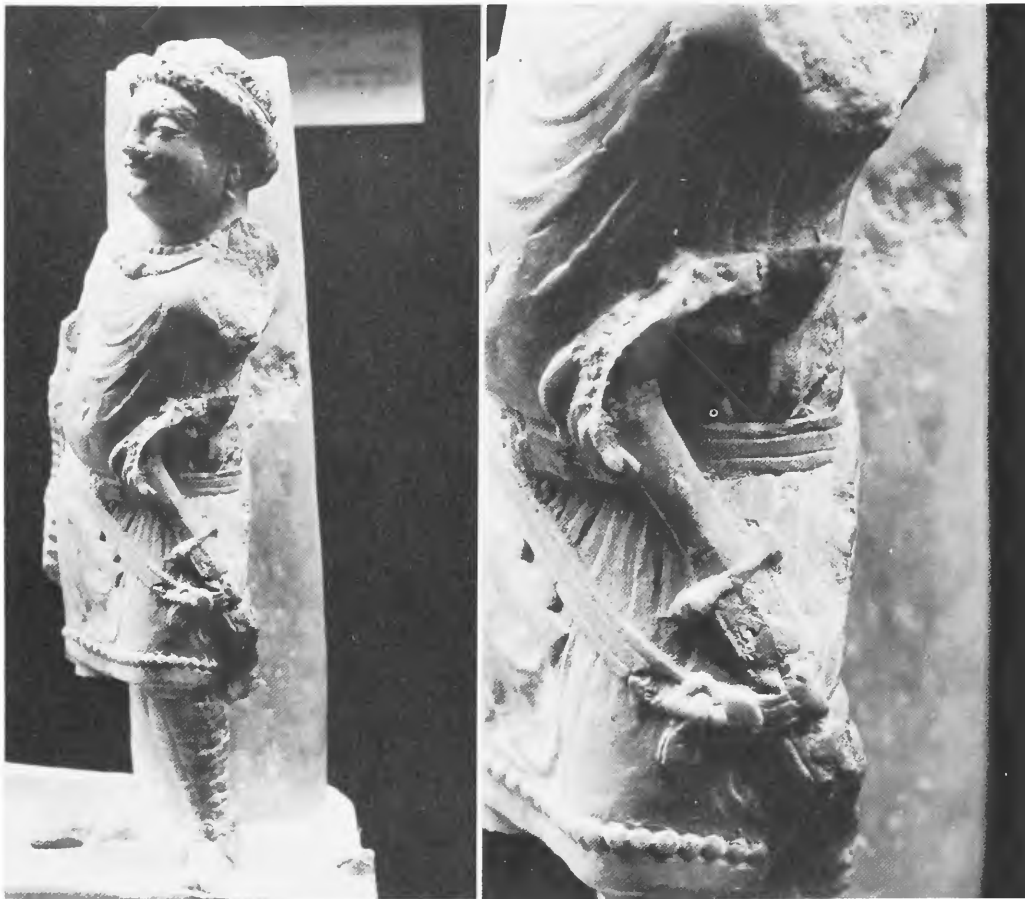


FIGURE 58.—Fragmentary marble relief, Khair Khaneh, Afghanistan.

thick to take the rivets by which the slide was attached.

It is not possible to determine with great accuracy the precise form of the scabbard slide depicted in the sculptural representations throughout the Kushan territories. As we observed in the analysis of the slide in China, distinctive and significant variations in form are notable chiefly in details one cannot reasonably expect to be shown in the sculptural and painted representations. A few observations of a general nature may, however, be made.

A few of the scabbard slides are long, narrow rectangles (A, G, J, L, U(b), Figures 46, 50, 53) with clearly defined edges. The sword belts pass through the center so that some form of aperture set below the upper end may be presumed. Possibly these represent slides imitating the Chinese Form I variety, or actual Chinese imports. The slide shown on the scabbard belonging to the Kanishka statue (A, Figure 46) and another on a relief in the British Museum (G) appear to be bound to the scabbard with broad bands in a way that suggests an adaptation of the Form I slide different from that of *GP.1* and *GP.2*. Neither sword is worn on a belt and the "binding"

may therefore be the loose sword belt wrapped about the scabbard.<sup>319</sup>

Other slides are represented by parallel vertical lines on the scabbard wall, implying recession of the upper and lower ends into the scabbard (F, K, Figure 49, CC), or they are defined only at the sides and upper end, suggesting a bulging loop that recedes at the lower end into the scabbard (E, N, R, Z, Figure 54). Still others are depicted as simple convex bands with flared ends (B, Figure 47, I, M), or as thin eye-loops on the scabbard wall (U(a), Figure 52). The scabbard slide worn by the seated Kushan figure (B, Figure 47) appears to be attached by rivets through a short tongue below and to be secured above by a narrow engraved band probably placed over another flat tongue.

These slides are obviously not related to Form I types from China. Whether they are similar to the Form II slides is equally doubtful. They appear to lack the essential feature of Form II slides: the self-contained aperture. Probably they are simply eye-loops attached to the scabbard wall which itself serves as the lower, or inner aper-



FIGURE 59.—Fragmentary stucco plaque, Afrasiyab, Uzbek SSR. [After Strzygowski (1917), figure 207.]

ture plate of the slide. The single published example in which the slide is shown in profile (I) strongly suggests this form. Such a device would be less satisfactory than a completely enclosed aperture owing to the possibility of the belt lodging in the angle between slide and scabbard wall, unless the upper end of the slide was in some way folded under. Their close relationship, however, to Form II slides from China and its bordering territories is clear. Probably the majority of these scabbard slides were sim-



FIGURE 60.—Fragmentary stucco plaque, Afrasiyab, Uzbek SSR. [After Strzygowski (1917), figure 208.]

ple bronze or iron loops since sophisticated lapidary traditions were foreign to them. Consequently, most of them may have disappeared, or they lie broken, misshapen, unrecognized, and unclassified in museum collections.



FIGURE 61.—Relief ornamentation on silver bowl, British Museum. [After Dalton (1964), plate XXX, lower.]



FIGURE 62.—Relief ornamentation on silver bowl, British Museum. [After Dalton (1964), plate XXXI, lower.]

While the obscure chronology of the Kushan period precludes assigning precise dates to any of the objects on which the scabbard slide is depicted, the chronological span of these monuments may be broadly outlined. The two fragmentary scabbard slides from the Kushan level at Sirkap indicate that the slide appeared in northern India with the Kushana and probably had not previously existed there. As no objects which could have served a similar function were found in the Parthian, Saka, Greek, or pre-Greek levels at Sirkap, it may be concluded that before the Kushan period swords were suspended in some other way.

Among the thousands of stone sculptures, stuccos, and terracottas from the Taxila sites, apart from NN I know of only two representations of swords which, from their position, may have been carried on scabbard slides. These pieces, however, are badly damaged and neither slide nor belt may be seen.<sup>320</sup> Similarly, among the hundreds of stone sculptures unearthed from Buddhist sites in the Swat valley by the Italian mission under the leadership of Giuseppe Tucci—still not fully published—only one representation of a scabbard slide occurs (Y), and it appears to be rather poorly understood, or crudely reproduced. This does not prove that the Gandharan "school"

of sculpture had already begun before Kushan times, for there is not a single representation of a sword in all of Gandharan sculpture which, by its position, suggests it was *not* carried on a slide. It may be, however, that the sword entered the repertoire of sculptural motives in this region only after official patronage of Buddhism by the Kushan overlords, after which figures of Kushan donors appeared in the reliefs, and warriors and even goddesses were provided with a Kushan-type sword. We may assume that by the time of Kanishka, whenever that may have been, the scabbard slide had become a standard item in the representation of swords. Two monuments from Surkh Kotal (AA, GG), a temple founded by, or under the patronage of, Kanishka reveal evidence of the existence of the scabbard slide. Finally, the Kushan statues in the Calcutta and Mathura museums (A, B, C, D) show the sword belt and slide worn by early Kushan rulers. (The sword has been broken off D, but presumably it resembled that of the others.)

We may assume, then, that the scabbard slide was in use throughout Kushan territories for the duration of their suzerainty and that it appeared with them in Trans-Oxiana and Bactria before their conquest of India. The terracotta figures from Soviet Central Asia (II, JJ, KK,



Figures 59 and 60) probably belong to a later phase of Kushan dominance in this region.<sup>321</sup> There is evidence that shortly afterward a new type of sword suspension was introduced. The sword held by one of these figures (JJ) has a flared chape similar to the Chinese form and may represent an import (Figure 60). Such a chape would strongly suggest a date not later than the third century for this piece.



FIGURE 63.—Gandharan stone relief. [Peshawar Museum, Peshawar.]

The silver bowl (MM, Figures 61 and 62) also belongs to the late Kushan period, and must be dated to the period of Sasanian supremacy in this region. Sasanian influence is pronounced in the representation of the figures and the swords themselves are of the type with broad guards seen on the third-century reliefs in Iran. Both swords are fitted with flaring chapes reminiscent of the Chinese form. In both representations, the sword belt falls in an arc to either side of the scabbard and possibly does not actually

pass through the slide. This misunderstood rendering of the apparatus is similar to that seen in the painting of the sun god at Bamiyan (Figure 57) and points to a fifth-century date.

Use of the sword belt and scabbard slide seems not to have survived the Kushana except as a vaguely and inaccurately perceived artistic convention in later representations. It may even have been more or less restricted in its use to the Kushana during the period of their domination and therefore subject to occasional misunderstanding on the part of non-Kushan artisans who represented it during that period. I can think of no other reason why the slide should have been represented once at Shotorak, Afghanistan, as fastened to a garment belt of plaques (DD, Figure 56), and another time properly to a low-slung sword belt (Figure 55), considering that the monastery probably belongs to the second century after Christ.<sup>322</sup> The form of the slide, its position on the scabbard, and the form of the sword itself, unlike other examples of likely later date, betray no revealing lack of familiarity with this equipment.

Doubtless, Kushan influence in Afghanistan was somewhat lessened following the invasion of the Sasanian monarch Shapur I in the middle of the third century, and still more so after the defeat of the Kushana by Shapur II in A.D. 340. Kushan power was not finally extinguished, however, until the invasion of the Hephthalites in A.D. 460. It is almost certain that the Hephthalites brought with them a different type of sword suspension and equally certain that at least one representation of the scabbard slide in Afghanistan is to be dated subsequent to the Hephthalite invasion.

At the late Buddhist monastery of Fondukistan, probably of sixth- or even early seventh-century date, a wall painting depicting the sun and moon gods was discovered. The moon god's sword (HH, Figure 64), is suspended from a loop of belt, the ends of which are attached to the garment belt a short distance to either side of its closing. This sword belt passes by the sword at a point below the hilt where the scabbard slide should be, but no slide is represented. Standing to the moon god's left, the sun god wears a sword suspended by two cords attached to the garment belt above and fastened into eyes on the scabbard edge. As we shall see, this fastening—here correctly represented while the moon god's sword suspension has been wholly misunderstood—must be considered as the one which had by this time become nearly universal in Asia. Whether it arrived in the old Kushan territories only with the Hephthalites, or had preceded them as an influence from outside, cannot easily be answered on the basis of the monuments on hand. The sword of the sun god painted at the top of the niche of the 38-meter Buddha (EE, Figure 57) has been equipped with a suspension device similar to that of the moon god at Fon-



FIGURE 64.—Wall painting from niche K, Fondukistan, Afghanistan. [After Hackin (1959) figure 195.]

dukistan. The date of this painting is not known. The modified pistol-grip hilt of the sword has analogies with Sasanian Iran which clearly indicate that the painting cannot be earlier than the later part of the third century; almost certainly it is still later than this, probably not before the later part of the fifth century.<sup>323</sup> Finally, a small figure of a donor in barbarian dress (FF, Figure 58) on a relief carved from white marble, and recovered from Sanctuary A in the temple at Khair Khaneh, wears a properly delineated sword belt which passes over the scabbard and through a correctly rendered slide. To the right proper of the sword is a small dagger, attached to the tunic belt by means of cords from two eyes on the scabbard edge similar to those on the sword of the sun god at Fondukistan. The temple at Khair Khaneh is dedicated to an Iranian, rather than Buddhist deity. It has been ascribed to the fourth or fifth century after Christ. Probably this sculpture is not to be dated much earlier than the arrival of the Hephthalites.

The typical Kushan scabbard slide was probably a simple eye-loop of metal or carved wood, nailed or bound to the wall of a wooden scabbard. Chinese imports may have existed; imitations of the Chinese Form I slide certainly did exist. The appearance of the scabbard slide in the territories of the Kushana does not prove that the Chinese obtained the slide from them centuries earlier when they inhabited the northwestern border regions of China. The presumed prevalence of a type of slide different from the commonly encountered Chinese variety indicates, however, that the Kushana probably did not receive this device from the Chinese.<sup>324</sup> What is strongly suggested is that the predominantly equestrian Kushana brought the slide with them from their earlier eastern territories and that it was, at least until the fourth century after Christ, the only form of suspension employed by them. The distinctive Chinese Form I slide was evidently novel among them, their more common variety resembling the simpler Chinese Form II variety which typologically is the earlier in China.

### IRANIAN ASIA IN THE PARTHIAN AND SASANIAN PERIODS<sup>325</sup>

We should expect to find the scabbard slide in use among the Parthians who had long been in close contact with the Kushana in Bactria and Afghanistan. That there is no evidence of the scabbard slide in the Parthian strata at Taxila is not disturbing; the only evidence of the Kushan slide there is two stone pieces crudely imitating a Chinese type while numerous representations suggest that the majority were of a simpler form.

Unfortunately, no actual examples of scabbard slides are known to have been recovered from Parthian sites, nor have any been depicted on monuments thus far discovered in their northeastern territories.<sup>326</sup> The few representations of the Parthian slide are all found in the western portion of their empire and presumably date from the later part of the period.<sup>327</sup> The scabbard slide is not seen clearly in the published photographs of any of these sculptures, but in one case (C) the description of the fastening clearly indicates the presence of a slide;<sup>328</sup> and in another case (D), a sword belt similar to those worn by the Kushan figures, with circular clasp or button joining the ends, makes it quite certain that the Parthians were familiar with the scabbard slide.<sup>329</sup> From the description of (C), we may gather that the Parthian scabbard slide, at least as represented in the late art of the Parthians' western provinces, bore little resemblance to that of the Chinese. Except for the fact that it was produced in the form of confronted animals, it is similar to the presumed common Kushan type; that is, a simple eye-loop on the scabbard wall. It is quite possible that not all

the Kushan slides were as plain as they appear on the small-scale sculptures.

The relationship between the clothing and accoutrements of the Parthians and the Palmyrenes has been thoroughly examined on several occasions, always with the same conclusion: the Palmyrene costume of boots, trousers, and knee-length tunic, together with the sword and its belt, is essentially an Iranian riding costume.<sup>330</sup> Whether the origin of this costume which appears in the early post-Christian centuries from the Mediterranean to northern India should be sought in the Bactrian civilization as recently posited by Daniel Schlumberger,<sup>331</sup> or whether we are obliged to carry it further back in time, as Widengren has done,<sup>332</sup> to the leather costume of the Scythians, with implications of a north Eurasian origin, is not of immediate concern to us here. Whether owing to a dominant Greco-Iranian cultural milieu, or to Romano-Hellenistic impulses constantly emanating from the West, what matters is that there was a degree of homogeneity throughout vast areas of western and central Asia among racially and linguistically distinct peoples in the centuries following the conquests of Alexander. It comes as no surprise, therefore, to find the sword belt and scabbard slide represented on funerary reliefs of the second and third centuries at Palmyra where its appearance is doubtless attributable to the Parthians,<sup>333</sup> or that these swords should have guards and hilts similar to those depicted on the Gandharan reliefs. The late Parthian period is also the time during which at least some Roman

legionnaires, periodically fighting the Parthians on their eastern frontier, adopted the scabbard slide to sling their swords from baldrics.<sup>334</sup>

As with the Parthian representations, the scabbard slides on the Palmyrene reliefs are for the most part invisible, damaged, or not clearly seen. But a single example where it is seen clearly (Figure 65) suffices to tell us that in the other cases a similar device was intended. It is a small, flat rectangle set some distance below the hilt and presumably it represents the simple eye-loop variety which seems to have been the dominant form in western Asia. At Palmyra, the sword belt passes either over (Figure 65) the garment belt, or under it (Figure 66). In either case, it does not appear to have been attached to the garment belt or to the clothing at any point. Fastening the garment belt over the sword belt would help to hold the loosely slung sword belt in its proper place. The posture of these Palmyrene figures, and the manner in which the left hand rests upon the hilt of the sword, is strongly reminiscent of the figures from many of the Gandharan reliefs which doubtless are contemporary.

Neither at Palmyra, nor among the later Parthians

(those best known to us), was the scabbard slide the only device in use for hitching up a sword. Another method of fastening, shown on two monuments, involved a series of four small rings banded to the scabbard, two on either side set slightly apart, but occupying a position on the scabbard equivalent to that at which the slide was set.<sup>335</sup> Contrary to the normal appearance of the sword belt, in both cases the narrow leather straps attached to the rings on the scabbard pass, at the right side, underneath a heavily tooled leather belt and may, therefore, be attached to it. While differing slightly from the attachment form which supplanted the scabbard slide in most parts of Asia, it is clearly related to it and may represent a similar though separately conceived innovation. In either case, the function of these attachments was to hold the sword at an angle equivalent to that achieved through use of the scabbard slide. The former, however, held the sword rigidly in place, while the latter allowed for adjustment laterally along the sword belt.

The long sword and scabbard slide carried by the Parthians and Palmyrenes points to connections with the Kushan realm to the east at earlier times. Whether the Parthians acquired these elements from the Kushana as



FIGURE 65.—Triclinium of Maqqai, from Palmyra, Syria. [After Seyrig (1937), plate IV.]

early as the second century B.C. in Trans-Oxiana, or brought them independently from their earlier homeland in the Eurasian steppe, cannot yet be determined. The scabbard slide composed of confronted lions (or simply felines?) may suggest closer affinities to the steppe than to China. But the external form of the Kushan slide is unknown. Similarities exist between the costume of the Parthians and Palmyrenes and the South Russian Scythians,<sup>336</sup> and if Widengren is right in his supposition that the Iranian riding costume points to prototypes in leather worn by the subarctic progenitors of the Scythians,<sup>337</sup> we are ultimately led into the Eurasian steppe at early times and into hypotheses which cannot be supported on the basis of the presently available evidence.

Maenchen-Helfen's statement, "It is strange that the Sasanian slide occurs only on monuments of the third century,"<sup>338</sup> is misleading. It loses much of its significance when we recall that virtually all of the Sasanian rock reliefs belong to the third century, and that in at least one relief (at Bishapur) which does not belong to this

century the slide is represented. His statement loses the remainder of its validity when we note that among the silver plates presently and plausibly ascribed to the fourth century, only one depicts the scabbard in such a position that the suspension device would be shown and a scabbard slide is clearly represented. Other plates of the fourth century show the sword belt alone, the sword being concealed or only partially visible at the left side of the figure seen from the right, but in each case the type of belt is that associated with those monuments on which the slide is clearly shown.

As was the case in the Parthian and Palmyrene provinces, no actual example of a Sasanian slide has been found or yet recognized among museum collections; but whereas the use of the slide among the Parthians and Palmyrenes can be demonstrated by reference to a small number of stone sculptures only, it appears on stone reliefs, metalwork, intaglios, and coins belonging to the Sasanians. Since the majority of Sasanian monumental sculptural reliefs belong to the earlier portion of the



FIGURE 66.—Fragmentary stone figure, Palmyra, Syria. [Courtesy Mr. Fred Anderegg.]

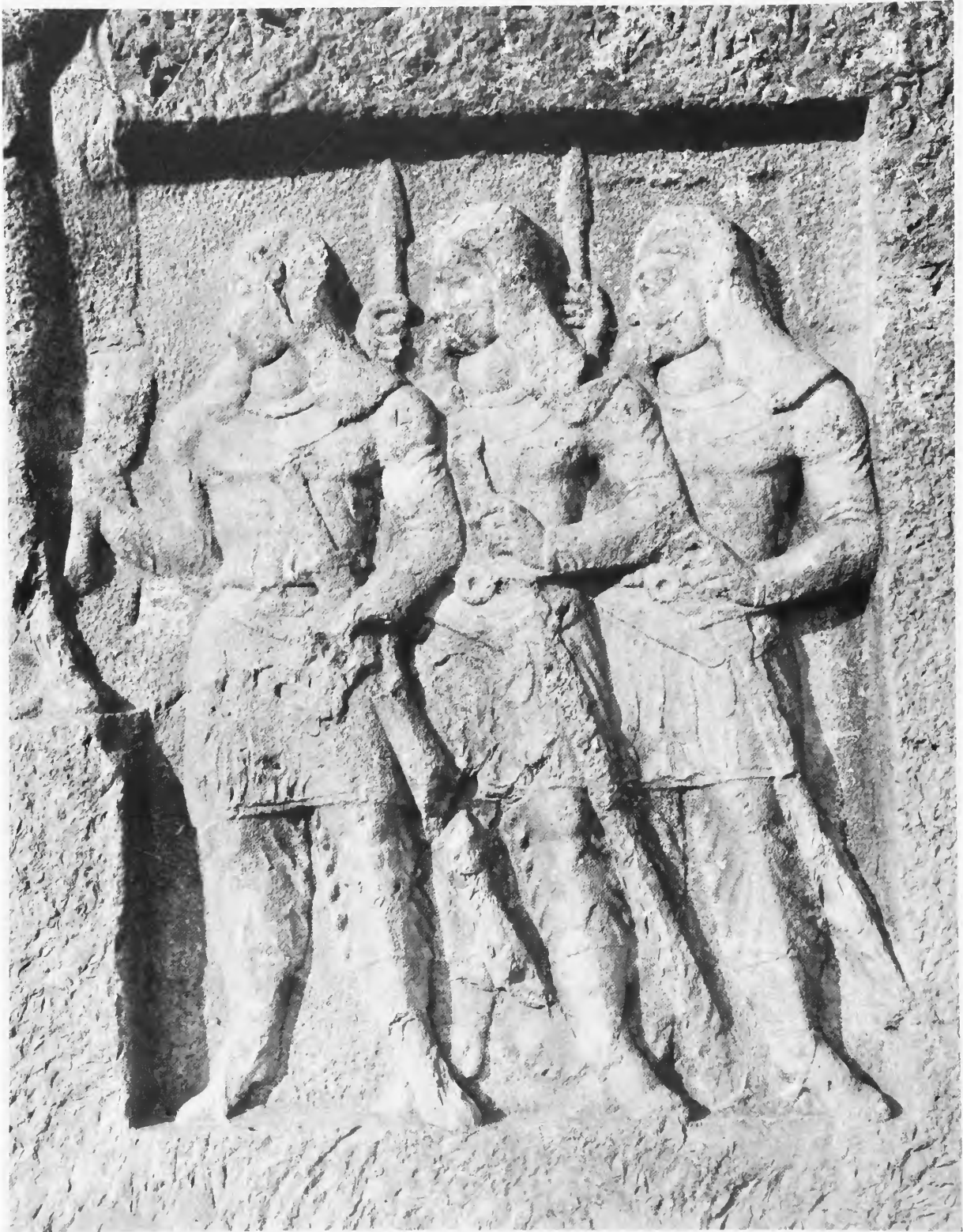


FIGURE 67.—Sasanian rock relief at Bishapur, Iran. [Courtesy of the Herzfeld Archives, Freer Gallery of Art, Washington, D.C.]



FIGURE 68.—Sasanian rock relief at Bishapur, Iran. [Courtesy of the Herzfeld Archives, Freer Gallery of Art, Washington, D.C.]

dynasty, that is to the third and early fourth centuries, it is only natural that the majority of scabbard-slide representations should belong to this time. From Ardashir I (A.D. 223–241), founder of the kingdom, through Narse (A.D. 293–302), every king depicted the scabbard slide on his commemorative reliefs, with the exception of Bahram III who ruled less than a year in A.D. 293 and had insufficient time to memorialize himself, and Hormizd I who ruled a year only (A.D. 272–273) but who, in spite of his brief reign, found time under the reign of his sovereign Shapur I (A.D. 241–272) to strike coinage in his own name on which the scabbard slide, if not actually seen, may be assumed.<sup>339</sup> Ardashir I,<sup>340</sup> Shapur I (Figures 67–71),<sup>341</sup> Bahram I (A.D. 273–276),<sup>342</sup> Bahram II (A.D.



FIGURE 69.—Sasanian rock relief at Bishapur, Iran. [After Ghirshman (1962), page 156, figure 197.]

276–293; Figures 72 and 73),<sup>343</sup> and Narse had carved at their behest one or more reliefs in which the scabbard slide is represented dozens of times.<sup>344</sup> It is only natural that the majority of these reliefs (and hence the most scabbard slides) were carved for Shapur I and Bahram II whose combined reigns account for forty-eight of the seventy-nine years included in the period spanned by the first seven Sasanian monarchs. Coins and intaglios

belonging to these kings also show the slide, or suggest its presence (Figures 74 and 75).<sup>345</sup>

Without exception the Sasanian sword is very long. Using the same norms applied to the Kushan representations on the Gandhara reliefs, it may be calculated that the typical Sasanian sword in its scabbard ranges between 35 and 45 inches in length. Even if we concede that the average Sasanian was over five feet four inches tall and that the swords as represented may be somewhat exaggerated in length, the conclusion that the Sasanians carried swords of approximately a meter in length is inescapable.<sup>346</sup> The sword guards may be relatively small (Figures 67 and 70), resembling Han dynasty, Chinese bronze rapier guards, but normally they are extremely broad (Figure 69); commonly, they are fashioned in the form of two animal heads facing outward to either side of the hilt (Figure 73). The pommels generally are rendered in two forms: rounded ring or spherical (Figure 67), or as an animal head facing toward the right proper (Figure 73), the muzzle projecting beyond the grip and transforming it into a modified pistol-grip similar to that of the hilt of the sun god at Bamiyan considered “un-Sasanian” by Maenchen-Helfen (n. 323).

Whereas in the Kushan territories swords were depicted in a wide variety of positions, in the third-century Sasanian representations two positions predominate: at the left side, hilt inclining forward (Figures 67 and 68); or, in the center of the body, the chape resting on or near the ground and the hilt serving as an arm rest, or reaching to just below the folded arms (Figures 69 and 72). Normally, when the sword is worn at the left—that is in the position of readiness—it rests snugly against the clasp which joins the two ends of the belt (Figure 67). As I have already noted, this clasp served two functions: to secure the belt and to prevent the sword from sliding forward, away from the left side. In the Kushan territories, when the sword was worn “at ease” vertically before the body, the belt clasp was usually represented to the left proper of the sword, thus emphasizing the noncombatant nature of the personage. I know of only one similar instance among the Sasanian representations;<sup>347</sup> in all other cases the clasp has been moved along to the right proper side of the sword.

The normal position of the sword when worn by the equestrian is well illustrated by Figures 70 and 75. Though certainly less often depicted in this position by the Chinese, this must be considered both the normal and intended one. The hilt is within easy grasp of the right hand while the scabbard lies along the flank of the horse behind the rider’s leg.

The scabbard slide itself is seen quite clearly on a number of reliefs. While its elevation from the scabbard wall is rarely discernible in photographs (but see Figures 70 and 71), first-hand observation reveals that in a number



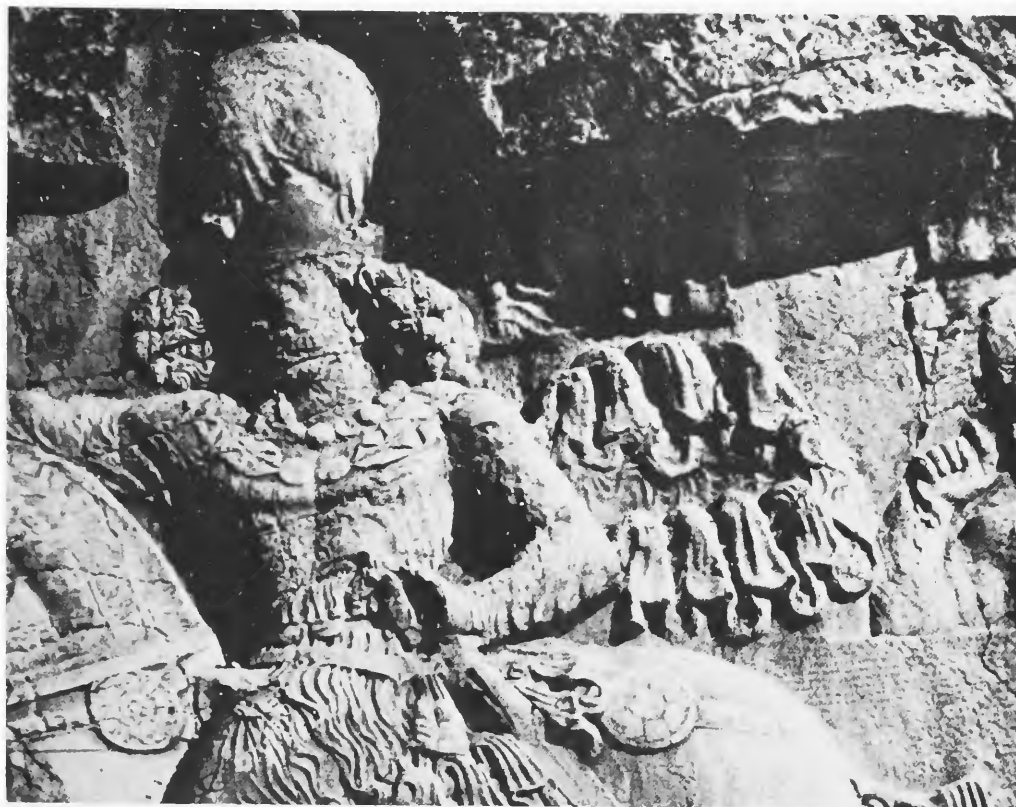


FIGURE 70.—Sasanian rock relief at Naqsh-i Rostam, Iran. [After Ghirshman (1962), page 135, figure 171.]

of cases the form of the slide can easily be ascertained. On the reliefs, the slides are often placed close to the guard; on the coins and the intaglio of Shapur I (Figures 74 and 75), they are situated lower on the scabbard. Presumably the position shown on the intaglio and coins is nearer to actuality as the principal benefits to be derived from use of the slide (balance and the inclined position of the sword) are chiefly dependant upon the slide being placed close to the balance point. The scabbard slides rise sharply from the sheath at their upper ends (Figure 71), then slope inward, the aperture becoming shallower gradually and evenly toward the lower end. The sides are either straight (Figure 68), flared (Figures 70 and 71), or more commonly concave (Figures 67, 69, and 72). The belt normally passes through near the upper end where the aperture is deepest.

There is little doubt but that these slides are arched metal bands with short flat tongues at either end riveted or bound to the scabbard wall. They are eye-loops similar to the majority of the Kushan slides, and while they are related to the Form II Chinese slide they do not have the self-contained aperture which constitutes a fundamentally superior device. The slide worn by the

kneeling Valerian in the relief at Bishapur (Figure 69) is narrower and suggests a somewhat different form, possibly similar to *S.1* and *S.2* (Plates 18*c-d* and 19*a-b*) from Roman Syria. It is tempting, however, to speculate that it might even be an imported jade Form I Chinese slide, for, as shall be seen, these were known in the Near East in the third century.

While some of the sword belts appear to be entirely plain (Figures 67 and 68), others show distinctly the tooled edge lines which identify them as leather (Figure 71).<sup>348</sup> Straps of the same type, though naturally heavier and broader, appear in the harnessing of horses in the reliefs (Figure 70, on crupper).<sup>349</sup> Some belts exhibit more elaborate tooled or set patterns (Figure 71, garment belts).<sup>350</sup> The leather sword belt is, therefore, a consistent feature wherever the scabbard slide has appeared.

When we come to consider the appearance of the scabbard slide in later Sasanian times we encounter problems in chronology and changes in representational practice or fashion which complicate the identity of this object. Whether, as Herzfeld maintains,<sup>351</sup> monumental wall paintings replaced the art of grandiose royal rock reliefs after the third century, the fact remains that the

practice of recording victories and investitures on stone virtually ceased at the close of the third century, with the possible exception of a relief ascribed quite plausibly by Ghirshman to Shapur II (A.D. 309–379),<sup>352</sup> but which earlier authors had thought belonged to Shapur I or Bahram II. If this relief does, indeed, belong to Shapur II, then it provides evidence that the scabbard slide was still in use among the Sasanians during the fourth century.<sup>353</sup>

Since the Sasanians had a penchant for representing equestrians riding toward the right, and were more faithful to reality than the Chinese in depicting the sword at the left side, it follows that the swords carried by horsemen on the silver plates are rarely seen. A plate ascribed to Shapur II is a notable exception. Here the king rides toward the left. His sword is in full view and is suspended from a sword belt by a small, straight-sided, carefully rendered, scabbard slide (Figure 76).<sup>354</sup>

The reign of Shapur II marks the last credible appearance of the scabbard slide in Sasanian Iran. Just as in the Kushan territories the scabbard slide lingered on as an artistic convention some time after it had disappeared from actual usage, so also is the slide represented on several later Sasanian monuments in such a form that it is clear it no longer constituted a meaningful object to the artisans. Hence, on a silver plate found at Ufa in the Priural region in 1941, belonging either to the fifth or the sixth century,<sup>355</sup> the king's sword has an eyelet on either edge of the scabbard and the ends of the sword belt are attached to these. The rectangular guard marked with four small circles and the hilt with ring or globe pommel closely resemble some from Kumtura in East Turkistan.<sup>356</sup> A similar device is depicted on the seated king's sword on a plate in the Hermitage Museum ascribed to the reign of Khusrau I (A.D. 531–578). Bracketed by larger eyelets on the scabbard edge, and situated

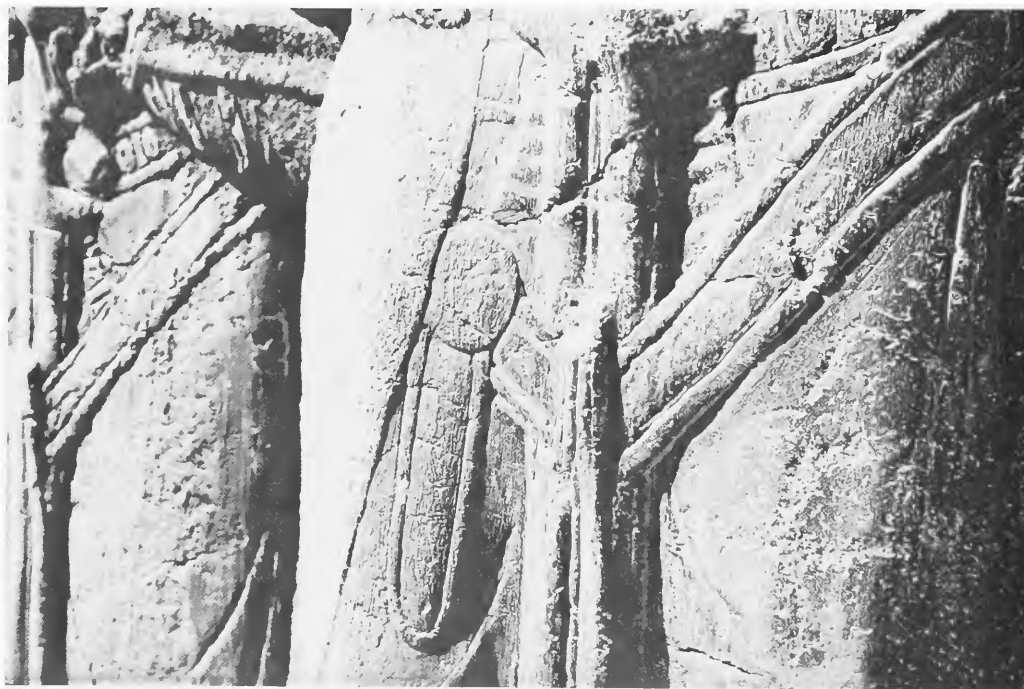


FIGURE 71.—Sasanian rock relief at Naqsh-i Rajab, Iran.

in the center of the sheath, is a small, one might say vestigial, scabbard slide (Figure 77).<sup>357</sup> The belt is represented as passing through each eyelet, crossing the outer surface of the scabbard and passing through the slide. We may, therefore, have here a late mutation of the scabbard slide combined with supplementary devices serving as “tension rings” on the belt. More likely, it is a meaningless convention. The sword worn by the king in the small hunting scene below on the same plate is

suspended in the same manner, though the small-scale scabbard slide has been omitted. Finally, on another silver bowl in the Walters Art Gallery, ascribed by Erdmann to the fifth century, but by Ghirshman to the sixth or seventh, the sword belt lies loosely over the scabbard of the seated king's weapon and does not appear to be attached to it at any point.<sup>358</sup>

At Taq-i Bustan, near Kermanshah, there are two reliefs depicting suspension devices which have some



FIGURE 72.—Sasanian rock relief at Bishapur, Iran. [Courtesy of the Herzfeld Archives, Freer Gallery of Art, Washington, D.C.]

bearing on the later conventional representations of the scabbard slide. At the rear of the smaller grotto stand the figures of two kings which have been identified as Shapur II and Shapur III.<sup>359</sup> Their swords are worn in a vertical position before them. On the scabbards, in place of slides, are rosettes similar in form to the clasps on the sword belts of the Gandhara reliefs. Only at Taq-i Bustan, the rosettes are evidently meant to represent scabbard slides. The ends of the sword belt cross over each other where they meet the sword and extend to

either side. If the grotto was indeed carved during the reign of Shapur III (A.D. 383–388), we are obliged to conclude that the scabbard slide as a functional object must have disappeared sometime late in the reign of Shapur II or his successor, Ardashir II (A.D. 379–383), for the slide is accounted for on a rock relief and a silver plate of Shapur II.

At the rear of the larger grotto at Taq-i Bustan is an investiture scene. Whether the king is Peroz (A.D. 457/59–483) as Erdmann believes,<sup>360</sup> or Khusrau (A.D. 590–628)

as Herzfeld contends,<sup>361</sup> the scabbard slide on his sword is in either case a rosette similar to those on the swords of Shapur II and Shapur III.<sup>362</sup> The sword belt, however, is more convincingly rendered. Passing through the rosette, the two ends are joined to the right proper of the sword by a round clasp and a belt end hangs below the clasp (Figure 78).<sup>363</sup>

Possibly the two hunting scenes depicted in low relief on opposite walls of the larger grotto provide a clue to its date. In the boar-hunt scene covering the west wall, a royal personage is represented twice. He stands in a boat and holds a bow. He carries no sword, but wears a belt of a type we have not encountered before.<sup>364</sup> To either side of the center clasp are closely set short straps, or lappets, hanging from the belt. These are ornamented with small metal roundels and the ends are enclosed by metal rims. Opposite this relief is another unfinished one



FIGURE 73.—Sasanian rock relief at Bishapur, Iran.

depicting a royal stag hunt. The king, surveying the hunt from horseback and sheltered by an umbrella (Figure 79), wears a sword at his left side.<sup>365</sup> It is suspended not by means of a scabbard slide, nor by some improbable device reflective of a conventional recollection of the slide, but by two straps attached at their upper ends to the garment belt and at their lower ends to the edge of the scabbard, some distance apart from each other. The belt also has a series of lappets attached to it. This

method of wearing the sword and the belts worn by the royal personages, courtiers, and attendants in the two reliefs belong together. Since they represent, as far as I know, the belt and sword suspension which replaced the scabbard slide and its belt throughout Asia, some notice of them should be taken.

Masuda, who has devoted a special study to this method of suspending the sword, ascribes an Iranian origin to it.<sup>366</sup> If Enoki is correct in his identification of the Hephthalites as an Iranian people,<sup>367</sup> then it is possible that the Sasanians first encountered this suspension device in use among them. Certainly the scabbard slide appears to pass from use in the Kushan territories about the time of the Hephthalite invasion in the mid-fifth century, but swords exhibiting the double-locket attachments are not represented during the period of their supremacy. Therefore, it is not known for certain whether the Hephthalites employed this device, but if they did it seems likely that they had acquired it from Turkish steppe peoples to the north and east with whom they were in contact and who, in the middle of the sixth century, finally overpowered them.



FIGURE 74.—Sasanian silver coin. [After Pope (1938–1958), volume 4, plate CCLIII,E.]

Ghirshman's belief that the double-locket, or two-point, suspension device does not appear in Iran until after the fifth century is based upon his acceptance of the conventionalized representations of the scabbard slide at Taq-i Bustan and on several silver plates as depicting a meaningful object.<sup>368</sup> In fact, a functional scabbard

slide cannot be shown to exist in Iran after the fourth century, and though in Iran as in the Kushan territories there is a marked hiatus between the last representations of a functional slide and the first appearance of the double-locket device, during which improbable and conventional representations of suspension devices based on the old scabbard slide are depicted, it is inadmissible either that these conventionalized forms represent an actual device in use, or that there was no way of suspending a sword during this interval. A similar hiatus between the disappearance of the slide and representations of a new suspension device may be noted in China as well. We must conclude, therefore, that the fantasy creations which separate meaningful representations of the slide from those of the device which replaced it are due

solely to a pan-Asian conservatism in art and that the date at which meaningful representations of the scabbard slide ceased to be produced is close to that at which the two-point suspension system replaced it. On this hypothesis, we may assume that the double-locket device entered the old Kushan territories at about the time of the Hephthalite invasion even though its actual existence there cannot be demonstrated until sometime later.

Recently several swords with double lockets on the scabbards have been found in northern Iran (see n. 368), two of which are illustrated here (Figures 80 and 81).<sup>369</sup> The hilts and scabbards are sheathed with thin plates of gold and silver which probably once overlaid wood. The blades are iron, but whether of rapier or saber type has not been revealed. Possibly they are too decom-

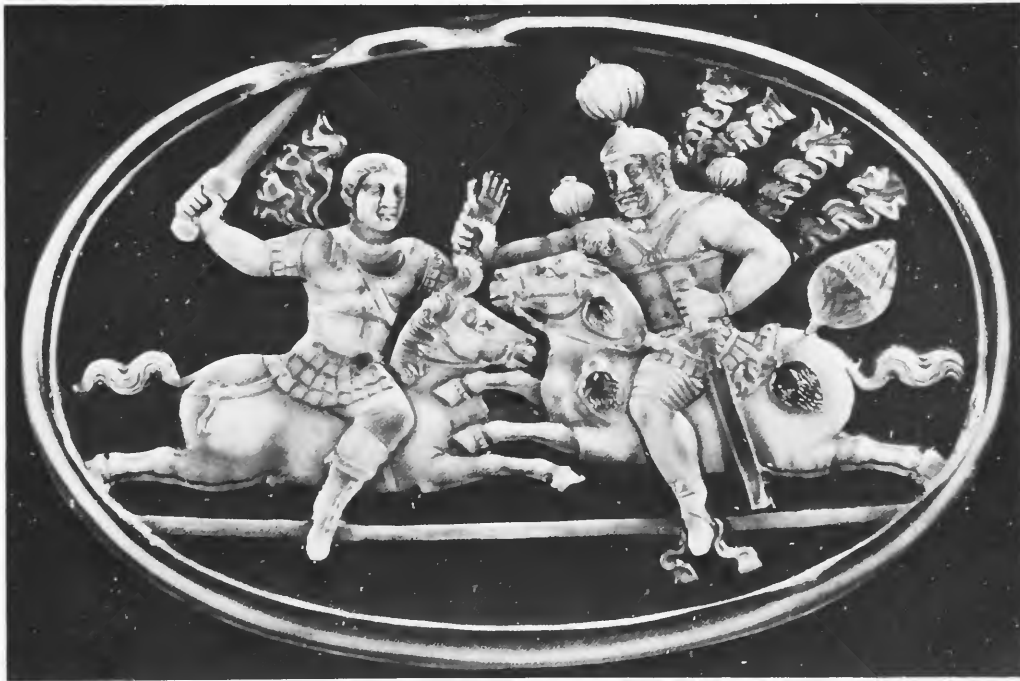


FIGURE 75.—Sasanian intaglio. [After Ghirshman (1962), page 152, figure 195.]

posed to make identification certain. All are over a meter in length.<sup>370</sup> None is provided with a guard. The strict correspondence between these swords and several represented in the wall paintings at Varakhshah in Uzbekistan and Panjikent in Tadjikistan, including the indentation in the hilt for the index finger, lack of guards, and the “pistol-grip” terminating in what must be vestigial animal heads, suggests that these swords belong, as Ghirshman believes, to the sixth or seventh century.<sup>371</sup> If, as I believe, the two-point suspension system replaced the scabbard slide directly by the end of the fourth century,

swords of this general type may be dated still earlier.

Some of the swords at Panjikent, as well as the short daggers there and at the site of Balalyk Tepe near Termez, and at Varakhshah, are clearly suspended from two lockets set on the scabbard edge.<sup>372</sup> But in some instances, at Panjikent especially, these lockets are represented in the form of rosettes on the flat side of the scabbard, though the basic type suspension remains clearly the same.<sup>373</sup> Probably these rosettes constitute an actual variation of the scabbard-edge lockets. If so, this would help to clarify the confused representations at



FIGURE 76.—Sasanian silver plate. [After Pope (1938–1958), volume 4, plate CCX.]

Taq-i Bustan where such rosettes appear and where they may constitute a stylistic combination of an obsolete device (scabbard slide) and its belt (improperly slung) with an element that belonged to the new two-point suspension form. The idea of adapting the rosette form to the double-locket device would have come from the Kushan territories where the sword belt clasp was frequently rendered in this form (Figures 48 and 49).

The swords in the Panjikent wall paintings are suspended from the garment belt when the bearer is represented seated at ease. When he is mounted, or engaged in combat on foot, a second belt is worn below the garment belt and the bow case is attached to this belt (Figure 82).<sup>374</sup> The garment belt is not provided with lappets such as we see in the hunting reliefs at Taq-i Bustan, but these plain belts and lower bow case



FIGURE 77.—Sasanian silver plate. [After Orbeli and Trever (1935), plate XIII.]

or quiver belt correspond to those worn by the giant equestrian statue at the back of the larger grotto at Taq-i Bustan.<sup>375</sup> The system is clearly related to that of the two-point sword suspension and not to the scabbard slide. Such a system of belts with their related appendages of sword, dagger, bow case, quiver occurs over a wide reach of Asia from the fourth to the eighth century—in China,<sup>376</sup> European and Asiatic portions of the Soviet Union,<sup>377</sup> East Turkistan,<sup>378</sup> and Soviet Central Asia.<sup>379</sup> At some point lappets are attached to the garment belt

as we see it in the two Taq-i Bustan hunt scenes. These also occur widely throughout Asia.<sup>380</sup> Werner and László have pointed out that this belt with lappets (Figure 83) is ubiquitous in Avar tombs of East Europe beginning in the late sixth century, while it is totally absent from the preceding Hunnish burials.<sup>381</sup> Whether the belt with pendant straps is the invention of the Avars, or whether they acquired it from an eastern Turkish people, and whether it originated at the same moment and place as the two-point suspension, are problems which carry us

beyond our immediate concern. What matters is that the suspension of the sword from lockets on the scabbard, together with its belt system, is soon associated across Asia with the garment belt with lappets, and that these are later universally associated with Turkish peoples.<sup>382</sup>

Richard Frye believes that the large equestrian figure at the back of the main Taq-i Bustan grotto belongs to the time of Shapur III as the peculiar *tamgha* which appears on the horse's flank is found also on coins of Shapur III (as well as some of his predecessor's), but is not encountered afterward.<sup>383</sup> This is possible when we consider the fantasy sword suspension worn by the relief

figure of Shapur III in the smaller grotto as indicative that the two-point suspension device had already come into use. But the belts with pendants worn by the royal personages in the hunt reliefs on the side walls could hardly be earlier than the end of the sixth, or even early seventh century. Hence, while the latest carvings at Taq-i Bustan could hardly be earlier than the reign of Khusrau II, it is possible that all of the carvings do not belong to the same period.<sup>384</sup>

The two-point suspension apparatus which replaced the scabbard slide, possibly as early as the end of the second century in China, and by the end of the fourth

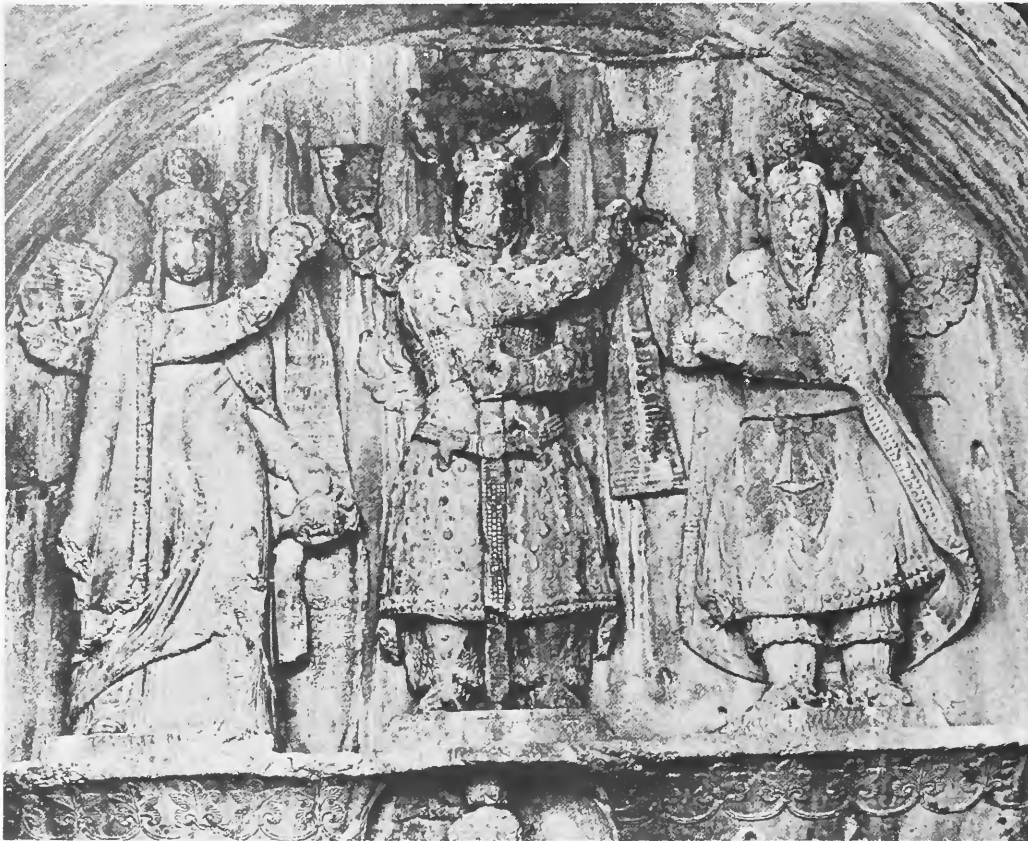


FIGURE 78.—Sasanian rock relief at Taq-i Bustan, Iran. [After Pope (1938–1958), volume 4, plate CLX,B.]

century in Iran and probably also in the Kushan territories, did not replace the fundamental function of the slide. It improved upon it. As we have observed, the chief function of the slide passed onto a loose leather belt was to facilitate drawing and carriage of the long sword, to cant the sword forward (or back as desired) so that the hilt was within easy reach of the right hand while the lower end of the scabbard extended behind and thus did not interfere with the legs. Practical as

the device was for the equestrian, its lack of rigidly fixed position on the belt and reliance on balance for its pitch had drawbacks for the foot soldier. While in no way altering the desired aspects of accessibility or angle, the two-point suspension apparatus eliminated the drawbacks inherent in the scabbard slide. It held the sword in an analogous position, but the two points of contact with the scabbard, as opposed to the single point provided by the slide, assured reliability of the desired angle. The





FIGURE 79.—Sasanian rock relief at Taq-i Bustan, Iran.

pitch of the sword could be adjusted and maintained by shortening or lengthening the straps. No movement of the foot soldier or the equestrian could upset the vertical balance of the sword, cause it to swing so that the scabbard knocked against the legs or the hilt moved away momentarily from its position of easy access, though lateral movement might still plague the foot soldier for whom neither device was ever primarily intended. The pendant thongs between the belt and the lockets on the scabbard edge still allowed the scabbard to be thrust back to gain sufficient drawing room to extract the sword.

For the last two thousand years in the Near East, Central Asia, and the Western World, and somewhat longer even in China, there have been only two principal ways of slinging a sword: by the scabbard slide and by the two-point suspension. The former was employed in China for approximately five or six hundred years; in Central Asia and the West, arriving later, it was employed for a similar span of time. The two-point system which replaced it is still employed today, not only in Asia but

in Europe and the Americas where it is the preferred suspension (Figures 84–86).<sup>385</sup>

To conclude on the history of the scabbard slide among the Sasanians, we find that it appears with the founder of the kingdom, Ardashir I, and there is evidence of its uninterrupted use among these people up to the reign of Shapur II, terminating in the last quarter of the fourth century. The slide used by the Sasanians was similar to



FIGURES 80–81.—East Iranian or Sogdian iron swords.

that employed by the Kushana and the Parthians, that is, a simple rectangular loop, probably metal, on the side of the scabbard, an intrinsically less satisfactory device than the Chinese slide with enclosed aperture.

Though the slide seems to have been introduced into western Asia by the Kushana, as far as we know, there is

no need to attribute its appearance among the Sasanians solely to these people. The Parthians, predecessors of the Sasanians in Greater Iran, also used the slide; and there is a possibility that they obtained it not from the Kushana, but from an as yet unknown people contiguous to their yet unlocalized northern steppe homeland before the Kushana arrived in the early second century B.C.



FIGURE 82.—Wooden shield from Gora Mug (Panjikent), Tadjik SSR. [After Yakubovskii (1954), plate V.]

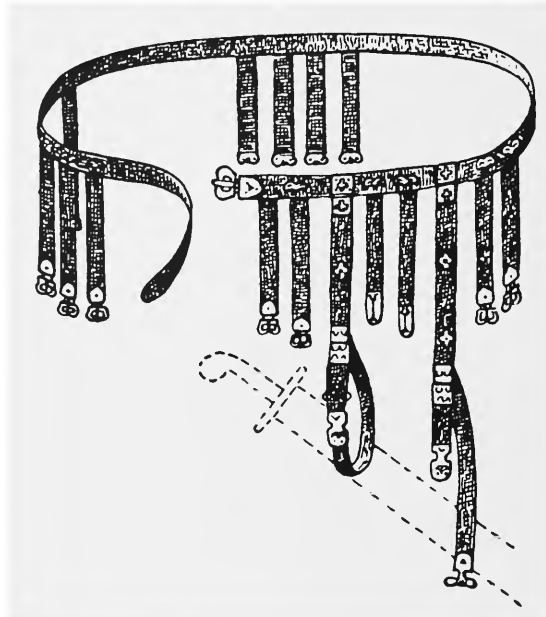


FIGURE 83.—Leather belt for two-point sword suspension. [After *Sovetskaya Arkheologiya*, 17 (1953), page 55, figure 7, a.]

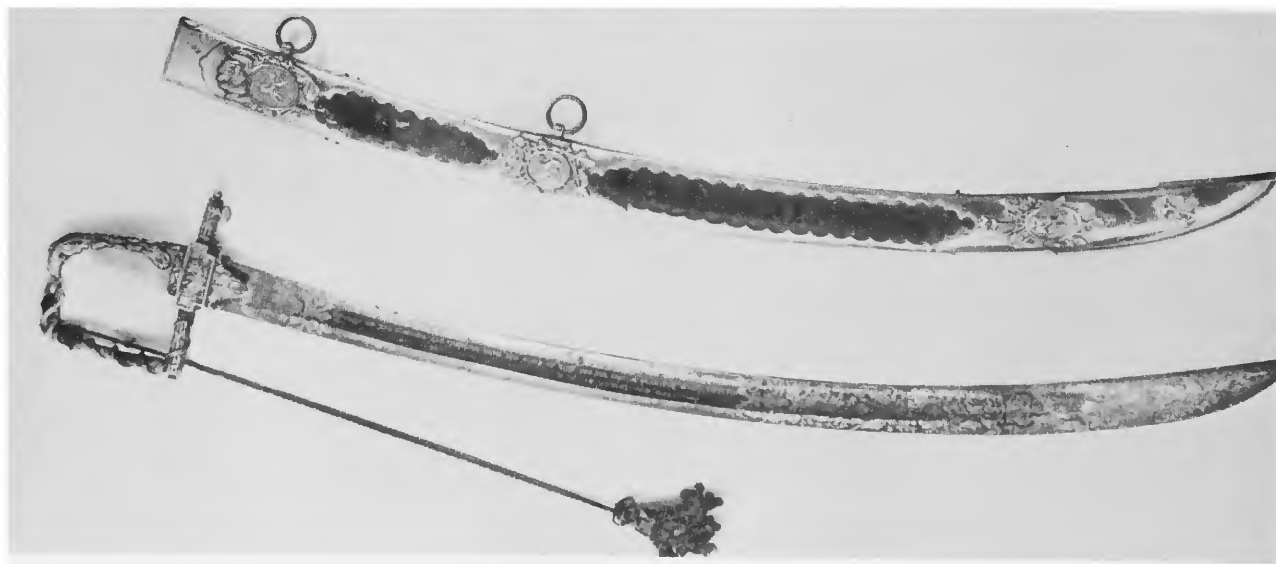


FIGURE 84.—Saber with scabbard lockets for two-point suspension. [After Wilkinson (1969), page 126.]

The Sasanians were evidently familiar not only with the Chinese scabbard slide, but also with their jade-ornamented swords. In a sap which the troops of Shapur I constructed near the main gate of Dura Europos at the

time of its conquest in A.D. 256, the skeleton of a Sasanian soldier was found. Evidently he was slain in the battle that ensued upon the discovery of the mining trench by the Roman defenders of the city. Amidst the skeletons of



FIGURE 85.—Military officer with double locket sword scabbard.  
[After Wilkinson (1969), page 28.]



FIGURE 86.—Cavalry officer with double locket sword scabbard.  
[After Wiley and Milhollen, *They Who Fought Here* (1959), page 78, after an original by T. H. O'Sullivan in the Library of Congress, Washington, D.C.]

several Roman soldiers surrounded by their weapons, the body of the Sasanian soldier lay face up where he had been killed. He wore a heavy coat of chain mail which he appears to have attempted to raise after falling mortally wounded. His conical helmet with mail face piece had been knocked off. Near the helmet lay his long sword of iron, only a few fragments of which were preserved. The pommel of the sword was ornamented with a piece of jade.<sup>386</sup> Among the bodies of the Roman soldiers a quantity of coins were found, evidently representing their last pay. The latest date among the coins was A.D. 256, and these thus lend striking confirmation to the

belief that the town fell to Shapur I on his way to the capture of Antioch in the same year.<sup>387</sup>

In addition to the above evidence of a sword fashion which ultimately leads us back to China, where such swords were already obsolete but, as we shall see, current in South Russia, a crudely cut jade sword guard roughly imitating Chinese Han dynasty bronze types with raised, rounded shoulders to either side of the tang perforation, has been found in Iran.<sup>388</sup> From a tomb at Nawa, Syria, comes at least one example of a bronze guard again imitating the Chinese form.<sup>389</sup> It was fitted to a long iron rapier.

## SOUTH RUSSIA AND WESTERN EUROPE

The situation in South Russia differs from that of the Kushan territories or Iranian Asia during the Parthian and Sasanian periods. Whereas in the latter areas and periods knowledge of the scabbard slide is derived almost exclusively from representations in various media, from South Russia I know of only one clear representation of the slide and two or three grave stelae which may show it.<sup>390</sup> The silver amphora (Figure 87) belongs to the fourth century, the grave stelae to the first. Instead of representations, we have a considerable number of slides (SR.1-SR.10, Plates 19-21), and many swords, upon which to reconstruct the history of these objects in this region.

The slide carried by the Greek warrior on the amphora agrees with the presumed form in the Near East and Central Asia. It is a simple loop on the scabbard wall. Possibly the rivet by which the lower end was secured to the scabbard is visible. At the upper end, the metal seems to have been folded under and down so that the baldric would not bind in a seam between the slide and sheath.

If scabbard slides of this form have been found in South Russia, they have not been reported. Once the scabbard has completely decomposed such metal fragments would be difficult to relate to their former function. The scabbard slides known from South Russia all resemble, or may be related to, Chinese Form I slides. They are made of chalcedony, nephrite, and gold incrustated with semiprecious stones.<sup>391</sup> Two of the slides are, in fact, Chinese. A third South Russian slide (SR.10, Plate 21c) has been published as being Chinese, but it is not.

Very little is known concerning SR.5, a Chinese slide of the Hydra Class belonging most likely to early Eastern Han. It was probably carved in China during the first century after Christ, but not interred in South Russia until the third century, or possibly still later. Since scabbard slides were no longer commonly used in China much beyond the beginning of the second century, it is



FIGURE 87.—Warrior figure on silver amphora from South Russia. [After Maenchen-Helfen (1957), figure 7.]

reasonable to assume that the slide left this country shortly after it was carved. How quickly, and by whom it was transported to South Russia is not known. How long after leaving China it served as a scabbard slide is also not known. At some time the aperture was broken and the piece, too valuable to be discarded, was partly sheathed with thin gold plate and worn as a pendant.

**SR.1** (Plate 19*c*), belonging to the Geometric Class, was carved earlier than **SR.5**, almost certainly during the late second or first half of the first century B.C. Since Form I jade slides were associated principally, if not exclusively, with ceremonial swords in China, they rarely exhibit substantial evidence of wear. **SR.1**, on the contrary, is severely worn, the most worn of all the scabbard slides I have seen. Among slides I have examined, only four others exhibit roughly comparable wear (**CV.13**, **CV.82**, **CV103**, Plate 2*d-e* and **XCG.11**). It is assumed, therefore, that **SR.1** left China relatively soon after its manufacture and that it was in more or less constant use until it was interred in South Russia in the third or fourth century. Whether it passed most of its four or five centuries of service in South Russia is not known. But such would seem unlikely. Probably it passed through several hands as it crossed Asia, gradually moving toward the west. That it did not leave the borders of China with the Yüeh-chih following their defeat and flight is certain; it was not carved until at least half a century after this event.

In addition to the two Chinese scabbard slides, eight others are known. Five of these are carved from stone, probably nephrite or chalcedony (Plates 20*a-b*, *d*; 21*a* and *c*); the other three are fashioned in gold, in two cases inlaid with garnets (Plates 20*c*, 21*b*).<sup>392</sup> All are related to the Form I Chinese slide and clearly imitate this shape. The stone slides have several characteristics in common with other imitations of the Chinese slide (e.g., **CP.1**, **CP.2**, **CP.3**, **GP.1**, **GP.2**). The upper surfaces are not decorated. The majority are broadest at the upper end, with straight sides tapering toward the narrower lower end. The proportions are more massive than those of the Chinese slide, the plates and walls thicker, and the curves are reduced to straight lines and planes and angles wherever possible. Only the forward edge is slightly rounded in imitation of the subtle curve of the Chinese type, but the forward hook usually is not undercut. As noted in our discussion of the slides from Gandhara (**GP.1** and **GP.2**), the inward projections at the ends of the upper plate extend inward to a depth equal to that of the exterior of the aperture. It is curious that the functional significance of the projecting lower aperture plate of the Chinese slide, enabling it to be inserted into a rectangular socket and thus securing the slide to the scabbard, was never noted or copied by the peoples who imitated the Chinese slide. Some other method of locking

the slide to the scabbard wall must have been devised in order to assure the stability of the suspension angle. Unlike the Gandhara slides, the South Russian ones have no perforations through which metal rivets were passed. Curiously enough, the scabbard found in association with **SR.3**, a gold slide, had a small rectangular socket in the scabbard wall, presumably to accommodate the lower aperture plate. Unfortunately, this plate is now broken off, but must have extended inward to a depth greater than that of the upper plate terminals. The relationship of the gold slides to Form I Chinese types is also clear. The appearance of animal masks at the upper ends of **SR.8** and **SR.9** makes it possible even to relate these to Chinese Geometric Class slides, though the geometric patterns below the animal mask on **SR.8**, or those on **SR.3** (Plates 20*c*, 21*b*), have nothing to do with those on the Chinese slides.

The dates of these South Russian slides are not known in every case, but in those cases where approximate dates have been proposed (**S.R.1**, **S.R.2**, **SR.3**, **SR.7**, **S.R.8**, **SR.9**) on the basis of associated artifacts, all fall within the third and fourth centuries. The probability is, therefore, that the other slides less certainly datable, or found out of context, belong to the same centuries. It might be hypothesized, then, that the two Chinese slides did not reach South Russia before the end of the second, or beginning of the third century.

The fact that all known scabbard slides from South Russia imitate Form I Chinese slides, and may be placed in the third or fourth centuries, does not necessarily lead us to the conclusion that the peoples of South Russia did not use the scabbard slide until Chinese examples reached them. The single clear representation of a slide from this area, though itself from the fourth century, is not analogous to the actual finds, but is clearly related to the slides represented in central and western Asia, that is, a form consisting simply of a loop on the scabbard wall and suggesting affinities to Form II scabbard slides. Therefore, it must be presumed that here as elsewhere the simpler form was known and probably was the more common one. The scabbard slides on hand, wherever provenance can be fixed, belong to burials reflective of considerable wealth. The situation seems, therefore, to be roughly analogous to that observed in China, that these stone and gold slides, in spite of the crudeness of some of the imitative work, were accoutrements belonging to a gentry class and that the ordinary scabbard slide of South Russia was a simple loop fashioned in metal or wood.<sup>393</sup>

If we concede that the basic function of the scabbard slide is to provide a means of carrying a long sword in the most convenient manner, it might be supposed that the long sword and slide here as elsewhere appeared together. The recent researches of N. I. Sokol'skii, N. Ya.

Merpert, O. A. Kritsova-Grakova, K. F. Smirnov, and others have provided a clearer picture of the development of the long iron sword in South Russia than we possess for any area of Asia.<sup>394</sup>

According to older theories advanced by Kusheva-Grozevskaya, Ebert, and Rau, the long sword associated with the Sarmatian peoples in the Bosphorus region emerged about the third century after Christ and could be related to late Roman forms produced in Panticapaeum.<sup>395</sup> A shorter sword with ring pommel, seen on Bosphoran grave stele, these authors believed to have developed during the first three post-Christian centuries. The fact that Roman geographers and historians remarked chiefly on the long lance carried by the Sarmatians, and seldom mentioned a sword, strengthened the notion that the sword could not have been conspicuous among Sarmatian military equipment.<sup>396</sup> Attributing the origin of the scabbard slide to the Near East, and recognizing the existence of long iron swords in Iran, Waldemar Ginters favored an Iranian origin for the long Sarmatian sword.<sup>397</sup>

The majority of the short Sarmatian swords with ring pommel, represented frequently on grave reliefs,<sup>398</sup> probably do belong to the first and second centuries in the Bosphorus region, but Sokol'skiĭ has pointed out that finds of such swords, between 15.75 and 25.59 inches in length and worn at the right thigh with a cord from the chape passed round the leg to secure it, are more numerous to the east, in the region of the lower Volga, and that their numbers diminish as they extend westward through the North Caucasus to Black Sea colonies.<sup>399</sup> This sword apparently lasts until the third century in the Bosphorus area. In the Kuban region of the Caucasus these short swords, which seem to have been provided with wooden scabbards and short, straight guards, and probably are related to the preceding Scythian *akinakes*,<sup>400</sup> appear surely by the first century B.C. and possibly as early as the second.<sup>401</sup> By the end of the first or beginning of the second century after Christ, they have disappeared from this region. Those from the Volga generally precede the Kuban types. Thus, it would appear that the short sword was brought to the Bosphorus from the lower Volga steppe zone to the east.

The long iron sword is far more significant in the late Bosphorus kingdom than the short. It ranks alongside the bow and the lance, which especially impressed the Romans, as a major element of military equipment. These swords range in length from 28.05 to 45.28 inches, the majority being a meter or slightly less in length. Most of the blades are straight and double-edged. A few later swords were furnished with short bronze or iron guards, but most when they are found have no guards. From the fact that the iron tangs were encased in wooden grips and the blades generally sheathed in wooden scabbards,

Sokol'skiĭ suggests that guards also may ordinarily have been made of wood.<sup>402</sup> While it is difficult to imagine swords without any kind of guard, it is equally difficult to concede that the function of a guard could be served by a fragile wooden crosspiece. We have already observed two later swords from northern Iran which were found without guards (Figures 80 and 81) and their strict analogy to types represented in wall paintings of Panjikent. Whether or not these Iranian swords were originally provided with guards of some material, and whether the wall paintings accurately depict such swords in this respect, is a question which cannot yet be answered on the basis of the available material. Yet the data presently at hand does seem to suggest that swords were not always provided with guards and such may, therefore, be the case with the long swords from South Russia. Against such an hypothesis are the representations of these long swords on South Russian grave reliefs where short, straight guards are invariably depicted.<sup>403</sup> Any doubt that this long sword was primarily, if not exclusively, an equestrian weapon is removed by these grave reliefs where it appears only at the left side of armed men on horseback.<sup>404</sup>

Of particular interest to us here is a special characteristic of these long swords. The pommels were ordinarily ornamented with disks or hemispheric inlays of semiprecious stone or glass. In some cases, the pommels were cast in precious metal and then inlaid with small stones.<sup>405</sup> Sometimes the pommels were carved from wood and afterward gold plated and inlaid with colored stones. These swords all belong to the first to third or fourth centuries and were the typical sword in cities of the Black Sea coast. These also were the swords carried on the scabbard slide.

Contrary to the theories which ascribe to this sword a Roman or Iranian origin, it appears to have entered into South Russia by the same route as the shorter ring-pommelled sword. Long iron swords are very rare among the late Scythian peoples of the Dnepr region.<sup>406</sup> Though swords of a moderately long type are known from the North Caucasus by at least the third century B.C., these have flat pommels and relatively broad blades unlike those of the Bosphorus region.<sup>407</sup> The thin rapier-type sword seems to have entered the Kuban area of the North Caucasus not before the second century B.C. and to have appeared in the Bosphorus a century or so later.<sup>408</sup> The stages in its development can be traced to still earlier swords of the lower Volga steppe and Sokol'skiĭ is probably correct in stating that these swords, together with the lance and heavy scale armor, formed part of the equipment of the equestrian Sarmatians who moved from the steppe toward the Caucasus and Bosphorus in increasing numbers during the last pre-Christian and early post-Christian centuries.<sup>409</sup>

These earlier swords from the Volga, however, had not yet acquired their richly ornamented pommels and scabbards.<sup>410</sup> Hence it seems possible, likely even, that the tradition of ornamenting the sword and its scabbard was acquired from the Near East.<sup>411</sup> Whether we must include among these innovations the scabbard slide and the distinctive way of carrying a sword its use implies, is a question I shall attempt to resolve in the following chapter. Maenchen-Helfen has pointed out that during the second and first centuries B.C. the Aorsi, a people essentially identical to the Yüeh-chih-Kushana, moved westward from the Caspian region across the southern steppe, past the northern edge of the Caucasus to the Don river and beyond.<sup>412</sup> If the Yüeh-chih-Kushana were the purveyors of the scabbard slide, we should expect them to have brought it with them into South Russia. Our only evidence to date for the slide in this region points to later times and to types which are related to Chinese Form I slides. These, and the pommel ornaments, may as well have been acquired by the peoples of South Russia from the Near East—we have already cited the existence among the Sasanians at Dura of similarly ornamented swords. But if we agree with Sokol'skiĭ that these stone and gold slides represent isolated luxury specimens of a type of object commonly carved in wood (and the evidence from elsewhere in Asia indicates a similar circumstance),<sup>413</sup> then it is possible to hypothesize that the slide was in use at an earlier date than the examples at hand permit us to say. The intimate association of long swords with scabbard slides elsewhere in Asia must be considered as additional support for the hypothesis that the slide was probably already in use among the Sarmatians before they reached the Bosphorus. The isolated scabbard slide in Turkey (T.I), apparently similar to the non-Chinese stone slides from South Russia, must be considered as an import into this area from South Russia during the third or fourth century.

Before discussing the problems concerned with the origin of the long sword and scabbard slide, it is appropriate here to summarize briefly the later history of the scabbard slide inasmuch as its late occurrence in Europe appears in part to be related to its existence in South Russia. The forces or circumstances which set the Sarmatians in motion from the Volga to the Prikuban and Bosphorus carried them still farther toward the west, through the Dnepr steppe and into the Balkans.<sup>414</sup> We may assume that among these people were elements descended directly from the Yüeh-chih-Kushana. Prominent among these were the Alans who passed into Europe in the late fourth and fifth centuries. Long swords from burials of the fourth to seventh centuries in eastern Europe frequently exhibit characteristics which link them to those of the third and fourth centuries' Bosphorus burials.<sup>415</sup>

The highly complex movements which carried the long sword and scabbard slide into western Europe is a subject which deserves attention by specialists in this area. I should like here to simply call attention to the presence of the slide in this area and to remark upon its relationship to those of South Russia and Asia. To my knowledge, scabbard slides have been found in Bulgaria (Plate 17*b*), Denmark (Plates 14*b-c*, 15*a-b*), Germany (Plates 15*c-d*), France (Plate 15*c*), Switzerland, England, Sweden (Plates 16*b*, 17*a*), Norway, and Finland.<sup>416</sup> They are made of wood, bone, bronze, iron, and precious metals, sometimes encrusted with semiprecious stones. In some cases (*E.I*, Plate 14*b*), these slides reflect clumsy efforts to imitate Chinese Form I slides, and we may, therefore, assume the existence in western Europe of actual Chinese specimens, or copies of this type similar to the ones from South Russia.<sup>417</sup>

Generally, however, the slides of western Europe are more closely related to the type we have indicated was probably the most prevalent in all areas outside China—a simple object raised from the scabbard wall and forming an aperture, employing the side of the sheath to close the loop (Plates 14–16). Such pieces were either riveted to the scabbard, or narrow pointed tongues extending vertically from either end were inserted under cord or leather bindings (Plate 15*a* and *c*).

A particular development of the scabbard slide in western Europe was the use of two small, identical or complementary pieces mounted side by side on the scabbard (*E.10*, *E.11*, *E.12*, *E.14*; Plate 15*c-d*). The aperture area in these is very small, and it seems unlikely that they were carried on leather belts. Possibly a chain was passed through, or attached to each of the paired slides. If the latter should prove to be true, then slides of this type might represent a curious fusion of the earlier scabbard-slide suspension system with the later two-point system which certainly had reached Europe by the date of these slides. Some of these small slides are inlaid with stones separated by zigzag socket walls. Their derivation from earlier South Russian slides exhibiting the same inlay technique seems certain. Sokol'skiĭ has pointed out that this inlay technique, frequently termed "Gothic style," is probably not original with these people but may be derived from inlay techniques in South Russia.<sup>418</sup> The South Russian slides of this type are perhaps later than the stone specimens as they represent the greater departure from the traditional form.

In this connection, it is interesting to note that the simpler bone, wood, and bronze slides from Bulgaria, Denmark, and England are separated by at least two centuries from the inlaid slides from Germany and France. These simple earlier slides were undoubtedly brought into Europe by a different route, or by a different people, than the later compound inlaid slides. The rela-



FIGURE 88.—Relief from Trajan's Column, Rome.  
[After Ginters (1928), plate XXXIII,b.]

tionship of the Bulgaria, Denmark, and England slides to outposts of the Roman empire suggests that the impulse may have come through the Romans who had acquired the slide in the Near East, whereas the inlaid slides may represent a later and altered form ultimately derived from related types in South Russia.<sup>419</sup>

In the first and second centuries, Roman armies encountered peoples in the Near East, chiefly Palmyrenes and Parthians, using the scabbard slide, and they adopted it. But the Romans did not wear their swords in the Asian manner on a belt loosely slung round the waist; they carried their swords on baldrics passed over either the right or left shoulder.<sup>420</sup> This distinction was correctly depicted by the Sasanians in their third-century representations of Romans (Figures 69 and 75). The rare occurrence of the baldric among the later art of Gandhara and Central Asia may be attributable to this Roman

fashion.<sup>421</sup> From the Roman provinces of the Near East, the slide thus passed to Italy where it is shown attached to a sword in a relief at the base of Trajan's column in Rome (Figure 88) and may be represented in use by Roman troops on the same column.<sup>422</sup> From Italy the scabbard slide passed north to England, to Denmark where examples carved in wood and bone have been found in ritual lake deposits of the second and third centuries, and eastward to the frontier on the Danube where at least one example (*E.35*) has been found in a Roman fortified settlement.

Among the scabbard slides from Europe, two are of special interest: *E.2* from Denmark and *E.35* from Bulgaria (Plates 14*c* and 17*b*). They belong to the earlier European series of Roman origin. They are not the same as the Chinese Form I scabbard slide, but still bear a clear relationship to it. With only a slight alteration in form, they have been turned upside down with the end hook opening outward instead of curving inward toward the scabbard wall. Above the below the aperture are laterally bored holes through which thongs were passed for binding the slide to the scabbard wall. At each end of both *E.2* and *E.35* are remains of the short bone tongues which extended above and below the slides on the side flush with the scabbard wall. These were inserted under the wrapping of the wooden scabbard, probably bound round with a metal band, and prevented vertical slippage. The tongues served the function, and took the place, of the inset lower aperture plate of the Chinese Form I slide. In their original state, then, both the Denmark and the Bulgaria slides were slightly longer. The Denmark slide (*E.2*) belongs certainly to the first half of the third century and the Bulgaria specimen (*E.35*) probably belongs to approximately the same time.

Where did this curious inversion of the Chinese-type scabbard slide take place? Since the Romans did not sling their swords in the Asian manner, it is possible that they are responsible for altering the form of the scabbard slide. It is unlikely, however, that the hook at one end now served any greater purpose than it had, turned inward, for the Asians. In some cases, it is well-defined and functional in appearance; in others, it is no more than a knob.

In the National Museum in Damascus are two scabbard slides carved from ivory (*S.1* and *S.2*, Plates 18*c-d* and 19*a-b*), one carved in one piece with an ivory scabbard containing the oxidized remains of a Roman iron *spatha*. These two slides were found at the Roman-period site of Khisfne, south of Damascus in Syria, and belong to the second century. One of these (*S.2*, Plate 18*c*), detached from its scabbard, has two projecting tongues which probably approximate in size those broken on the Denmark and Bulgaria slides. *S.1*, carved in one piece with its scabbard, reveals the exact manner in which these



slides were used. The narrower end with the hook is the lower end; the broader blunt end, the upper. The Chinese Form I slide has been, therefore, in a manner of speaking, not only altered in appearance, but turned upside down and backwards. The Syria slides are, in every essential way, identical to the Denmark and Bulgaria specimens and to the jade slide from China (CZ.14, Plate 11a) which has only to be turned over to emphasize this conformity. Manufactured from a more brittle material, CZ.14 naturally lacks the thin tongues, but it has instead transverse end perforations through which pegs were passed to fasten it to the scabbard, thus preventing vertical slippage.<sup>423</sup>

In his description of CZ.14, Salmony noted that around the holes on the sides and on the bottom (Plate 11a) there is lightly incised ornamentation, crude but unmistakably Chinese in character. It makes no sense to decorate the underside of a scabbard slide which is concealed against the scabbard wall and no authentic scabbard slide anywhere is so decorated. But once we realize that CZ.14, in conformity with its nearest analogies from Denmark, Bulgaria and Syria, is to be turned round so that the decorated side is in fact the outer surface, the problem is eliminated. The uniqueness of CZ.14 entitles us to question its Chinese origin which is based primarily on its material, presumably jade, and on the clearly Chinese surface decor. The object is clearly not an ornament and it is so far removed from the Chinese form of scabbard slide—which had disappeared at least a century before this object could possibly have been carved—that it is doubtful if any could have known what it was except the man (merchant, traveler, soldier) who brought it to China, or who acquired it there, and had it sinicized by the addition of a little crudely incised decor.

It seems likely, therefore, that scabbard slides of this form constitute an essentially Roman innovation based on the Chinese Form I slide, and that the Denmark and Bulgaria examples and their chronologically related wood, metal, and bone types have nothing to do with the South Russian slides to which the inlaid examples from Germany, France, and Switzerland are related. Likewise, it is plausible that CZ.14 is not Chinese at all, but Roman, carved in stone in a Roman Near Eastern province where there was a centuries-old tradition of manufacturing scabbard slides of stone, a tradition founded on an earlier impulse emanating from China. The hiatus between the earlier Roman slides and the slides of several centuries later from Germany, France, and Switzerland can thus be explained on the basis of their distinct origins.

Apart from actual finds of scabbard slides in western Europe, there are several representations of the object in use which inform us of its wider diffusion on this



FIGURE 89.—Ivory diptych from cathedral treasury, Monza, Italy. [After Volbach and Hirmer (1961), plate 63.]

continent. A standing figure on a finely carved ivory diptych in the cathedral treasury at Monza, Italy, wears his sword with elaborate and doubtless jeweled pommel on a sword belt slung about the waist (Figure 89). This is the type of belt familiar from Asia, distinct from the man's patterned garment belt and clearly overlapping it,

without evident attachment, at the right side. The authors believe that the figure represents Stilicho as Consul and *magister militum*, and that the "high quality of the diptych suggests a court artist in Milan."<sup>424</sup> The carving is dated by them to about A.D. 400. The scabbard slide is somewhat different from any we have seen. At the lower end, it is divided into two bands which curve outward toward the edges of the scabbard. This slide is clearly similar to the type illustrated here by *E.24* and *E.26* (Plate 16*b-c*), belonging to the fourth century, and may ultimately be derived from such Sasanian slides as that shown in Figure 71. These simple eyelet scabbard slides are an improvement upon the normal later European inlaid-metal varieties in that they are carved in one with the wooden scabbards and hence consist of an enclosed aperture without seams.

One other representation, from Sweden (Figure 90),<sup>425</sup> depicts a short sword worn on a baldric slung over the right shoulder. The baldric passes through a narrow eyelet with parallel sides set below the scabbard mouth. What is especially interesting about the small-scale representation is the care taken to indicate that the baldric is leather. Along the center, a thin line is drawn and stands for the tooled line which properly would be pressed along each edge of the belt. This artist of northern Europe adopted a convention in the representation of the sword belt employed eight or nine centuries earlier by the Chinese craftsman who carved the blocks stamped on the tomb tiles of Honan province (Figures 21 and 22).

How long use of the scabbard slide survived in Europe, we cannot say. The bronze mold from Sweden, probably seventh century, is the last appearance of this object known to me. Possibly the slide had already disappeared by the time this object was cast. Among the stone slides from South Russia is one which indicates the form may have continued in use after the two-point suspension system had largely replaced the slide, and that the two systems became combined in an interesting manner. Outwardly the form of *SR.7* (Plate 21*a*) is similar to the other stone imitations of Chinese Form I slides; however, the upper bay is unusually long and the inward-projecting wedge at the lower end especially thick and long. Where



FIGURE 90.—Bronze mold for helmet boss, Torslunda, Sweden. [After Holmqvist (1955), plate XXXIII.82.]

the enclosed aperture should be is a solid area with two round holes drilled through laterally. These suggest that a thin chain, braided cord, or leather thong was passed round through the holes, its ends tied to the belt. Thus, an object shaped like a scabbard slide may have been adapted to a new suspension system. Kusheva-Grozevskaya, however, suggests that the holes were used for thongs which bound the slide to the scabbard wall, the sword belt passing through one of the shallow bays. In either case, it is obvious that this unusual piece represents the survival of a form which was losing, or had already lost, its functional meaning. The date of this slide—fourth century or slightly later—coincides, I believe, with the arrival of the two-point suspension system in Central Asia and Iran.

## SUMMARY

The occurrence of the scabbard slide over broad expanses of Asia and Europe indicates that its related method of sword suspension was the principal, if not sole, manner of carrying a sword for several hundred years in North India, Central Asia, "Iranian Asia," and South Russia. It may have been only of secondary signifi-

cance in western Europe. Its chronological and geographical distribution coincide with the movements of the Yüeh-chih-Kushana and related peoples. It is possible that the Parthians obtained the scabbard slide independently from peoples in their hypothetical Eurasian steppe homeland before the arrival of the Kushana, but there is no

firm evidence at present to support this.

The earliest scabbard slides in regions to the west of China are not earlier than the first century after Christ, centuries later than their appearance in China. In central and western Asia, there is no evidence of their use after the fourth century. In South Russia, they may have continued slightly longer; and in Europe, as a derivative form, they are known from the fifth and sixth centuries. The last known representation of a scabbard slide occurs about the seventh century on a bronze mold from Sweden (but see *ET.I*).

Except for several late derivative inlaid types from western Europe and South Russia, all known scabbard slides from central and western Asia and Europe clearly imitate Chinese Form I slides, but all have certain characteristics in common which distinguish them from the Chinese slide. The lower aperture plate does not project inward beyond the depth of the upper plate terminal ridges; they are massive and angular, avoiding the subtle curves of the Chinese prototype; all are unornamented; most are broadest at the upper end, tapering regularly toward the lower end. The existence of long upper plates, well-defined bays and articulated upper plate terminals indicates that the Chinese prototype could not have been earlier than the Western Han period.

The evidence provided by numerous representations in the western region suggests that these slides imitative of Chinese Form I types were not the sort in common use, but as in China, were luxury, or in the case of the West, possibly novelty pieces. The common slide was a simple eyelet attached to the scabbard wall, possibly analogous at times to Chinese Form II slides with self-contained aperture, but often simple bands utilizing the scabbard wall to form the aperture. Because the ordinary slide differed in form from the imitations of the Chinese type, peoples to the west of China probably considered the

scabbard slide to be an invention of the Chinese.

The leather sword belt is ubiquitous; in the Roman provinces, or in areas where Roman influence was felt, the baldric appears. The sword belt is clearly distinct from the garment belt and is not attached to this or to the clothing at any point, but depends upon the tension produced by the weight of the sword at the left side to hold the belt above the hip at the right. The belt ends were fastened with a clasp which seems to have served the dual purpose of regulating the position of the sword on the belt. Probably the common scabbard slide was made of wood or metal. As in China, the scabbard slide in the West is associated with long swords, though these may not in all cases be as long as those generally found in China. The existence of stone guards and pommels ornamented with semiprecious stones suggests familiarity with the jade-decorated Chinese sword.

Around the end of the fourth century the scabbard slide is replaced by a suspension system consisting of thongs attached at one end to two lockets or rings on the scabbard edge and at the other to the garment belt. This apparatus may have first appeared in the West with the Hephthalites, but probably owes its origin to steppe Turkish peoples. It may have appeared in China still earlier than in the West. The two-point suspension system improved upon the obvious deficiencies of the scabbard slide; it held the sword in a fixed position at the side and the level and angle of the sword could be adjusted and maintained by shortening or lengthening the straps by which it was secured to the belt. This system did not constitute a wholly new principle of suspension, but merely improved upon an older one. The two-point system, like its predecessor, was designed primarily for the equestrian and is the system provided present-day cavalry swords.

## The Volga-Ural Steppe and Speculations on the Origin of the Scabbard Slide

### THE VOLGA-URAL STEPPE ZONE IN LATE SARMATIAN TIMES

In addition to the geographical regions where we have already noted the presence of the scabbard slide, there are only two other areas on the Eurasian land mass where its presence may be demonstrated by actual finds: along the lower Volga River, chiefly in the vicinity of Saratov, and to the northwest in the Priural, chiefly in the Kama River region of the former Perm *guberniya*. Though these two areas, with respect to the find localities of scabbard slides, are separated by several hundred miles, they constitute a single zone, at least insofar as we are here concerned. I know of two scabbard slides only from the Volga and three from Perm. Possibly there are others in the museums at Saratov, Engels (formerly Pokrovsk), and Vyatka.<sup>426</sup> Photographs of two scabbard slides excavated on the lower Volga (*V.1* and *V.2*) have been published, but those from Perm (*P.1*, *P.2* and *P.3*) are known only from older drawings of questionable accuracy.

The similarity of these scabbard slides to the stone specimens from South Russia is immediately apparent (Plates 17*e*, 18*a-b*, 22*a-b*).<sup>427</sup> The same massive proportions and angularity cited in the description of the South Russian slides holds true for the Volga-Perm group. The photographs and drawings of the Volga slides (Plate 22*a-b* and Figure 91) show that they are broadest at the upper end, tapering regularly toward the lower end. The rather crudely executed drawings of the Perm slides (Plates 17*e*, 18*a-b*) do not reveal such tapered forms, but more than likely they are analogous to the Volga slides. The rounded forward edge once again provides the most telling evidence of the derivation of these objects from Form I Chinese slides. The involuted upper end of the upper plate is undercut on at least two of the slides (*V.1* and *P.1*), quite deeply in the case of the Perm slide if the drawing reproduces this feature accurately. In every case, the aperture protrudes into the area of the upper plate and on one slide (*P.2*) the aperture is cut almost entirely from this plate, the upper and lower bays being extremely shallow. As before, the terminal inward projections of the upper plate are equivalent in depth to the exterior of the lower aperture plate, thus rendering it impossible for

these slides to have been set in sockets on the scabbard wall as their Form I Chinese models were. Kusheva-Grozevskaia believed that these slides were bound to the scabbard wall by a leather strap passed through the aperture. In some cases, a metal band may have been used.<sup>428</sup> Probably she is correct; I see no other way by which these slides could have been secured. But if slippage was to be prevented, these leather or metal bands would have to have been riveted to the scabbard to either side of the slide.<sup>429</sup>

The Volga scabbard slides have a special importance in the history of our knowledge of the function of these objects. P. Rau, who discovered *V.1* only a few years after *CV.8* was found by Japanese archeologists at Lo-lang, and who reported his find a little over a year following publication of the Japanese discovery, almost certainly arrived independently at the same conclusion drawn by the Japanese: that the object was not a sword guard as it had been described by Rostovtsev three years before,<sup>430</sup> but an attachment to the side of the sword scabbard by means of which the sword was carried on a leather belt.<sup>431</sup> Whereas Rostovtsev's error had been due to an incorrect restoration by the excavators of *SR.2* (see Plate 20*a-b*; as of 1961 the incorrect restoration was still preserved), Rau's correct assumption was permitted by the discovery of a scabbard slide *in situ* (see description under *V.1*). The scabbard had entirely decomposed, but there could be no doubt as to the relative position of the slide as it was rusted fast to a section of the double-edged, iron sword blade. The drawing, Figure 92, is a reconstructed view; the sword was found lying on its edge. The position of the slide with respect to distance from pommel and blade tip is approximately the same as the find from Lo-lang (cf. Figure 17).

Resting against the right proper side of the slide, at the upper edge of the aperture, was a polished, perforated, oval, green stone disk overlaid by an elliptical bronze clasp or buckle (Figure 91, lower right). Rau believed that this stone disk and bronze clasp were related to the attachment of the slide to the scabbard; Kusheva-

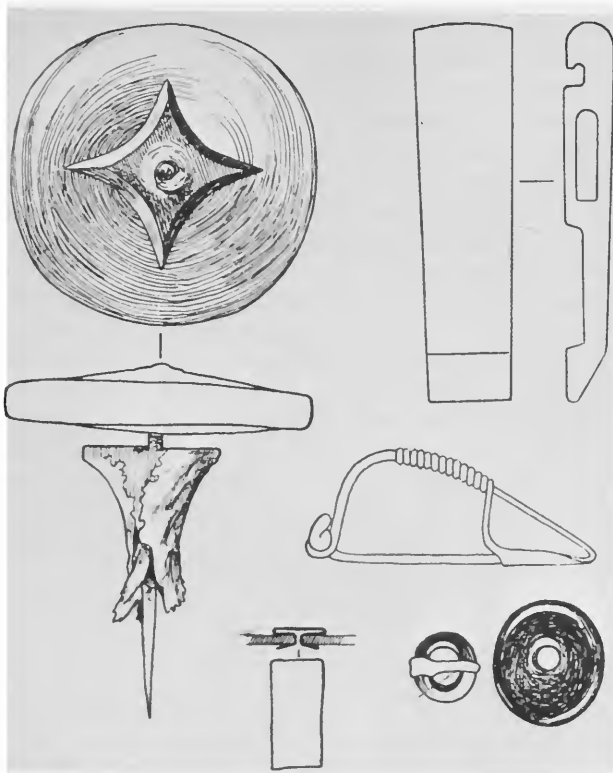


FIGURE 91.—Scabbard Slide *V.1* and associated finds. [After Rau (1927), page 38, figure 31.]

Grozevskaya concluded that they were ornaments from the leather strap that bound the slide to the scabbard.<sup>432</sup> This disk and buckle are clearly related to the sword belt fastening we have noted in the Kushan territories and among the Sasanians. The function of this attachment, compound in the case of the Volga slide, was clearly to secure the two ends of the sword belt and to provide an obstruction on the belt to prevent the sword from slipping forward along the belt to the front center of the bearer's body. With the sword worn at the left side, we suppose that normally the sword belt was slung round so that this clasp held the sword in the desired position; and that the clasp, as it was found with *V.1*, rested against the right proper side of the scabbard slide.

The double-edged iron rapier associated with *V.1* was badly decomposed, but from the disposition of the fragments its length was calculated at 45.28 inches. The

wooden grip into which the tang was inserted was ornamented at its upper end with a chalcedony disk pommel secured to the grip by a copper nail, the head of which was adorned with a small piece of violet-colored glass paste (Figure 91, left). The tomb belonged to the late Sarmatian period, that is, third to fourth century.

*V.2* (Plate 22*b*) was not scientifically excavated, but the tomb from which it came clearly belongs to the same period. The iron rapier from this tomb was 35.24 inches long, but the wooden grip was not preserved and no pommel was recovered by Rau who investigated the site and assembled the finds several days after their accidental discovery.

None of the Perm slides was found in context, or at least no records remain to show whether swords were found with them. Their strict agreement with the Volga slides suggests, however, that they also belong to the late Sarmatian period. During the third and fourth centuries Sarmatian peoples moved in increasing numbers northward from the lower Volga, and we assume that the Perm slides are actually imports into this region during this period.<sup>433</sup> Sarmatian graves in the Priural, especially in the central Kama region where the Perm slides were found, have inventories very similar to contemporary burials on the lower Volga. Forms of bronze and gold belt plaques with remains of glass inlay in sockets are clearly related to similar finds by Rau and Sinitsyn on the lower Volga.<sup>434</sup> As different styles are evident in the Priural in the fifth century, the Perm scabbard slides are clearly not later than the fourth century.<sup>435</sup>

Long iron swords similar to those from the Bosphorus, without guards and with pommel ornaments of glass paste or semiprecious stone, are common in burials of the late Sarmatian period in the lower Volga and Perm regions.<sup>436</sup> If we assume that here, as in South Russia, swords of this type were carried on scabbard slides, then it must be assumed once again that the majority of the slides were made of wood, or were thin metal eyelets on the sides of the wooden scabbards characteristic of both South Russia and the lower Volga. Though we cannot supplement our knowledge of the scabbard slide on the lower Volga or in the Priural with representations of it in use, we are probably justified in assuming that the wood and/or metal types were of the simple eyelet variety suggested by representations elsewhere in Asia and Europe.

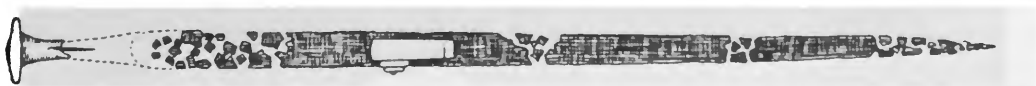


FIGURE 92.—Sword associated with scabbard slide *V.1*. [After Rau (1927), page 37, figure 30.]

The Japanese archeologist Egami Namio believes that the scabbard slide and stone pommel disks are among the objects brought directly from the borders of China by the Huns who began to arrive in the West Kazakhstan steppe and along the lower Volga by the late-second century after Christ.<sup>437</sup> Egami equates the Huns with the Hsiung-nu who centuries earlier were responsible for the migration of the Yüeh-chih toward the west, and traces their passage from the north of China across southern Siberia to the frontiers of Europe by means of numerous finds of Chinese objects—chiefly inscribed mirrors of Han date—which more or less coincide with the arrival of the Huns.

While I do not propose to enter here into the arguments concerning the identity of the Huns—a question which has been pursued with vigor since it was first introduced by M. DeGuignes more than two hundred years ago<sup>438</sup>—I find that the archeological record cannot support Egami's hypothesis that the scabbard slide and decorated pommels were brought to the Volga by the Huns directly from China. Whatever the explanation for the distribution of Han-dynasty mirrors across northern Eurasia may be,<sup>439</sup> there is sufficient evidence to rule out the possibility that the tradition of ornamenting sword pommels with disks of semiprecious stone and carrying swords by means of scabbard slides arrived in the Volga-Ural steppe only with the Huns.

The fact that Chinese mirrors appear in burials of the lower Volga,<sup>440</sup> and stone pommel disks in Perm,<sup>441</sup> before the appearance in these regions of the Huns is perhaps not grounds enough to suggest they arrived there by some other means. Objects may be traded across wide territories with greater speed than their purveyors move. Nor by the same token does the prevalence among late Sarmatian burials on the Volga of skull deformation necessarily point to the arrival of the Huns.<sup>442</sup> Smirnov believes it to be a Central Asian trait restricted not solely to the Huns, but found among the Messagetae and even the Kushana.<sup>443</sup> Even if the Huns had begun to infiltrate the Volga-Ural steppe zone as early as the late second century, their numbers among the late Sarmatians, who seem to have included the Aorsi and Alan confederacy described by Ammianus Marcellinus,<sup>444</sup> would surely not have been sufficient to influence major changes in weaponry. Hunnish burials do not appear in great numbers until the fourth century.<sup>445</sup> We may, therefore, assume that before this date their influence was negligible, and that the confederacy of Sarmatian peoples—among whom we find the Aorsi and Alans (Alanorsi),<sup>446</sup> a people descended from or identical to the Yüeh-chih-Kushana—were until this time, as they had been for several hundred years, the predominant, if not sole peoples inhabiting this region.<sup>447</sup>

The considerable migration of late Sarmatians northward from the lower Volga toward the Priural during the

third and fourth centuries, presumably under pressure from the Huns, implies an incompatibility of the two people not felt during the second century. This is exactly the period to which the stone scabbard slides from Perm belong. Among the weapons brought by the Huns, only the long bow with bone facing seems preeminent.<sup>448</sup> If they had also brought with them the scabbard slide and long swords with stone pommel disks, we should expect to find plentiful evidence of these articles in the lower Volga during the Hunno-Sarmatian period of the later fourth and fifth centuries. On the contrary, the scabbard slide and pommel disk disappear completely sometime during the fourth century. If the Huns brought these articles with them across southern Siberia, at least one example should have been found among all the "Hunnish" burials containing the Chinese mirrors Egami believes they carried. But not one has been found. There is no evidence that the Huns, unlike the Hsiung-nu, either carved or admired Chinese jade objects.

We have already noted the strict analogy between the Volga and Perm slides and the non-Chinese stone examples from South Russia, and have remarked upon contacts between these areas from at least the first century B.C. We have noted also that the long iron sword of the Prikuban and Bosphorus appeared with Sarmatian peoples coming from the east during the first century B.C. This movement corresponds to that of the Sarmatian Aorsi, a people identified with the Yüeh-chih-Kushana. The scabbard slides from South Russia are hardly earlier than those from the Volga. Their similarity suggests they belong to the same people. Probably all of the scabbard slides were carved in South Russia where there were Chinese models. Some were carried back to the Volga.

This does not mean, however, that the Sarmatians of the lower Volga did not carry their swords on scabbard slides before they obtained the stone slides modeled on Chinese examples from South Russia. If we concur with Sokol'skiĭ that the majority of scabbard slides in South Russia were made of wood and that the long Sarmatian sword was already carried by such a device when it first appeared there, then we must concede that the Sarmatians on the lower Volga of the second and first centuries B.C. also carried their swords on slides. These slides were probably not similar to the stone specimens, but simple loops on the scabbard wall, the sort we have found to be the prevalent type everywhere outside China.

It has been pointed out by Shmit that the "jade" material of the Perm slides implies a central Asiatic origin for these articles.<sup>449</sup> Maenchen-Helfen believes they were bartered from tribe to tribe until they reached the lower Volga, pointing to regions to the south and east for their origin.<sup>450</sup> Since A. A. Spitsyn opened the first Sarmatian graves in the Volga-Ural steppe in 1895, hundreds have been excavated.<sup>451</sup> If the Sarmatians on

the lower Volga carved jade, we should expect to find stone scabbard slides in their graves of the second century B.C. to the second century after Christ. If they received these articles in trade from central Asia, we should expect to be able to point to links along the route. The evidence is negative in either case. The major trade routes that brought Chinese goods to the Roman provinces of the eastern Mediterranean left comparatively little of this material in central Asia—a few coins in Sogdia,<sup>452</sup> some lacquer at Bagram.<sup>453</sup> Judging from texts and from finds,

the majority of these luxuries passed through central Asia to the more lucrative markets of the West.<sup>454</sup> Doubtless, it is this trade which brought Chinese silks to South Russia.<sup>455</sup> The scabbard slides surely did not travel so directly or swiftly, but they probably were passed along the same route. Crude imitations of these jade slides were made, probably as luxury substitutes for the authentic Chinese articles which were both rare and treasured, and a few of these imitations were transported back to the Volga.

## SPECULATIONS ON THE ORIGIN OF THE SCABBARD SLIDE

It has been hypothesized, I think plausibly, that the scabbard slide existed in the lower Volga steppe at least as early as the second century B.C. Its presence there, as in all other places in Asia, can be linked with the Yüeh-chih under one or another of their names in the West. The evidence suggests that these people were largely, if not solely responsible for the diffusion of this mode of suspending a sword wherever it appeared. Among the Parthians alone the origin of its use is obscure, possibly because we know so little about their origins.<sup>456</sup> At present, there is no evidence of Parthian occupation to the north or east of Khwarezm.<sup>457</sup> The evidence on hand seems clearly to point to the Yüeh-chih having used the scabbard slide when they resided on the borders of China, and this may conceivably carry us back to the fourth century B.C. when their presence is first discerned in this area. This does not prove they were the givers of the scabbard slide to the Chinese. It is simply strongly suggested by the evidence that the scabbard slide and long iron sword in China seem to point to an origin with northern nomadic peoples, of whom the Yüeh-chih are the most likely group. The Form II Chinese slide, which was the earliest type known to the Chinese, and the simple eyelet variety, its equivalent and most common type in Yüeh-chih-Kushana territories to the west of China, also points to the Yüeh-chih as the people from whom the Chinese obtained the scabbard slide.

Thus far, we have been chiefly concerned with the late Sarmatians on the lower Volga; that is, the period extending over the third and fourth centuries after Christ. It has also been pointed out that the long iron rapier which reached the Prikuban and the Bosphorus by the first century B.C., where it was carried on a scabbard slide, can be traced back to the Volga. There, during the period designated as Middle Sarmatian by Soviet archeologists—first century B.C. to second century after Christ—it was widely used by these equestrian peoples, probably in conjunction with a long lance and bow. Wherever

the long, essentially equestrian sword has appeared, we have found it carried by the scabbard slide. In some areas neither swords nor slides have been found, but the testimony of numerous representations to their conjunction in use has been considered as valid evidence of their existence. Short swords have from time to time been carried by scabbard slides, but the association of the long iron sword and slide seems to be the immutable one. If the long swords from South Russia were carried on slides as early as the first century B.C., it is logical to assume that their contemporaries and antecedents on the lower Volga in the second and first centuries B.C. also were carried on slides. If the Sarmatians had a long sword before this time, it seems logical also to assume that they carried it in the same fashion.

The Sarmatians resided in the Volga-Ural steppe zone for a long time before their gradual advance southward and westward toward the Pontic steppe. The prevailing opinion among Soviet archeologists is that the Sauromatae are proto-Sarmatians.<sup>458</sup> Up to 1952, over six hundred burials belonging to these people had been excavated in the southern Priural and Orenburg steppe zone. These range in date from the eighth, or seventh, to the fourth century B.C.

According to Smirnov, Glazkova and Chtetsov, the Sauromatae may be linked with a western expansion of Andronovo peoples into western Kazakhstan in the second millennium B.C. This already heterogeneous people commingled with peoples of the Srubna Culture in the Volga-Kama regions.<sup>459</sup> Metalworking characterized the culture of the southern Priural in the second millennium B.C., as did also the use of the horse in ritual sacrifice.<sup>460</sup> Between the twelfth and eighth century B.C., the Srubna peoples, already assimilated with the Andronovo migrants from West Kazakhstan, moved westward to the upper Don and Dnepr, and southward into the north Pontic region where they came in contact with metalworking traditions emanating from Anatolia.<sup>461</sup>

Gimbutas believes the Srubna to be the proto-Scythians and Piggott has suggested that it may be at this time that they encountered the sword which had been in use earlier in central and eastern Anatolia.<sup>462</sup> It is extremely doubtful that these earlier Anatolian swords were carried by scabbard slides;<sup>463</sup> but one, at least, from Urartu, belonging to the eighth or seventh century B.C., was carried by some form of *porte-épée* on a leather belt.<sup>464</sup>

Whether or not the peoples of this Srubna-Andronovo complex who remained in the Priural region, Smirnov's proto-Sarmatians or Sauromatae, received their earliest impulse to manufacture swords by way of the Srubna proto-Scythians, we cannot say. Probably they did not. The Scythians seem to have used only a short sword. "But in contrast to the Scythians, the Sauromatae were armed with long equestrian swords."<sup>465</sup>

Before the end of the sixth century B.C., the Sauromatae in the Priural were using long, double-edged iron swords, with short tangs and tectiform (or "butterfly-shaped") guards.<sup>466</sup> These swords, often a meter in length, appear alongside shorter swords little more than half their length. While some evidence of influence exists between these long swords and the Scythian *akinakes* to the west and Siberian short swords and daggers to the east, the development of the Sauromatae sword appears to be a relatively independent one.<sup>467</sup> Smirnov remarks that this sword, along with a possibly related long sword employed by the Meots in the Prikuban, was a superior fighting weapon to the short sword of the Scythians.<sup>468</sup> Though greatly outnumbered by shorter swords, long swords are known along the lower Volga not later than the second half of the sixth century B.C. Two of these have heart-shaped guards, and though the swords themselves may be derived from the Sauromatae types farther to the north, the guard form is related to that of the Scythian *akinakes*.<sup>469</sup>

The existence of several types of long sword in the southern Priural during the sixth and fifth centuries B.C. suggests a formative stage, possibly among still unconsolidated, or only partly consolidated tribal groups. By the end of the fifth century these diverse types have merged into a single type distinguished by a tectiform or straight bar guard and a crescent-shaped pommel.<sup>470</sup> These swords, from the southern Priural and Orenburg steppe, prevail throughout the fourth to second centuries B.C. and belong to a distinctive culture designated Prokhorovka by Soviet archeologists, from the fact that swords of the type were first excavated by S. I. Rundenko in 1916 near the village of Prokhorovka in the Sharlyk region, Chkalovsk district, RSFSR.<sup>471</sup>

The Prokhorovka Culture is, in fact, early Sarmatian. Rostovtsev believed that its long sword represented an intrusion from the east at this time,<sup>472</sup> but Smirnov subsequently demonstrated that it developed out of the

preceding Sauromatae weapon.<sup>473</sup> The genetic connection between the Sauromatae and early Sarmatians cannot be distinctly established, but from the fact that their burials are practically indistinguishable it is probable that they are essentially the same people.<sup>474</sup> The period of the Prokhorovka, or Early Sarmatian Culture marks the consolidation of the Sarmatians and the beginning of their military expansion toward the Pontic steppe occupied by the Scythians, a movement culminating in the first and second centuries after Christ in the wars waged between the heavily armored Sarmatian cataphracts and the Romans on the borders of their empire.<sup>475</sup> Contacts between the early Sarmatians and the Saka-Messaetae peoples of Kazakhstan north and east of the Aral Sea are attested to by finds of characteristic Prokhorovka swords of the fourth to second centuries B.C.<sup>476</sup> Smirnov believes the early Sarmatians acquired many features of the nomadic cultures of central Asia during this period, and he points to recent finds of Prokhorovka—type swords in Khorezm.<sup>477</sup>

The characteristic Prokhorovka or early Sarmatian sword was provided with a crescent-shaped pommel of iron. Sokol'skii believes that the disk pommel ornamented with a piece of semiprecious stone was a contribution of South Russia in the first post-Christian century to the development of the Sarmatian sword.<sup>478</sup> This decorative tradition probably reached South Russia from the Near East and was carried back to the Volga during the second or third century after Christ. Smirnov, however, notes that between the second half of the fourth and end of the third century B.C. several "atypical" long swords with flat oval pommels are known from the Orenburg steppe. Though a group of short Scythian swords from the North Pontic steppe has a similar pommel, swords analogous to the long Sarmatian ones have recently been found in fourth-century-B.C. kurgans at Chirik-rabat in Khorezm.<sup>479</sup> Elsewhere, Smirnov has published several small concave disk-sockets belonging to the sixth to fifth centuries B.C., and coming from the Orenburg steppe.<sup>480</sup> The earliest, belonging to the sixth century, is bronze; two, belonging to the sixth or fifth century, are gold. These objects (Figure 93), and others similar to them,<sup>481</sup> were found near sword hilts in burials.<sup>482</sup> While it cannot be demonstrated conclusively that these small hollow sockets with

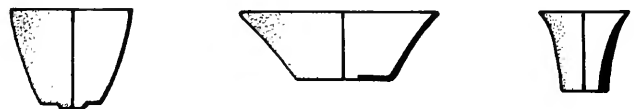


FIGURE 93.—Bronze and gold pommel sockets (?), Orenburg Steppe. [After Smirnov and Petrenko (1963), plate XV, 2, 14, 35.]



flared ends are pommel sockets, in context it is difficult to imagine what other function they might have served.<sup>483</sup> With more vertical sides, and deeper than the typical Chinese disk pommel, their basic form is still so close to the latter that their function, in some cases, at least, must surely have been the same. Pommel sockets of this type may belong to the early long tanged swords with heart-shaped guards (n. 469). The disk pommel of the later Sarmatian sword, in South Russia and on the lower Volga, may have received only its stone inlay from the Near East; the form of pommel to which this embellishment was adapted may have its origin with the earlier Sauromatae and early Sarmatian sword of the southern Priural and Orenburg steppe. One of the earliest long swords from South Russia, belonging to the first century B.C., had a wooden disk set in its pommel mount.<sup>484</sup> While it may simply have been carved in imitation of more costly stone disks conceivably already beginning to appear at this time, it may indicate that pommel disks, like scabbard slides, existed before similar stone adornments arrived.<sup>485</sup> Since a scabbard slide of wood is to be hypothetically associated with the disk-pommelled Sarmatian sword several centuries before the date of the stone specimens from South Russia, the lower Volga, and Perm—which are derived from Chinese types not earlier than Western Han—it is possible that the wooden scabbard slide may already have been in use as early as the sixth century B.C. in conjunction with the long Sauromatae and early Sarmatian swords with disk pommel sockets.

A particular kind of small iron or bronze hook is commonly found in burials of the sixth to second centuries B.C., from the Don steppe to central and western Tuva in southern Siberia. These hooks somewhat resemble the characteristic Chinese belt hook except for the fact that the hooked end curves in the opposite direction. Near the straight end, on the side toward which the opposite end curves, is a small, flat, circular button raised from the shaft of the hook on a short post. In the Sauromatae and early Sarmatian territories of the southern Ural and Volga steppe these hooks belong to burials of the seventh to fourth centuries B.C.<sup>486</sup> The raised button suggests that the hook was attached to a leather belt. Following the opinion of Kiselev with respect to these hooks in southern Siberia,<sup>487</sup> Shilov considered them to have been used for suspending swords.<sup>488</sup> The same opinion was expressed by Anfimov with regard to such hooks from the Kuban region.<sup>489</sup> Zavitukhina has pointed out that these hooks are frequently found in burials where there are arrowheads, but no evidence of either a sword or a dagger. Consequently, she is inclined to believe that they were used to suspend quivers which were made of light material which completely decomposed in the burials.<sup>490</sup> This identification was subsequently accepted by Shilov and Smirnov.<sup>491</sup> I believe, therefore, that two

rather oddly shaped hooks found in association with scabbard slides *CG.I* and *CH.I*—both quite early Chinese examples—may be neither belt hooks nor sword suspenders as supposed by the authors reporting on these finds, but quiver hooks related to those from southern Siberia.<sup>492</sup>

Smirnov describes several small, concave bronze rings with relatively large central perforations as objects associated with late Sauromatae and early Sarmatian *porte-épées*.<sup>493</sup> These rather resemble in size and form later flat disk pommel mounts (Figure 94). They come from burials of the fifth and fourth centuries on the Orenburg steppe. Except for the fact that they are made of bronze, some of them are nearly identical to the small perforated stone disk found by P. Rau with the late Sarmatian sword *V.I*. The latter was not part of the *porte-épée*, but part of the clasp which joined the ends of the leather sword belt. If the bronze disks served the same function as the later stone disk (which may only have been carved in stone in response to the fashion which brought the stone scabbard slide and pommel disk to the lower Volga from South Russia), we may assume the existence of a leather sword belt in use by the fifth century B.C., and probably the scabbard slide as well. The iron quiver hooks suggest use of a leather belt still earlier, in the late seventh and sixth centuries. From the sixth century, we have also the circular concave bronze sockets which probably are pommels. Separately, each of these elements does not afford very strong evidence for the existence of the scabbard slide, but taken together, and considered in relation to similar articles associated with long swords from later periods invariably carried on slides, they add considerable strength, I believe, to such an hypothesis. The evidence they afford could, in the isolated instance, amount to an unrelated phenomenon, but the probable coincidence of leather belt, belt clasp, and pommel mount seems sufficient grounds to disassociate this from pure chance.

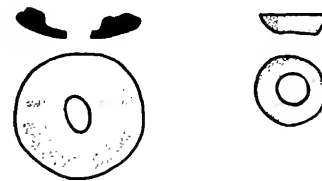


FIGURE 94.—Bronze rings from Sauromatae and Early Sarmatian burials, Orenburg steppe. [After Smirnov and Petrenko (1963), plate XV, 40–44.]

Shilov has noted that the majority of Prokhorovka, or early Sarmatian swords, sometimes recovered with remains of wooden scabbards, are found at the right side of the skeleton in burials.<sup>494</sup> Apart from China where the

representations show a persistent disregard for verisimilitude in depicting sword positions, the long sword in all other parts of Asia where it has been associated with the scabbard slide is habitually worn at the left. The sword position in the Prokhorovka burials need not, however, be taken as evidence that the early Sarmatians did not carry their swords on scabbard slides. Sokol'skiĭ has observed the same sword position in nearly half of the burials in South Russia.<sup>495</sup> It is practically certain that all of these swords were carried on scabbard slides. Though the slide was rarely represented in the art of South Russia, there exist scores of representations of swords. Not one hangs at the right side. The sword found with *V.I* lay at the left side, but it had been placed in the grave in an inverted position, with hilt down and blade extending toward the head. Obviously, the military equipment of the deceased was not worn in its usual position at the time of interment, but was deliberately laid in a position contrary to the normal one. Possibly the burial rites prescribed a ritual "disarming" of the deceased.<sup>496</sup> It may be, then, that the Prokhorovka swords were laid at the opposite side from that at which they were worn in life. If such a ritual did exist among the early Sarmatians, it would not be surprising to find it slowly disappearing among later Sarmatians who observed it in somewhat under fifty percent of their burials.<sup>497</sup>

In proposing that the scabbard slide and its associated apparatus was invented by the Sauromatae peoples in the Priural and Orenburg steppe zone, I do not mean that the use of the slide by these people constitutes an independent discovery unrelated to other areas of Asia where the scabbard slide was employed. The slide fixture invented by the Sauromatae to carry their long iron swords might antedate the appearance of this object in China by as much as 150 years. Probably it was carved from wood, and in form it must have resembled the Chinese Form II slide which is typologically the earliest in China. Whether this scabbard slide was a simple eyelet on the face of the scabbard, or already constituted a self-contained aperture by the time it reached the Chinese, is a question for which we have no answer. The evidence from outside China suggests that other peoples saw less advantage in an enclosed aperture than did the Chinese.

The equestrian Sauromatae, roving over a broad steppe zone, are the kind of people among whom we should expect an equestrian sword and distinctive carrying device to have been developed. That they employed a long iron sword for a considerable span of time before the appearance of such a sword in China is clear. Whether or not they carried their swords on scabbard slides cannot be proved or disproved since no examples have been found. The nature of this sword, together with its related fittings, as well as the nature of the Sauromatae them-

selves and that of their steppe homeland, offers strong evidence for the origin of the scabbard slide, and that particular long equestrian sword carried by it, among the Sauromatae.

The vast area between the easternmost burials of the Sauromatae in the Orenburg steppe and the north borders of China is, archeologically speaking, still poorly known for the period under consideration here. I know of no long swords from this region which could suggest a connecting link between the Urals and China. Even short swords are very scarce, though daggers and knives abound. The typical Prokhorovka sword found in several sites in Soviet central Asia does not provide a link between the Sauromatae and China. These swords belong to the fifth to first centuries B.C. and represent a southeast expansion of the early Sarmatian weapon.<sup>498</sup> If these swords were carried on scabbard slides, as they would certainly have been if their prototypes were thus carried, then it is conceivable that the Parthians whose homeland probably lies somewhere about this region may have received the scabbard slide before the arrival of the Yüeh-chih-Kushana in this region in the earlier half of the second century B.C. Thus far, our evidence for the long Parthian sword in this region does not extend beyond the first century B.C. It was a double-edged blade with a tang, without guard, but presumably with a pommel socket. It resembles swords of the same date from the lower Volga.<sup>499</sup> Since we know nothing of the Parthian slide until considerably later, we cannot say from whom they acquired it. But we are reminded of Widengren's opinion that the "Iranian" riding costume worn by the Parthians points to a leather prototype in the subarctic region of Eurasia.

Probably the movement which brought the long sword and scabbard slide to the borders of China was a relatively swift one. The typical Prokhorovka guard and crescent-shaped pommel are found on daggers from the eastern Pamir as early as the fifth to fourth centuries B.C.<sup>500</sup> How early iron may have been used for sword manufacture in southern Siberia, we cannot say. M. A. Devlet believes that it was relatively common by the fifth century B.C., and quite possibly earlier. He remarks that although iron swords belonging to the Tagar (700-100 B.C.) period have not been found, the long swords represented on petroglyphs belonging to this period in form and size suggest an iron sword.<sup>501</sup> Unfortunately, it is not possible to tell from these often lively but summary rock sketches how this sword was suspended.

The late Sir Ellis Minns believed that the equestrian peoples from Pazyryk in the Altai Mountains carried long swords.<sup>502</sup> Since the plunderers of these late fifth and fourth century burials took not only the objects in precious metals but also the weapons, we cannot be certain what sword they wore. On one of the felt hang-

ings from these tombs and on a tattoo on the arm of one of their occupants are representations of a horse and, in the case of the tattoo, a fantastic horse-like creature.<sup>503</sup> The manes of both animals are cut into a series of notches or crenels. Maenchen-Helfen has shown that the diffusion of this mane in Asia quite corresponds to the movements of the Yüeh-chih-Kushana.<sup>504</sup> It does, in fact, appear concurrently in every area of Asia where we have noted the scabbard slide. It appears also in South Russia. Its appearance at Pazyryk, probably in the fourth century, B.C.,<sup>505</sup> antedates its arrival in China by about one hundred years, as far as we know. The artifacts from Pazyryk tombs indicate that these people had far-ranging contacts, with the Achaemenian Persians to the west and with China to the east.<sup>506</sup> These contacts amply attest to the high degree of mobility among the Eurasian nomads at early times.

If the people of Pazyryk carried long swords, they probably suspended them on scabbard slides. As far as the appearance of this equipment is concerned, Pazyryk can tell us relatively little about the origin of the scabbard slide in China. The site is hardly earlier than the hypothesized appearance of the long sword and scabbard slide in China. By the same token, the famed Siberian gold plaque depicting an equestrian archer equipped with a sword worn on a sword belt passed through a scabbard slide (Figure 42) cannot really provide us with the information we seek.<sup>507</sup> The plaque is probably not earlier than the fourth century B.C.<sup>508</sup> Indeed, the sword carried by this rider is provided with a guard which closely resembles the Chinese type with raised rounded shoulders. It is certainly not the Prokhorovka guard of the Orenburg-steppe swords. Rostovtsev noted that the

facial features, hair style, and moustache of this man, and those of riders on a few other Siberian plaques, closely resemble those of Kushan figures on the sculptures of Gandhara.<sup>509</sup> It has likewise been noted that the costume worn by these riders on the Siberian plaques, as well as the trappings of their horses, is practically identical to that appearing in the equestrian scene on the felt hanging from Pazyryk.<sup>510</sup> It is the "Iranian" riding costume of Iranian Asia, and probably it was leather. The facial features, moustache and hair style of a Parthian sculpture from Hatra and of the Kushan portrait sculpture from Khalchayan are again practically identical to those of the Pazyryk equestrian.<sup>511</sup> Physical resemblances between the figures on another Siberian gold plaque,<sup>512</sup> the Pazyryk rider, and a kneeling man on a bronze altar from the district of Alma Ata, Kazakh SSR, have also been noted.<sup>513</sup> Whether or not this means that in each case there is sufficient evidence to postulate the existence of an homogeneous parent group is doubtful. Haskins argues that the identity is clearly demonstrated;<sup>514</sup> Maenchen-Helfen prefers to envision more loosely related, or even distinct, groups.<sup>515</sup> We must concede, I believe, that the evidence indicates a fairly similar people, or closely related groups of people.

If the Pazyryk people used the long sword, they had it at least as early as the hypothesized appearance of this weapon in China. Since it could not have been received by them from the Chinese, it must have come from elsewhere. The Chinese long sword points to a northern equestrian nomad origin. No geographical barriers separate Pazyryk from the Orenburg steppe and it seems likely, therefore, that the Sauromatae sword was the prototype of the nomad equestrian sword in Asia.<sup>516</sup>

## Conclusions

During the past 2,500 years there have been only two principal methods of suspending long fighting swords in Asia. The earlier of these methods was the scabbard slide. It may have originated in the seventh or sixth century B.C. in the region of the southern Ural mountains and adjacent steppe areas. Its use lingered, not in Asia but in Europe, until the fifth or sixth century after Christ. In Asia, the scabbard slide was replaced by the more efficient two-point suspension system; in East Asia, possibly as early as the middle of the second century after Christ. By the beginning of the fifth century, this new method of sword suspension was employed by all people in Asia who had formerly used the scabbard slide. Like the scabbard slide, the two-point suspension system arrived somewhat later in Europe. It is the one still in universal use today. Both of these suspension systems originated in Asia, and the beginnings of both are obscure. The present study has been concerned with the former, that is the scabbard slide, and the particular long sword types associated with it.

In our study of the long sword and scabbard slide, we have traced a great circular diffusion route, from China through central Asia to the Mediterranean and Black Sea regions, and back eastward across the north Eurasian steppe to the borders of China. The circle is not a closed one; much of its northern sector is hypothesized only. Two significant offshoots from this circle brought distinctive regional forms of the scabbard slide into Europe, one emanating from the east Mediterranean outposts of the Roman empire, the other from the Bosphorus Kingdom of the early post-Christian centuries.

The earliest scabbard slides on hand come from China and probably are not earlier than the later part of the fifth century B.C. The typological study of the Chinese scabbard slide leads us back ultimately to an extremely simple form consisting of a loop or eyelet only on the scabbard wall. The commonness of the scabbard slide in China, and the material of its manufacture, chiefly jade stone, has led most specialists on early China to believe that this object was invented by the Chinese. Observers of similar objects in South Russia and at sites along the lower Volga River tended rather to hypothesize an Iranian origin. While it is possible that the scabbard slide was first introduced into the Near East by the Parthians who may have acquired it in their Eurasian steppe homeland about which nothing is known, the tangible evidence for the scabbard slide in the Near East and in South Russia—that is the elongated stone and

metal slides recovered from burials of the third and fourth centuries—relates clearly to earlier Chinese models. The Chinese-jade scabbard slide in its simplest and earliest stages of development leads us back to prototypes carved from wood or possibly bone, quite unrelated to Chinese lapidary traditions which only later influenced the development and decoration of this object.

The scabbard slide and its associated leather belt were developed for the suspension of long swords which often exceed a meter in length. The scabbard slide was set sufficiently low on the scabbard wall to permit the sword to rest at an angle at the bearer's left side; the hilt within easy reach of the right hand, the foot of the scabbard extending behind the body. Loosely suspended on the sword belt, the scabbard could be thrust back with the left hand as the sword was drawn with the right, thus enabling the long blade to clear the scabbard mouth. Essential as the sword belt and slide were for the carrying and use of the long sword, the Chinese appear to have suspended shorter bronze swords in the same manner, though no particular advantage could possibly have accrued from so doing.

The long sword for which this distinctive carrying device was developed was made of iron. It must have appeared in China as early as the scabbard slide, though no preserved specimen may be dated as early as the fifth century B.C.—the date proposed for the earliest Chinese scabbard slide on hand. Though in China the long iron sword with scabbard slide rapidly became the standard weapon of massive armies of infantry, this sword and suspension system are better suited to equestrian use. It is assumed that these elements of military equipment were introduced into China through the Chou states, chiefly Ch'in, bordering the northern territories of the horse-riding nomads, though the iron sword in China exhibits a seemingly independent development related to preceding Chinese bronze sword and iron knife forms. Though cavalry never constituted a major tactical force in China, the gradual preeminence of the single-edged iron saber with long grip, and especially the inward-curving blade, indicate that equestrian requirements were the predominant influence in the development of this sword.

The occurrence of the scabbard slide in central and western Asia and in South Russia may be related directly to the appearance in these territories of the Yüeh-chih-Kushana who were driven westward from the borders of China early in the second century B.C. Extant examples

of the scabbard slide from these regions clearly imitate the fully developed scabbard slide of Han dynasty age, but representations of the slide indicate that a simpler form, the eyelet or loop variety typologically earliest in China, was the predominant form in use. Both forms, the simple eyelet and the more highly developed, elongated lapidary form, were also current in China, the latter reserved strictly for ceremonial purposes.

It is impossible to trace the use of a long sword in the Near East earlier than in China. It is assumed, therefore, that the long equestrian sword and its associated belt and scabbard slide were brought westward by the Yüeh-chih from the borders of China. This does not mean, however, that either sword or slide originated within China.

A long iron sword appears in the southern Ural steppe during the seventh and sixth centuries B.C. The length of this sword, in some cases exceeding a meter, indicates that it was intended for equestrian use. In order to serve this function it had to rest at an angle beside the rider so as to be handy to his reach, out of the way of his leg, and to permit the horse free movement. The carrying position of a long cavalry hand weapon, whether a sword as in antiquity or a rifle as today, is immutable. The angle at which it reposes has always been the same. The scabbard slide, so far as is known, was the earliest device by which a cavalry sword was suspended. Since the Ural steppe swords antedate the appearance of a similar sword type—with related elements of fittings—in

China by one or two hundred years, and since the long iron sword in China clearly points to an origin among a northern equestrian people, we have concluded that the precursors of the Chinese long iron sword and scabbard slide are to be sought in the Ural steppe zone.

The history of the association between the long equestrian sword and scabbard slide in Asia begins and ends in the same region, the steppelands of the southern Ural mountains. The method of suspending this sword by means of the scabbard slide endured for a thousand years in the region of its origin. In the third and fourth centuries after Christ, the elongated stone scabbard slides manufactured in South Russia in imitation of Chinese jade forms which had reached this territory were still useful and meaningful objects to the equestrians of the Ural steppe who imported them from South Russia. These steppe peoples probably considered their own loop or eyelet scabbard slide as a simplified version of the longer and more elegant form appearing in South Russia; and if they were unaware of the Chinese prototypes for this scabbard slide form, they probably regarded it as an invention of, or development emanating from, the more sophisticated Bosphorus Kingdom. What they almost certainly did not know was that this object had been invented in their own territory by their ancestors a thousand years before, and had simply returned to them from the West in a new form centuries after their ancestors had first carried it eastward toward the borders of China.

# Catalog

## INTRODUCTION

The 440 scabbard slides described in the catalog constitute the main body of material from which the preceding study of this object was drawn. Not all of the scabbard slides here described were discussed in the text, but all were carefully considered in the formulation of the basic conclusions governing the history of the development and function of this object; these were expressed in relation, or by reference, to the most revealing specimens. The catalog is not intended as a corpus of known scabbard slides in collections throughout the world. I have, however, endeavored to include all adequately published examples up through 1970. A few unpublished specimens which I have had an opportunity to examine first-hand have been included, but I have seen, both in museums and in private collections, numerous examples about which I was not able to obtain the necessary information to introduce them here. None of these, however, either in form or in ornamentation, suggested stylistic or typological characteristics not represented in the present catalog. Therefore, it is hoped that the present selection may be sufficiently broadly representative to permit relation of subsequently published pieces to one or another of the examples or categories appearing in the catalog.

Every effort has been made to avoid duplication, but the possibility of double entry for a single piece remains. Frequent change in ownership, republication with varying description, or publication without identification of collection, have in a few cases made correct distinction or identification questionable. Wherever noted, such ambiguity has been recorded.

First-hand examination of jade objects often reveals very telling details in the quality of cutting, incising, and modeling that photographs ordinarily do not reveal. From poorer photographs, it is not always possible to tell scrupulously exacting work from more hurried summary execution. Therefore, I have deemed it important to identify here those scabbard slides I have had an opportunity to examine personally as distinct from those known to me only from publication. As might be expected, I have noted that as this study progressed the criteria for appraisal of an individual slide became more refined and exacting; in some cases where I have had an opportunity to reexamine a particular slide, I have been able to record significant characteristics not initially recognized. In some cases, reexamination has resulted in a substantially

revised opinion. It has not, of course, been possible to restudy a large number of slides.

Except in the cases where slides have been personally examined, descriptions of color and stone properties are based on the published descriptions of the pieces. Experience has shown that these have highly varying degrees of accuracy. As the majority of the slides included in the catalog are known to me from photographs only, these limitations on the following descriptions should be noted.

### EXPLANATORY NOTES

1. The identifying numbers of excavated slides are *italicized*; those which have been studied first-hand are in **boldface** type.
2. Scabbard slides fashioned from stone are described as "jade" unless the mineral has been identified.
3. Provenance, unless given, is presumed unknown. Scabbard slides found in regions contiguous to China (Korea, Mongolia, Viet-Nam) and of indisputable Chinese manufacture are classified with the Chinese slides. Only slides of local or uncertain manufacture are cataloged under these distinct geographical regions.
4. Collection, unless otherwise known and indicated, is that of publishing date.
5. All measurements are given in inches and decimal fractions thereof unless otherwise noted. Approximate measure is indicated by an asterisk (\*) following the figure. Measurements derived from scaled drawings in Chinese publications are only approximate as in all cases where measurements have been published along with scaled drawings or rubbings, slight to considerable differences have been noted.
6. Bibliographical references for each scabbard slide are listed in chronological, rather than alphabetical order, in conjunction with occasional annotations on the publishing history of particular examples.
7. Page and plate citations in the descriptions of scabbard slides, unless otherwise indicated, are to the references for the individual slides listed with each and not to the text of this study.
8. A list of characters for frequently recurring Chinese and Japanese names and terms is given on page 263.
9. Figure 95 illustrates the proper orientation of the scabbard slide, as it would normally be viewed when

attached to its scabbard. Slides are seldom exhibited or photographed in this position; generally they are shown in horizontal position as they rest more easily there. The

majority, therefore, of the slides among the plates here are shown as photographed or published, though some have been turned for clarity.

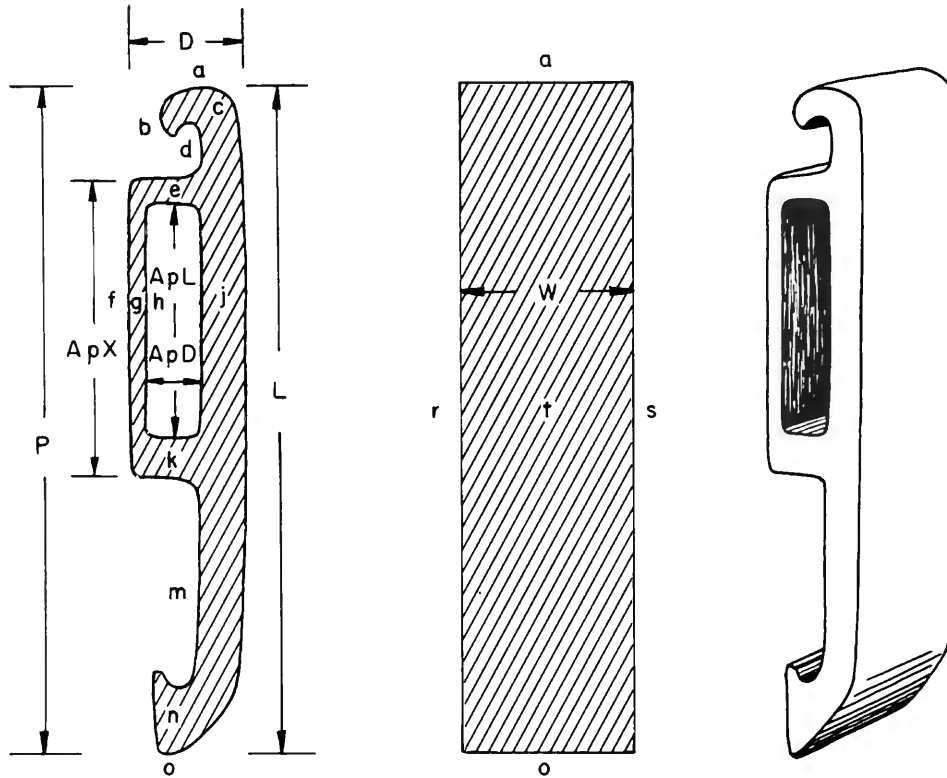


FIGURE 95.—Chinese Form I scabbard slide: explanation of descriptive terminology.

L	length	f	exterior of lower aperture plate; base
W	width	g	lower aperture plate
D	depth	h	interior of lower aperture plate
ApL	aperture length	j	upper, or outer, plate
ApD	aperture depth	k	lower aperture wall
ApX	aperture exterior	m	lower bay
a	forward edge	n	lower hook
b	upper, or forward hook	o	lower end; heel
c	upper end; head	p	under, or inner, side
d	upper bay	r	left side
e	upper aperture wall	s	right side
		t	upper plate; top; decor surface

## LIST OF SCABBARD SLIDE CLASSES

FORM I: Chinese	<i>Page</i>	S	Syria . . . . .	236
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CV	China: Geometric Class . . . . .	T	Turkey . . . . .	243
CR	China: Ridge Class . . . . .	V	Lower Volga River region of the USSR . . . . .	243
CG	China: Grain Class . . . . .			
CH	China: Hydra Class . . . . .			
C	China: Unclassifiable . . . . .			
CZ	China: Atypical . . . . .			
Ca-Cm	China: Imaginary Class . . . . .			
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		XC	China: Unclassifiable . . . . .	259
		XCZ	China: Atypical . . . . .	259
FORM I: Non-Chinese				
E	Europe: (representative derivatives) . . . . .			
ET	East Turkistan (Sinkiang) . . . . .			
GP	Gandhara region, West Pakistan . . . . .			
K	Korea (probable non-Chinese work) . . . . .			
M	Mongolia . . . . .			
P	Perm district of the USSR . . . . .			
RX	USSR (unknown provenance) . . . . .			
		FORM II: Non-Chinese		
		XK	Korea . . . . .	260
		KM	Mongolia . . . . .	260

## FORM I

## CHINA

## Unornamented Class

CP.1 . . . . . Figure 12, Plate 1a

MATERIAL: Stone, lustrous black.

PROVENANCE: Shih-chai-shan 石寨山 ("Stone Fortress Hill"), near the shore of Lake Tien-ch'ih 滇池, west of the town of Chin-ning 晋宁, about thirty miles south-southeast of K'un-ming 昆明, east central Yunnan 雲南 Province.

## MEASUREMENTS:

L	3.98	ApL	1.19
W	.87	ApD	.28
D	.63	ApX	1.61
	Depth of upper plate over aperture		.20.

The slide tapers slightly toward the lower end where the width is .81; the aperture is shallower toward the lower end where the depth is .25.

DATE: End of the second century B.C.

At the time of excavation the slide lay near the center of a long double-edged iron sword blade. Traces of a lacquered leather scabbard remained and it was determined that the slide had been attached to this scabbard. The sword associated with this slide (pl. CI,6), was badly corroded; neither grip nor blade was preserved at the extremity. The total preserved length of the sword is

about 28.88. A flat disk pommel similar to that on another long double-edged iron sword from this site (pl. CI,1) was probably once attached to the tang.

The report listed below deals with the excavation of twenty tombs at this site (see preliminary report in *KKHP*, 1956 (1) pp. 43-63; Haskins "Stone-fortress-hill" [1963]). Hsia Nai, however, reports that thirty-four tombs had been excavated by 1959 ("Tracing the Thread of the Past").

It has been assumed by the excavators that the tombs at this site constitute, at least in part, royal burials of the Tien 滇 people whose chief centers were located in central and northern Yunnan during the second century B.C. This region was subdued by Chinese armies under generals Kuo Chang 郭昌 and Wei Kuang 衛廣 in about 109 B.C. A gold seal found in tomb 6 bears the inscription *Tien wang chih yin* 滇王之印 ("The Tien king's seal"); it is clearly of Chinese manufacture and probably represents an overture on the part of the Chinese to reinvest the Tien king with regional authority after the conquest (p. 113; Loewe, *Military Operations in the Han Period* [1961], p. 4).

Imports from China, notably bronze mirrors (pl. XLV), become increasingly common during the later part of the second century B.C., though imitations of Chinese weapons, vessels and ornaments probably began at an earlier date. The scabbard slide, as well as a part of the jade



objects (pls. CXII–CXIII) belongs to the latter class of objects imitating Chinese forms. Of these, the scabbard slide is possibly the most strongly and beautifully conceived, with few suggestions of the heaviness, clumsiness reflected in imitations of this object elsewhere in Asia. The slightly more outspoken curve of the upper plate and lack of refinement in the execution of the end hooks enhance, rather than detract from its sturdy, undecorated form.

But neither the Chinese imports and imitations, nor perceptible relations to cultures to the south, markedly intrude upon the strong local character of the artifacts from these tombs. Tools, ordinarily of iron in China, were here mostly made of bronze, iron being reserved chiefly for sword manufacture. Of the sixty-nine swords found, twenty-one were double-edged iron and forty-eight had double-edged iron blades with bronze hilts (cf. CH.2). The longer, tanged iron swords with disk pommels, such as the one associated with the scabbard slide, closely resemble types from Han China and may largely be imports. Those with bronze hilts, furnished with ornate gilt bronze scabbards (pl. C) reminiscent of Germanic metalwork of northern Europe several centuries later, have nothing to do with the ordinary Chinese sword (but cf. London, *The Burlington Fine Arts Club*, 1915, p. 49, no. 14 and pl. XXXVIII, an unusual, ornate, cast bronze hilt, probably of a dagger).

It is clear from the cast bronze statuettes and plaques found at this site that the Tien peoples, perhaps in imitation of the Chinese, carried their swords by means of some fixture on the scabbard set at approximately the same position as the scabbard slide on Chinese swords (e.g., pl. LXVII,1). But the scabbards seem generally to be suspended from the girdle rather than from a low-slung weapons belt (pl. LI), and I am inclined to believe that a different form of fastening was used. The scabbard slide could not have been attached in the normal Chinese manner to the elaborate scabbards of the bronze-hilted swords. Curiously, the Tien soldiers seem to have wielded the sword with an overhand thrust, as though it were a dagger. It seems probable, therefore, that the shorter bronze-hilted sword was the customary weapon and that the longer Chinese, or Chinese style, iron swords with scabbard slides and jade (or stone) pommel ornaments (pl. CXIII,3) were novelties or symbols of rank and prestige.

REFERENCE: *Yün-nan Chin-ning Shih-chai-shan* (1959) pl. CX,3, profile and top photos, approximately natural size; text, p. 118.

CP.2..... Figure 16

MATERIAL: Bronze, surface of upper plate gilt.

PROVENANCE: Tiao-ch'iao,<sup>a</sup> near T'ung-kuan,<sup>b</sup> at the bend of the Yellow River in east central Shensi<sup>c</sup> Province.

MEASUREMENTS:

L 2.75	ApL .56*
W .78	ApD .19*
D .31*	ApX .69*
Depth of upper plate over aperture .06*	

DATE: Eastern Han.

A group of seven tombs (p. 56, fig. 1, plan), constructed of brick with vaulted ceilings, excavated in 1959. The scabbard slide was found in tomb 4 (p. 58, fig. 10), a four-chambered tomb. Iron objects were found in the tombs, but the two swords recovered were of bronze, with solid, ribbed hilts and guards cast in one piece with the blades (tombs 3 and 4). They represent a somewhat old-fashioned sword type at this date and are related to Late Chou and early Han types. The sword associated with CP.2 is about 17 long (p. 65 and p. 62, fig. 32). The complete sword was perhaps an inch longer as the pommel, probably disk, is missing.

Among the hundreds of scabbard slides from China, only three other examples of bronze are known (CP.9, CV.39, CZ.18). The upper plate and walls of the aperture are of uniform depth and are extremely thin. The upper plate is slightly arched and is bent downward slightly at each end, though no hooks are formed.

Although gilt bronze objects are far from rare in China at this time and at earlier periods (see, e.g., Umehara, *Ryūkin no Kan Rikuchō kyō* [1952]), the near uniqueness of this bronze scabbard slide suggests, whether it was produced in China or not, that it may have been influenced by the tastes, or metal-working traditions, of peoples to the north among whom gilt bronze plaques of various forms were especially favored (see Trever, *Excavations in Northern Mongolia* [1932] pp. 55ff; Maenchen-Helfen, "Crenelated Mane and Scabbard Slide" [1957] p. 97).

(See also CV.3, from this site.)

REFERENCE: Shen-hsi sheng... "T'ung-kuan Tiao-ch'iao" (1961), p. 63, fig. 36,7, small drawing of profile and top, not scaled; text, p. 64.

CP.3

MATERIAL: Jade, translucent grayish green with heavy iron-oxide encrustation on under surfaces; lower left end broken.

COLLECTION: Art Institute of Chicago, 50.877; Edward and Louise B. Sonnenschein Bequest.

MEASUREMENTS:

L 3.88	ApL 1.47
W .84	ApD .19
D .50	ApX 1.81
Depth of upper plate over aperture .19.	

DATE: Probably first or second century after Christ.

The proportions and general carving technique indicate

Chinese manufacture, or careful imitation of a contemporary Chinese model. The elongated form, together with the poorly articulated upper and lower inward projections of the upper plate suggest imitative work similar to *M.I.*, and the slide may have been carved in a Chinese or sinicized frontier settlement.

Unpublished.

#### CP.4

**MATERIAL:** Nephrite (by X-ray diffraction), yellowish brown with considerable black coloring in clouds, flecks and veins; opaque except for a few flecks of translucent gray; small areas of surface decomposition on lower hook and left side; specific gravity 3.048.

**COLLECTION:** Freer Gallery of Art, Washington, D.C., 12.57.

##### MEASUREMENTS:

L 1.56 (at left; 1.59 at right)	ApL .33
W .73	ApD .14
D .44	ApX .56
Depth of upper plate over aperture .17.	

**DATE:** Late antiquarian.

The aperture is too short to have served the normal function of accommodating a sword belt. The lower hooked ridge extends inward to the level of the inner surface of the lower aperture plate, but the forward hook ridge terminates almost parallel with the base of the slide. It is thus evident that the lower aperture plate could not have been inserted in the usual manner into a socket on the scabbard wall. The slide is rather crudely fashioned and poorly proportioned.

In all probability this object, which is in fact a miniature copy of a scabbard slide, is a belt "toggle," that is a small, and in this case probably ornamental rather than symbolic, object to be hung from the girdle by a cord. S. Cammann, *Substance and Symbol in Chinese Toggles* (1962), p. 231, no. 198, publishes a similar piece carved from *prunus* burl, a variety of peachwood (p. 52). Unpublished.

#### CP.5

**MATERIAL:** Glass, deep bluish green color; no evidence of wear; surface heavily incrustated with brownish white decomposition, the unaltered glass showing only in a few places; on the bottom exterior of the aperture specks of two distinct red materials, perhaps iron oxide and cinnabar.

**COLLECTION:** British Museum, London, 1938.5-24.582; formerly Eumorfopoulos Collection.

##### MEASUREMENTS:

L 3.28	ApL 1.09
W .89	ApD .28
D .56	ApX 1.53
Depth of upper plate over aperture .25.	

**DATE:** Western Han.

The slides are tapered inward toward the base so that the width across the lower plate of the aperture on the under side is .81, or .08 less than the width of the top plate. Umehara, who saw this slide at a London dealer's establishment in the 1920s, before it entered the Eumorfopoulos Collection, reports (p. 410) the existence of a nearly identical piece, but of jade, from a Han tomb at Lo-lang<sup>k</sup>, Korea (pl. XC,4, profile and bottom drawings). No unornamented scabbard slide from this site has been published; Umehara may refer simply to a similarity of form.

**REFERENCE:** Umehara, *Shina kōkōgaku ronkō* (1938b), pl. XCII, 4, oblique profile photo.

#### CP.6

**MATERIAL:** Jade, black.

##### MEASUREMENTS:

L 4.25*	ApL 1.53*
W 1.03*	

Crudely executed line drawing from which the piece may not be accurately described.

**REFERENCE:** Wu Ta-ch'eng, *Ku yü t'u k'ao* (1889) II,115:a, line drawing, oblique top/profile view.

(B. Laufer, *Jade* [1912], p. 13, notes that the drawings in this book are generally seven-tenths the natural size of the objects. The measurements from the drawing of this piece suggest that it is reproduced natural size, or larger.)

#### CP.7

**MATERIAL:** Jade, deeply veined stone of unidentified color.

**COLLECTION:** Formerly Tuan-fang 端方 Collection, China.

The surface of the upper plate has been decorated with a linear design identified by Ferguson (p. 69) as that of an "auspicious plant," but it is not clearly discernible. It appears to have been rather carelessly scratched onto the surface of what may have been an older, plain slide.

**REFERENCE:** Ferguson, *Survey of Chinese Art* (1939), pl. CXXIV, right, slightly oblique top photo.

#### CP.8

**MATERIAL:** Jade.

**PROVENANCE:** Southern suburb of Ch'ang-sha,<sup>d</sup> Hunan<sup>e</sup> Province; excavated in 1961.

##### MEASUREMENTS:

L 3.27
W .87

**DATE:** Western Han.

The upper plate appears to be virtually flat and to

taper regularly from a maximum width at the upper end to a minimum at the lower end. At both ends the upper plate appears to turn inward abruptly at right angles, terminating in blunt, inward-projecting ridges equal, or exceeding, in thickness the upper plate.

(See *CH.81* from the same tomb.)

REFERENCE: Chang Hsin-ju, "Ch'ang-sha Sha-tzu-t'ang" (1956), pl. III, 17, slightly oblique top/profile photo; text, p. 117; p. 116, fig. 1, plan of tomb showing find position of slide.

**CP.9**..... Figure 16, Plate 1b

MATERIAL: Bronze; the surface thinly covered with green corrosion products mixed with thin earth deposits in places; a few areas clean. In several places on the upper plate textile pattern may be seen in the earth deposits and corrosion.

COLLECTION: Dr. Paul Singer, Summit, New Jersey.

MEASUREMENTS:

L	3.41	ApL	1.16
W	1.03	ApD	.22
D	.69	ApX	1.34
Depth of upper plate over center of aperture .16; depth of lower aperture plate, upper and lower aperture walls .09.			
Slight vertical taper, the width of the lower aperture plate being .91.			

DATE: Late Western Han. This date is proposed on the basis of *CP.2* which seems less strictly related to contemporary jade forms.

The plain upper plate is gracefully curved, terminating above with a slight inward projection and thickening of the plate, suggestive of influence from contemporary jade specimens with fully developed forward hooks. At the lower end, the upper surface of the upper plate tapers inward to meet the lower in a sharp ridge. The underside of the upper plate is slightly concave, so that its depth in the center is slightly less than that given here for the outer edge. The walls of the aperture and the lower aperture plate are of even thickness; normally on stone scabbard slides the aperture walls are thicker than the lower aperture plate. The aperture walls slope outward from the lower aperture plate so that the aperture is longest just below the upper plate. The aperture length given here is taken at the middle of the aperture and hence represents the mean length. The outer side of the aperture is somewhat more strongly arched than the corresponding curve in the upper plate; thus the upper plate is slightly shallower at the center of the aperture than elsewhere. Though the provenance of this slide is unknown, the material of its manufacture suggests it was a functional specimen. A locality at the northern frontier, similar to that of *CP.2*, seems likely.

REFERENCE: Loehr, *Relics of Ancient China* (1965), no. 141, erroneously assumed to be unique; not illustrated.

## Geometric Class

### *CI.1*

MATERIAL: Stone, probably jade stone.

PROVENANCE: Ch'ang-sha,<sup>d</sup> Hunan<sup>e</sup> Province.

MEASUREMENTS:

L	3.94
W	.98

TYPE: Atypical.

DATE: Late Eastern Chou (?).

In the report on the excavation in 1955 of thirty tombs belonging to periods between Late Eastern Chou and the Sung dynasty, it is stated that all of the tombs had been robbed at an earlier time. Among the ten tombs of Late Eastern Chou age only one scabbard slide was found. The iron sword and its scabbard to which the slide had been fastened had decomposed entirely, but from the position in which the stone pommel disk (p. 39, fig. 6), guard (p. 38, fig. 2) and chape (p. 38, fig. 5) were found, the total length of the sword must have been approximately 35.50.

The profile drawing of the scabbard slide suggests inaccuracy. The line of the upper plate is not arched and the hooks at either end are poorly proportioned and involuted to a degree not observed on any other piece and hardly credible on objects of this type. The lower plate of the aperture, generally quite thin on reliable pieces, is here represented to be as thick as the upper plate. The awkwardness of the drawing suggests representations of slides in older Chinese publications reproduced from wood-blocks (e.g., *T'ao-chai ku yü t'u* [1936] p. 76:a).

The decor of the upper plate, consisting of nine rows of three equal-sized, elongated C-shaped ornaments in relief, is also unique among attested slides. The rows alternately face to the right and to the left. The rubbing of this ornamentation does not permit appraisal of the carving technique.

REFERENCE: Hu-nan sheng... "Pei tao chüeh-kuo-ti ku mu tsang" (1956), p. 38, fig. 4, profile drawing and rubbing of ornamentation on upper plate.

### *CI.2*

MATERIAL: Jade.

PROVENANCE: Wu-kuei-tun 烏龜墩 ("Black Tortoise Mound"), western suburbs of Ho-fei 合肥, central Anhui<sup>f</sup> Province.

MEASUREMENTS:

L	2.44
W	.71

TYPE: 1.

DATE: Eastern Han.

Two brick-vaulted tombs were excavated at this site in 1954. Among the iron inventory were one ring-handled knife and two iron swords (p. 51), concerning which no particulars are given. There seem to have been no bronze swords found so that it may be assumed the scabbard slide belonged to one of the iron swords.

The slide is described as being decorated with the *hu-wen* 虎紋 tiger-pattern. The photograph is extremely poor and nothing of the decor can be ascertained except the existence of an animal mask at the upper end, facing up, and below a standard geometric ornamentation for slides of this type, consisting of a bilaterally symmetrical arrangement of small spirals and elongated Cs. A depressed line along the sides separates the decorated surface from plain narrow borders.

REFERENCE: An-hui sheng... "Ho-fei hsi chiao Wu-kuei-tun" (1956), p. 50, fig. 14, photo of top; text, p. 51.

### CV.3

MATERIAL: Jade.

PROVENANCE: see CP.2.

MEASUREMENTS:

L 3.23

W .95

TYPE: (?)

DATE: Eastern Han.

See CP.2 for description of site. Slide recovered from tomb 6 (p. 57, fig. 5, structural plan). The tomb contained no sword. The scabbard slide is not illustrated, but described as being decorated on the upper surface with *yün-wen* 雲紋 cloud-pattern and *shou* 獸 animal mask.

REFERENCE: Shen-hsi sheng . . . "T'ung-kuan Tiao-ch'iao" (1961), p. 65.

### CV.4.....Plate 1c

MATERIAL: Jade, grayish green with brown areas; cloth impressions and heavy incrustations of iron oxide on lower aperture plate.

PROVENANCE: Chin-ts'un,<sup>g</sup> about thirteen miles north-east of Lo-yang,<sup>h</sup> Honan<sup>i</sup> Province.

COLLECTION: Royal Ontario Museum, Toronto; NB-4892.

MEASUREMENTS:

L 1.66

W .81

D .50

ApL .75

ApD .25

ApX 1.16

TYPE: 1.

DATE: Late Eastern Chou.

At the upper end, an incised animal mask facing upward. Below, a bilaterally symmetrical geometric decor of small spirals, cross-hatching, elongated C's with tangent spirals projected from the lower end of each C toward

either the side borders or the undefined central vertical axis depending upon the orientation of the C. All elements of the decor are incised, but a slight plasticity is imparted to the larger elements by the depression of the surface along one side of the incisions. Along the central axis, near the lower end, is a single, small, incised circle. The upper pair of elongated C's are joined by two finely incised lines arched slightly downward. Two pairs of small tight (lower pair) and loose (upper pair) spirals spring from the borders and curl downward and outward. The decorated area is separated from thin, plain borders along the longer sides of a shallow groove. The surface surrounding the closely set decor elements is flat.

The upper plate is strongly arched, suggesting a close relationship to Form II scabbard slides, which it resembles. The upper plate projects only a short distance beyond the upper aperture wall, and only slightly further beyond the lower aperture wall, at either end prolonging the arc over the aperture and terminating bluntly. The aperture is rather crudely formed, lacking clearly squared interior corners.

While there is no compelling reason to doubt the authenticity of this slide, it cannot be certainly verified that it actually came from the Chin-ts'un tombs. White (pp. 29, 138) presumes that it came from tomb 7, believed to be that of a military man, and possibly to have belonged to the single bronze sword (pl. LXVIII, 164a) found in this tomb. There is no supporting evidence for this belief. The sword has a double-edged blade, with concave pommel in which a disk of jade was set; the solid bronze hilt cast in one piece with the blade has two round ribs; the guard is of bronze inlaid with turquoise and malachite; the scabbard has entirely disintegrated, its length 27. Related swords have been found among the Late Eastern Chou tombs at Ch'ang-sha<sup>a</sup> (*Ch'u wen-wu* [1954] pl. XXXVII, 72, length 26.47); similar swords are ascribed by Loehr (*Chinese Bronze Age Weapons* [1956], nos. 98-99) to the last half of the fifth century B.C.

The doubt which must remain concerning the provenance of this scabbard slide was strengthened by White himself some years after his initial publication of the objects he managed to salvage from the plundering of these tombs. In this publication, the piece was identified as a "jade scabbard plaque" (p. 138). However, in their study on early glass published four years later, Seligman and Beck included the following note of interest ("Far Eastern Glass" [1938], p. 19, n. 31): "We may draw attention to the fact that no glass or jade cicadas or pieces of sword-furniture are figured in *Tombs of Old Lo-yang*, and that Bishop White informs us that so far as he could discover none were found."

(See further discussion of the Chin-ts'un finds with CH.5.)

REFERENCE: White, *Tombs of Old Lo-yang* (1934b), pl.

CXXXIX, 339a, photo of top; text, p. 137f.

CV.5

MATERIAL: Jade (similar to CV.8, pl. 3b).

PROVENANCE: Tomb 260 of Sekigan-ri<sup>1</sup> [Sōgam-ni],  
Lo-lang<sup>k</sup> district, Korea.

MEASUREMENTS:

L 3.91*	ApL 1.44*
W 1.06*	ApD .25*
D .41*	ApX 1.78*

The slide contracts in width slightly toward the upper and lower ends to 1.02.\*

TYPE: 1.

DATE: End of Western Han.

At the upper end an animal mask facing up, partly in low relief, partly incised. Below, a bilaterally symmetrical decor of flattened spirals in low relief springing from the borders and four pairs of elongated C's (with tangent spirals emanating from the lower end) alternately backing along the undefined central axis and facing from the outer borders. In addition to the flattened, downward-curling spirals along the lateral borders, there are two opposing pairs of short incised lines which begin perpendicular to the border and then turn upward at right angles parallel to the sides. Along the central axis five paired volutes with cross-hatched triangles where they converge on the axis. The carving technique is similar to that described under CV.8. The lower plate of the aperture is extremely thin. The blunt hook at the forward end may result from a contemporary breakage and reshaping as the forward hook is more fully formed on the other scabbard slides of this class from Lo-lang. The upper plate is slightly arched and the lateral grooves separating the slightly beveled decor surface from the raised plain borders rise and fade into the surface at both ends. The broad lower hook with only a thin wedge projecting forward is typical of the Lo-lang slides. The lower hook terminates slightly above the line formed by the inner surface of the lower aperture plate and therefore was not supported by the scabbard wall.

Tomb 260, which had been robbed, was excavated by A. Koizumi and S. Sawa in the fall of 1931. It is a single-chambered, wood-constructed tomb and one of the smallest at Lo-lang,<sup>k</sup> measuring only 2.8 meters square. Very few objects remained. No sword was found.

REFERENCE: Hamada, *Rakurō saikyō-zuka* (1934), pl. CXXXI,8, top and profile photos, approximately natural size.

CV.6

MATERIAL: Jade.

PROVENANCE: Tomb 3 of Sekigan-ri<sup>1</sup> [Sōgam-ni],  
Lo-lang<sup>k</sup> district, Korea.

MEASUREMENTS:

L 2.18\*

W .73\*

The slide narrows more toward the lower end than is usual; width at lower end .65.\*

TYPE: 1.

DATE: Late Western Han.

At the upper end of the slide an animal mask incised, possibly with slight relief, facing upward. An incised drop-shaped element between the striated eyebrows of the animal mask. The design below appears to be incised also and consists of a bilaterally symmetrical decor of flattened spirals springing from the borders and curling downward and two pairs of elongated C's with perpendicular tangent spirals, the upper pair backing along the undefined central axis and the lower pair facing from the outer borders. In addition to the single pair of flattened spirals along the lateral borders, there are two opposing pairs of short incised lines which begin perpendicular to the borders and then turn at right angles upward parallel to the sides. Along the central axis three paired volutes with cross-hatched triangles where they converge on the axial line.

The unusually pronounced taper and somewhat rustic appearance of this common Chinese ornamentation suggest the possibility that this slide was manufactured locally, imitating such probably contemporary pieces as CV.5. Customarily on such pieces a spiral springs from the lower end of each elongated C; here they appear to spring from the center inner side of the C. The pair of thin incised arched lines that generally join the centers of the backed elongated C's across the central axis are here separated, joining the ends of the C's and arching in opposite directions.

Tomb 3, of wooden construction, was excavated by R. Fujita in 1924. Among the inventory was a lacquered vessel inscribed with a date corresponding to A.D. 3. The scabbard slide was found in association with the badly decomposed remains of an iron sword which apparently had a bronze guard. Yetts ("A Chinese Scabbard-Jade" [1926], p. 193) states erroneously that the scabbard slide from this tomb was not published.

REFERENCES:

Sekino, *Rakurō-gun jidai no iseki* (1925), pl. XCVII,586, photo of top only.

Umehara, *Tōa kōkōgaku gaikan* (1947), pl. IX, upper (?).

CV.7

MATERIAL: Jade.

PROVENANCE: Tomb 194 of Sekigan-ri<sup>1</sup> [Sōgam-ni],  
Lo-lang<sup>k</sup> district, Korea.



aperture, which is taken to be the point at which the sword is balanced on its belt, seems to have been set about three-eighths of the distance down from pommel to chape.

The total length of the sword in its scabbard is 41.47. An additional two inches may be added for the missing chape, undoubtedly of jade, and pommel which is detached. The bronze disk pommel was inlaid with a concave jade disk (A—pl. XLI.301) with a small hole in the center through which a metal rivet was passed. On the hilt remains of the braided cord lashing over wood which surrounded the tang are preserved. The guard of jade, 2.17 wide, is decorated with C-hooks and a bovine animal mask. The grip, excluding pommel and guard, is 6.50 \* long.

## REFERENCES:

- A. Sekino, *Rakurō-gun jidai no iseki* (1925), pls. XLI, 300, top and profile photos of slide; XLI, 298, photo of slide on scabbard as found; XLII, 303, scaled drawings, top and profile, of sword and scabbard with slide; XLI, 301, broken concave jade disk from pommel. (See also preliminary report by Sekino in *Koseki Chōsa hōkoku* [s.v. Sekino 1925], p. 654, fig. 273, photo of slide, inverted.)
- B. Hamada, *Yūchikusaizō kogyokufu* (1925), 1, fig. 12, structural plan of tomb; 1, fig. 13, 3–4, sword with slide in position and slide.
- C. Yetts, "A Chinese Scabbard-Jade" (1926), fig. A, top and profile photos of slide (after Sekino); fig. E, drawings, top and profile, of sword with slide in position (after Sekino).
- D. Sirén, *Early Chinese Art* (1930), 2, pl. XCVIII, H, photo of sword and scabbard with slide in position.
- E. Harada, *Kan Rikuchō no fukushoku* (1937), p. 146, fig. 38, top, photo of slide on sword; fig. 38, third from top, profile and top photos of slide; fig. 38, bottom, fragmentary concave pommel disk.
- F. Sirén, *Kinas Konst* (1942), 1, p. 248, fig. 162, left, photo of sword and scabbard with slide in position.
- G. Egami, *Yārashia kodai hōppō bunka* (1948), pl. XXIX, 1, top and profile photos of slide.
- H. Umehara and Fujita, *Chōsen kobunka sōkan* (1948), 2, pl. XXXVIII, 69, photo of sword and scabbard with slide in position.
- J. Dresser, "Ancient Chinese Jades" (1955), p. 26, drawings, top and profile, of sword with slide in position.
- K. Umehara, *Shina kogyoku zuroku* (1955), pl. CIV, upper right, top and profile photos; pl. CIV, left, photo of sword with slide in position.
- L. Mizuno and Kobayashi, *Kōkōgaku jiten* (1959), p. 240, drawings, top and profile, of sword with slide in position.
- M. Sekai *kōkōgaku taikei* (1959), 7, p. 114, fig. 311, photo of sword with slide in position.
- N. Hansford, *Chinese Carved Jade* (1968), pl. LIII, c, photos of top and profile.
- P. Trousdale, "Possible Roman Jade" (1969), p. 59, fig. 2, top and profile photos of slide, after Umehara (1955).

## CV.9

MATERIAL: Jade.

PROVENANCE: See CV.8.

COLLECTION: National Museum, Seoul, Korea.

MEASUREMENTS:

L 3.63*	ApL 1.25*
W .94*	ApD .25*
D .47*	ApX 1.66*
Depth of upper plate over aperture .17.* The slide tapers slightly toward each end: maximum width of .94* is reached at about one-third of the distance down from the head (at the center of the aperture); at the head and heel the width is .91.*	

TYPE: 1.

DATE: End of Western Han.

The decor and profile of this piece are generally similar to CV.8. All of the elements of decor appear to be incised, but possibly some are in low, thin relief line. Toward the center of the slide there is a round knob grain in low relief and just below it a square grain in low relief. The elongated C's with perpendicular tangent spirals which back to the undefined central axis are here joined at their centers across the axis by pairs of thin, arched, incised lines; these arch downward, contrary to the normal direction. The decor surface appears to be flat, separated from thin, plain side borders by deep grooves closed at the lower end by an incised line, but possibly open at the upper end. The larger elements of the decor, which on CV.8 are in relief, here appear to be deeply engraved; those incised elements on CV.8 are here thin and shallowly incised.

Possibly this slide is a locally carved piece in careful imitation of such a piece as CV.8 which is certainly from an accomplished jade atelier in China. Fragments of the scabbard cling to the inner and outer surface of the lower aperture plate.

The scabbard slide was found in association with a double-edged tanged iron sword with remains of a black-lacquered scabbard. The sword lay outside the coffin. The slide appears to have fallen off the scabbard, but its position beside the sword blade marks the level at which it was originally fastened to the scabbard. The chape, presumably of jade, and the pommel, presumably of bronze inlaid with a concave jade disk, are missing; the plain guard appears to be of bronze, of the type shown here on Figure 37. The sword blade does not appear to be preserved at the tip. Probably if the sword were whole the position of the slide would be three-eighths of the distance down from the pommel, as on the sword associated with CV.8.

## REFERENCES:

Sekino, *Rakurō-gun jidai no iseki* (1925), pl. XLIII,309, profile and top photos; pl. XLIII,305, photo of sword with slide beside blade at point where it was attached to scabbard; pl. XLIII,306, scaled diagram and section of sword with slide to side as above.

Umehara, *Shina kogyoku zuroku* (1955), pl. CIV, lower right, top and profile photos.

*CV.10*

MATERIAL: Jade.

PROVENANCE: Tomb 212 of Sekigan-ri<sup>j</sup> [Sōgam-ni], Lo-lang<sup>k</sup> district, Korea.

COLLECTION: National Museum, Seoul, Korea.

## MEASUREMENTS:

L 4.13\*  
W .91

TYPE: 1.

DATE: Late Western Han.

Ornamentation similar to *CV.8* and possibly identical to *CV.7*. Larger elements, elongated C's with perpendicular tangent spirals, paired volutes, flattened border spirals curling downward, in low relief; other elements, presumably in thin, shallow incised lines, do not show clearly in the rather poor photograph.

Found presumably in original position on remains of the black-lacquered scabbard of a double-edged, tanged iron sword. Pommel, presumably of bronze inlaid with concave jade disk, and chape, presumably of jade, are missing. The relative position of attachment of the slide on the scabbard wall is approximately the same as *CV.8* and *CV.9*. The jade guard, with rounded shoulders and a saddle between, is decorated on one side with C-hooks, spirals, and a bovine animal mask.

(See also *CH.6* from this tomb.)

## REFERENCES:

Umehara, *Shina kogyoku zuroku* (1955) pl. CV, lower right, photo of top, showing slide in position on sword blade with scabbard remains; pl. CV, lower center, jade guard.

Na Chih-liang, *Yü ch'i t'ung-shih* (1964) pl. LXXIV, 2 (guard) 3 (slide); (after Umehara).

*CV.11*

MATERIAL: Jade.

PROVENANCE: Lo-lang<sup>k</sup> district, Korea.

## MEASUREMENTS:

L 3.56*	ApL 1.34*
W .98*	ApD .25*
D .45*	ApX 1.71*
Depth of upper plate over aperture .13.*	

TYPE: 1.

DATE: Late Western Han.

Profile and ornamentation similar to *CV.8*. Lower hook extends downward to point level with inner side of lower aperture plate and therefore probably rested against the scabbard wall. Animal mask at upper end executed more freely and with greater vigor than on other Lo-lang slides. The interior of the aperture is clogged with debris.

## REFERENCE:

Umehara, *Shina kogyoku zuroku* (1955), pl. XCIX, lower left, no. 3, top and profile photos.

*CV.12*

MATERIAL: Jade.

PROVENANCE: Lo-lang<sup>k</sup> district, Korea (?).

## MEASUREMENTS:

L 1.31\*  
W .75\*

TYPE: 1.

DATE: Western Han. (?).

Seemingly almost identical to *CV.4* in ornamentation and, insofar as it can be ascertained, in carving technique. Possibly belongs to the XCV class.

No details concerning the excavation have been given and the reliability of this piece must therefore remain in doubt.

(Cf. *CV.35* and *CV.82*.)

REFERENCE: Umehara, *Shina kogyoku zuroku* (1955), pl. XCIX, lower left, no. 5, photo of top.

*CV.13* . . . . . Plate 1d

MATERIAL: Jade, pale grayish green with lighter and darker markings; partly decolorized; iron oxide stains on under side; evidence of prolonged use, the aperture wall worn through at the upper left corner and exhibiting considerable wear at the lower right corner.

COLLECTION: Art Institute of Chicago, 50.745; Edward and Louise B. Sonnenschein Bequest.

## MEASUREMENTS:

L 2.16	ApL 1.13
W .83	ApD .28
D .52	ApX 1.39
Depth of upper plate over aperture .20.	

TYPE: 1.

DATE: Late Eastern Chou.

At the upper end an animal mask in low relief with striated eyebrows. The relief outline of the eyes is especially prominent. Below, a bilaterally symmetrical decor of elongated C's with perpendicular tangent spirals, flattened border spirals curling downward, paired volutes, cross-hatching, relief rectangles in an arrangement similar to *CV.8*. The carving of the ornamentation is, however, here much more vigorous and lively. The elements are



closely crowded one upon the other and the small surface areas between the elements are not flat, but dissolved in undulating plains so that an impression of motion and interaction between the various elements is achieved. The principal elements of the decor, the elongated C's and paired volutes along the undefined central axis, are more plastic and less ridged than those on CV.8 and the relationship of forms here is less formal.

The upper plate is rather strongly arched, terminating above the aperture with a short beak-like projection. The exterior of the upper plate below the aperture is longer, and curves inward abruptly, forming a blunt inward-projecting wedge.

REFERENCE: Salmony, *Sonnenschein Collection* (1952) pl. XCIII,6, photo of top, inverted.

#### CV.14 . . . . . Plate 4d

MATERIAL: Jade, mottled grayish green; surface decoration; no evidence of wear; slight vertical taper.

COLLECTION: Art Institute of Chicago, 50.832; Edward and Louise B. Sonnenschein Bequest.

MEASUREMENTS:

L 4.09	ApL 1.41
W .94	ApD .27
D .58	ApX 1.89
Depth of upper plate over aperture .20.	

TYPE: 2.

DATE: Late Western Han.

At the upper end an incised animal mask with striated eyebrows extended upward from the head along the borders; a cross-hatched, lozenge-shaped element between the brows. Below, a bilaterally symmetrical decor of flattened border spirals curling upward, elongated C's and paired volutes along the central axis defined by a low, beveled ridge running the length of the decorated surface. The elongated C's are in two interlocked groups of four, each consisting of an opposed pair backing on the central ridge and a second pair joined to one end of the former, backing against the borders. From the free spiraled end of each C an incised curved line extends to either the axis or the border depending upon the direction the open side of the C faces. The C's backed to the vertical axis are joined at their centers by two pairs of incised downward arched lines, each pair reaching to the crest of the axis, rather than a single pair joining across the axis as on CV.9. The C's backing against the side borders are joined to these by a pair of incised arched lines. From the ends of the animal mask eyebrows, two elongated C-hooks curl downward. The decorated surface which appears to be slightly arched is separated from the thin plain lateral borders by grooves which are closed at the lower end by an incised line.

The principal geometric elements of the decor are

carved in thin relief line. There are no relief hooks perpendicular to the axis of the slide as on CV.8, so that the entire orientation of the design serves to emphasize the length of the slide. This, in conjunction with the flat surface upon which these elements rest, imparts to the composition a dull formality bordering on conventionalization. The carving of the decor elements is not of highest quality and related forms are not uniform in size throughout.

The upper plate is terminated above in a regular, rounded and undercut hook. At the lower end, the plate angles inward and is cut off parallel with the upper surface and undercut to form a forward-projecting wedge.

REFERENCE: Salmony, *Sonnenschein Collection* (1952), pl. CVIII, 3, photo of top.

#### CV.15

MATERIAL: Jade, light green, partly decomposed; no evidence of wear; iron-oxide stains on exterior of lower aperture plate.

COLLECTION: Fogg Art Museum, Harvard University; G. L. Winthrop Bequest.

MEASUREMENTS:

L 2.63; with extended relief 2.69	ApL 1.06
W .91 at lower end; .97 at top	ApD .25
W 1.25 with extended decor	
Depth of upper plate over aperture .14.	

TYPE: 1, variant.

DATE: Han, probably early western.

At the upper end an animal mask in low relief with striated eyebrows. Between the eyebrows, an incised drop-shaped ornament. Below, on the main body of the slide, a bilaterally symmetrical decor of flattened border spirals curling downward, partially outlined rectangles in relief projected perpendicular to the border, elongated C's with perpendicular tangent spirals. The principal geometric elements are somewhat sculptural in quality, volume being given to the forms by varying thickness of the relief lines. The central axis is defined in two places by opposed curved lines emanating from paired elongated C's and proceeding upward parallel to the axis for a short distance before joining and terminating. A somewhat similar partial definition of the axis is found on CV.13.

Extending along the right side is a hydra partly in relief on the surface of the slide and partly in open-work where it projects out from the side. The body of the hydra is thin and long, stringy even, but its complex and seemingly arbitrary convolutions and more organic contours do not wholly agree with the flatter, formalized, brittle geometric late Chou treatment of this animal form. The forms and the style of the geometric decor are very close to late Chou types, but they are more loosely organized. The greater emphasis on plastic contours

over formal linear design suggests the early Han development of a form derived from late Chou jade carving techniques.

The slightly arched upper plate is broadest at the head and tapers more sharply than is usual toward the lower end. The upper end does not terminate in the usual hook, but curves downward to meet the extended level undersurface of the upper plate at an acute angle. Set in from the head on the under side, an angular ridge crosses the breadth of the upper plate.

REFERENCE: Salmony, *Carved Jade of Ancient China* (1938), pl. LVIII, 2, photo of top.

#### CV.16

MATERIAL: Jade, yellowish brown with ruddy brown clouded areas, especially at the upper end and on the under side; broken .78 below aperture.

COLLECTION: Museum of Fine Arts, Boston, 12.1074.

##### MEASUREMENTS:

L 3.03 (estimated original L 3.90)	
W 1.02	ApL 1.41
D .50	ApD .25 to .28
Depth of upper plate over aperture .16.	

TYPE: 1.

DATE: Late Western Han.

Ornament and style of carving and profile similar to CV.8. At the break below the aperture, the stone has been ground smooth and polished. The unaltered stone here is an opaque yellowish white, less rich in coloration than the older surfaces.

Unpublished.

#### CV.17

MATERIAL: Jade, pale green with buff and cream colored general surface decomposition; traces of iron oxide on base of aperture.

COLLECTION: Fogg Art Museum, Harvard University, Cambridge, Massachusetts, 43.50.375; G. L. Winthrop Bequest.

##### MEASUREMENTS:

L 3.38	ApL 1.30
W 1.01	ApD .25 to .28
D .53	
Depth of upper plate over aperture .17.	

TYPE: (?).

Animal mask at upper end; below, a bilaterally symmetrical ornamentation of elongated C's, spirals, volutes.

Unpublished.

CV.18 ..... Figure 15, Plate 5c

MATERIAL: Jade, green with spots of brown (iron?) oxidation; a portion of the upper plate at the lower left

side broken off.

##### MEASUREMENTS:

L 4.53
D .59

TYPE: 2.

DATE: Early to mid Eastern Han.

At the upper end an animal mask, partly in relief, partly incised, with striated eyebrows extended upward from the head along the borders. Between the brows a cross-hatched triangle. Two elongated C-spirals curl toward the central axis from the center of each brow. Below a bilaterally symmetrical geometric decor of an unusual type. Opposed pairs of elongated C's executed in thin relief line alternately back upon the central vertical axis and upon the side borders. The lower end-spiral of alternate elongated C's along the side borders is replaced by an elongated C-spiral curling upward and inward toward the central axis. The central axis is defined by a thin, beveled relief line interrupted at two points by paired volutes and an arched line from which comblike striations project downward (cf. CV.20, CV.65, CV.96). At three other points the axial line widens to enclose cross-hatched diamonds, which are joined on two sides by slender lines to the centers of elongated C's backing along the side borders. At the lower end the axial line divides into a pair of downward opening volutes which bracket a cross-hatched triangle on the lower border. The C's backing upon the axis are joined to it from either side by pairs of thin incised lines arching downward. From the inside center of each of these C's a thin line is projected to the side border, terminating in a tight upward curling spiral. The surface area between the principal elements in relief is flat.

The slide has an exceptionally elongated and elegant profile with a well-formed forward hook and slightly back-sloped forward edge. The slightly arched upper plate curves inward at the lower end where a forward-projecting wedge on the under side forms a hook. The end hooks extend inward to a depth almost equal to that of the inner surface of the lower aperture plate, so that they doubtless rested against the scabbard wall.

REFERENCE: Pelliot, *Jades archaïques de Chine* (1925), pl. XLIII, 1 and 3, top and profile photos; text, p. 119, ascribes to Sung dynasty and, following an early opinion of Rostovtsev ("Une trouvaille de l'époque gréco-sarmate de Kertch" [1923]), regards it as a sword guard.

#### CV.19

MATERIAL: Jade.

PROVENANCE: Purchased in Shou-hsien,<sup>1</sup> Anhui Province.

TYPE: 2.

DATE: Late Western Han to early Eastern Han.

At the upper end an animal mask, partly in relief, partly incised, with upswept striated eyebrows. From the end of each brow a small incised spiral curls downward and toward the central vertical axis. Below, a bilaterally symmetrical geometric decor the principal elements of which are three pairs of elongated C's in relief line alternately backing upon the central axis and upon the side borders. The C's are set in two lines equidistant from the side borders and central axis on either side, a position similar to that described under CV.23. The published photograph does not permit detailed observation of the incised lines, but it seems likely that incised C-spirals curl upward and downward from the ends of each elongated C in the direction of the central axial ridge or side borders in accordance with the orientation of the elongated C. The central axis is defined by a low, beveled relief line dividing at two points to frame cross-hatched diamonds attached on two corners to the upper ends of elongated C's. There is a pentagonal cross-hatched element between the brows of the animal mask, and at the lower end a small incised circle bracketed by two compound curved lines rising from the lower border and joining with the central axis.

REFERENCE: Karlbeck, "Selected Objects from Ancient Shou-chou" (1955), pl. LXI, 1, photo of top; text, p. 125.

#### CV.20

MATERIAL: Jade, opaque whitish green with translucent caramel colored areas; portions of the upper surface decolorized by a film of surface decomposition; heavy iron-oxide stains on base.

PROVENANCE: Shou-hsien,<sup>1</sup> Anhui Province (?)

COLLECTION: British Museum, London, 1935.1-5.5.

MEASUREMENTS:

L 2.03	ApL .91
W .91	ApD .25
D .47	ApX 1.22

Depth of upper plate over aperture .13. The sides taper inward so that the width of the lower aperture plate is .81.

TYPE: 1, variant.

DATE: Late Western Han.

At the upper end an animal mask, partly in relief, partly incised, with upswept striated eyebrows. An additional striated curved peak rises from the center of each brow. Between the brows a prominent cross-hatched triangle. Below, a bilaterally symmetrical geometric decor. Five pairs of elongated C's alternately back upon the central vertical axis and against the side borders, with perpendicular tangent C-spirals from the upper end of each C extending toward the borders or the axis in accordance with the placement of the C's and curling upward. The tangent spirals from the elongated C's backing upon the borders connect to forms along the

axis. Along the axis, near the center of the slide, a pair of opposed volutes opening upward. An arched incised line connects the volutes at the upward open end and short, comblike striations project downward from this line (cf. CV.18, CV.65, CV.96). Below this pair of volutes, and connected to it by a narrow, beveled relief line defining the vertical axis at this point, is a cross-hatched lozenge. Below this, at the lower end, another pair of volutes with comb striae similar to the first. The upper and lower pairs of elongated C's backing upon the axis are joined at their centers by two incised lines arched downward and extending across the axis. The central pair, backing upon the axis at the point where it is defined by the relief line, are individually joined to this line by a pair of incised lines arched downward.

The principal elements of the decor are executed in a beveled relief line; the surface area between the elements is relatively flat.

The crisp profile lines and small size of this slide suggest comparison with late Eastern Chou work, but the quality of the carving is generally somewhat less accomplished and the arrangement of the geometric elements of the decor is more rigidly formal; the forms are less freely interrelated than on the late Chou and early Western Han pieces. There is a clear relation to such Type 2 slides as CV.18.

The upper plate is slightly arched. The forward edge slopes inward, but is blunted. The lower end of the upper plate turns sharply inward and a rounded wedge projects upward to form a small hook. The aperture is relatively deep in relation to the length of the slide.

REFERENCES:

Jenyns, *Chinese Archaic Jades* (1951), pl. XXXV,D, photo of top; text, p. xxxvii (for W. = width, read "length").

Karlbeck, "Selected Objects from Ancient Shou-chou" (1955), pl. LXI, 3, photo of top; text, p. 126.

Savage, *Chinese Jade* (1965), pl. II, C, bottom left, photo of top; reduced size photo from Jenyns (1951).

#### CV.21

MATERIAL: Jade.

PROVENANCE: Acquired in Shou-hsien,<sup>1</sup> Anhui Province.

COLLECTION: O. Karlbeck, Stockholm.

MEASUREMENTS:

L 3.31
W .78

TYPE: Atypical.

DATE: Han.

At the upper end an animal mask, seemingly entirely incised. Below, a bilaterally symmetrical decor, incised or in very slight relief, of elongated C's curvilinear forms

and spirals of unusual form and arrangement. Near the lower end at each side is a T-shaped ornament reminiscent of similar types frequently encountered on late Eastern Chou jade work, but the workmanship, which does not appear to be of a high quality, and the general character of the ornamentation do not suggest that the piece belongs to this period. Two small spirals spring from the tip of each eyebrow of the animal mask and a C-spiral curls downward, along the undefined central axis, from the center of each brow, both characteristic elements of Type 2 slides of Han date.

The indistinctness of the published photograph prohibits detailed observation of this slide.

REFERENCE: Karlbeck, "Selected Objects from Ancient Shou-chou" (1955), pl. LXI, 4, photo of top, text, p. 126.

**CV.22** ..... Figure 9, Plate 2a

**MATERIAL:** Jade, pale green, partly decolored with some areas of surface decomposition; heavy iron-oxide stains on bottom.

**COLLECTION:** British Museum, London, 1945.10-17.43; O. Raphael Bequest.

**MEASUREMENTS:**

L 3.97	ApL 1.50
W 1.00	ApD .36
D .67	ApX 2.02
Depth of upper plate over aperture .20. The sides taper inward slightly so that the width of the lower aperture plate is .94.	

**TYPE:** 1.

**DATE:** Early to middle Western Han.

At the upper end an animal mask, partly in relief, partly incised, with striated eyebrows. The representation of the animal face is more detailed than usual, with pronounced teeth, fangs and whiskers on the forward edge. Between the eyebrows an incised drop-shaped ornament. Below, a bilaterally symmetrical decor of elongated C's, paired volutes and border spirals. At even intervals along each side border three flattened spirals curling downward. Between each two border spirals, and between the lowermost spiral and the lower end, are rectangles in low relief projected perpendicular to the border and outlined on the lower and inner sides by shallow incised lines which do not strictly follow the contour of the rectangles. The six pairs of elongated C's alternately back upon the undefined central vertical axis, with perpendicular tangent C-spirals curling out from the lower end towards the side borders, and upon the side borders with similarly placed C-spirals extended toward the central axis. Along the central axis are six pairs of opposed volutes alternately opening upward and downward, with incised triangles where their ends converge on the axis. The elongated C's backing upon the axis are

joined at their centers by pairs of incised straight, or slightly downward-arched, lines reaching across the axis. The elongated C's backing upon the borders are not so connected to the borders by incised lines of this type. Along the axis, placed below the upper two downward-opening pairs of volutes, are two small circular knob grains, incised around the top of shallow rises in the surface. At opposite sides of the lower end two short incised lines, projected inward for a short distance mark 45 degrees in the right angles formed by the borders. The decor is separated from narrow plain side borders by concave grooves which rise to the surface level of the upper plate at each end and are closed by an incised line across each end.

The upper plate is very slightly arched. The slight inward slope of the forward edge is characteristic of the finest slides of Western Han age. The lower end slopes inward sharply to form the lower hook, defined by a narrow wedge projecting forward or upward. The hooks terminate slightly above the extended line of the inner surface of the lower aperture plate so that they probably were not supported by contact with the scabbard wall.

The carving is uniquely meticulous and the treatment of the surface area, which is never flat but undulates subtly between the decor elements, enlivens and prevents the surface, more fully charged with ornament than on most pieces, from appearing crowded, and imparts a plastic quality to the decor elements. The resulting cut-gem crispness of sharp edges set in beveled surfaces enhances the clean lines and graceful proportions of this possibly finest of scabbard slides recorded here. The following exaggerated sectional sketches of three elements from the surface decoration illustrate the nature of the surface carving (Figure 96).

**REFERENCES:**

London, Royal Academy. *International Exhibition of Chinese Art* (n.d.), p. 28, no. 375 and pl. XXXVIII, 375, oblique top/profile photo.

London, Royal Academy. *The Chinese Exhibition: A Commemorative Catalogue* (1936), p. 16, no. 375, not illustrated.

Jenyns, *Chinese Archaic Jade* (1951), pl. XXXV, A photo of top.

Umehara, *Shina kogyaku zuroku* (1955), pl. CVI, top left, photos of top and of profile.

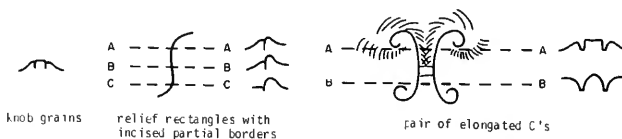


FIGURE 96.—Sections of decor elements on scabbard slide CV.22.

Savage, *Chinese Jade* (1965), pl. II, C, top, photo of top (reduced-size copy from Jenyns [1951]).

CV.23 ..... Figure 10, Plate 4e

**MATERIAL:** Jade, light greenish brown translucent, with clouds of darker brown in the interior; small areas of white surface decomposition; possible traces of iron-oxide stain on base of aperture; small chip at the exterior base of the lower aperture wall, reground and polished.

**COLLECTION:** University of Michigan, James Marshall Plumer Memorial Collection.

**MEASUREMENTS:**

L 3.97	ApL 1.56
W .91	ApD .20
D .44	ApX 2.00
Depth of upper plate over aperture .20.	

**TYPE:** 2.

**DATE:** Late Western Han or early Eastern Han.

At the upper end an animal mask, partly in relief, partly incised, with upswept striated eyebrows outlined by low, beveled relief lines. The brows are not rounded at the ends above the snout in the usual manner, but are squared by a vertical line separating them. The outer ends of the brows turn at right angles where they encounter the side borders and extend downward along the borders for a short distance before terminating in curls. An incised C-spiral curls downward from the tip of each brow. Below, a bilaterally symmetrical decor the basic unit of which is paired, elongated C's alternately facing and backing toward the central axis. The C's, executed in a rather broad, beveled relief line, are in two lines equidistant from the side borders on either side of the central vertical axis rather than in the usual Type 1 positions alternately close to the borders and to the axis. From the upper end of each elongated C backing toward the central axis, an incised C-spiral curls upward; from the lower end, a similar incised spiral curls downward. The central axis is defined by a beveled relief line which divides at the upper and lower ends to enclose cross-hatched triangles. At three regular points along the axis the line divides to enclose cross-hatched diamonds which are joined at two corners to the upper ends of paired C's facing the axis. The elongated C's are joined at their center backs to either the borders or to the central axis by pairs of incised lines, straight or with a slight upward arch, which are projected greater distances than usual owing to the position of the C's as noted above. At opposite sides of the lower end two incised lines projected inward for a short distance mark 45 degrees in the right angles formed by the borders.

The relief elements are raised above a flat ground lowered between thin plain side borders. The upper plate is slightly arched. The forward edge curves inward with a slight back-slope and terminates in a well-formed hook. The lower end of the upper plate curves sharply inward and a hook is formed by a forward projecting wedge on the underside.

(Cf. CV.43, CV.90)

**REFERENCES:**

University of Michigan, *Early Chinese Jades* (1953), no. 117, photo of top.

*Detroit Institute of Arts, James Marshall Plumer Collection* (1962), p. 12, no. 119, not illustrated.

University of Michigan, *James Marshall Plumer Memorial Collection* (1964), no. 106, illustrated, oblique top/profile photo.

CV.24 ..... Figure 10, Plate 4a

**MATERIAL:** Jade, white with cinnabar (?) impregnated in incised decor lines.

**COLLECTION:** Late Mr. Ueno Seiichi,<sup>a</sup> Osaka.

**MEASUREMENTS:**

L 3.52	ApL 1.34*
W .92	ApX 1.75*
D .62	

**TYPE:** 2.

**DATE:** Mid to late Western Han.

At the upper end an animal mask, partly in relief, partly incised, with upswept striated eyebrows that do not meet in the center. Above and between the brows an incised drop-shaped ornament. Below the mask, a simplified bilaterally symmetrical decor of elongated C's and paired volutes. The upper pair of C's backs upon the central axis, the lower two upon the side borders. From the lower ends of the upper pair incised curved lines are drawn out perpendicularly to the borders. Similar lines emanate from the upper ends of the lower two pairs of C's and extend to the central axis. The lower ends of these C's are interlocked with a second elongated C facing the borders, but parallel to the vertical axis. From the lower ends of these subsidiary C's incised lines are drawn to the borders. Along the central axis pairs of downward-opening volutes with cross-hatched triangles where they converge on the axis alternate with incised drop-shaped ornaments. The central axis is defined by a thin, beveled relief line connecting the volutes and drop-shaped ornaments, interrupted at two points. The elongated C's backing upon the axis are individually joined to the axis line by pairs of incised lines arched downward. Those backing upon the side borders are

joined to these by similarly oriented pairs of incised lines. Along the side borders are three opposed pairs of flattened spirals curling upward.

The principal elements of the decor are executed in a thin, beveled relief line incised along one side. The elements are widely spaced with much flat surface area surrounding. The decorated area is separated from thin plain borders by lateral grooves which are closed at the lower end by an incised border. The upper end appears to be open.

The rather thick upper plate is slightly arched, with well-proportioned hooks at either end. The forward edge does not, however, slope backward as it does on the finest pieces of this period. Both hooks terminate at a line above that formed by the extension of the inner surface of the lower aperture plate so that they were not supported by the scabbard wall.

(Virtually identical to SR.1)

REFERENCES:

Hamada, *Yūchikusaizō kogyokufu* (1925), 2, pl. XX1, 46, color photo of top; 1, pl. V, 46, reduced-size drawing of profile and rubbing of top.

*Shū Kan ihō* (1932), pl. XXXIII, 1, photo of top.

CV.25 . . . . . Plate 3d

MATERIAL: Jade.

COLLECTION: Eguchi Jirō,<sup>m</sup> Ōsaka.

MEASUREMENTS:

L 3.25*	ApL 1.19*
W 1.03*	ApD .25*
D .55*	ApX 1.59*
Depth of upper plate over aperture .19.*	

TYPE: Mixed 1 and 2.

DATE: Early to mid Eastern Han.

At the upper end an animal mask, partly in relief, partly incised, with striated eyebrows. Between the brows a rounded triangle cross-hatched. Below, a bilaterally symmetrical geometric decor. Along the borders three opposing pairs of small rounded spirals: the upper pair, incised, curl inward and upward; the lower two pairs, in relief line, curl outward and downward. Five pairs of elongated C's alternately back against the central vertical axis and the side borders, with perpendicular tangent C-spirals emanating from the lower end of each C and curling toward the axis or the borders in accordance with the placement of the C's. Along the central axis, defined by a beveled ridge, are five pairs of volutes alternately opening upward and downward, with cross-hatched triangles where they converge on the axis. The elongated C's backing against the axis are separately joined to the axial

ridge by pairs of incised lines arched downward. The C's backing upon the outer borders are joined to these by similar pairs of incised lines. From the tight curl at the end of each C-spiral reaching the outer borders, a thin, curved, incised line is drawn from the inner side to meet the border below the spiral.

The elongated C's, C-spirals, volutes and side spirals are executed in a beveled relief line similar to that of the central axis. The surface area between the elements is relatively flat.

The upper plate is arched, the forward end rounded, but the hook on the underside incompletely formed. The lower end of the upper plate is bent inward, but no hook is formed.

REFERENCE: Umehara, *Shina kogyoku zuroku* (1955), pl. CVII, 9, photos of top and profile.

CV.26

MATERIAL: Jade, white, with pale yellowish areas.

COLLECTION: K. C. Wong (now dispersed).

MEASUREMENT:

L 3.25

TYPE: 2.

DATE: Possibly authentic, Eastern Han.

The published photograph is indistinct. Decor of the upper plate probably similar to that of CV.19. At the upper end, an animal mask. Below, a bilaterally symmetrical geometric decor. Paired, elongated C's in relief alternately backing and facing the central axis, are joined, in accordance with their position, by pairs of incised lines arching downward, to the central vertical axis or to the side borders. From the upper ends of the C's backing upon the borders, incised lines are drawn to the central axis. Along the side borders, opposed pairs of small flattened spirals curl upward or downward. The central axis is defined by a narrow relief line, interrupted at three (?) points by paired volutes opening downward, and dividing at two (?) points to enclose cross-hatched diamonds. Thin, plain lateral borders.

REFERENCES:

Wong, "Ancient Jades," 14 (1) pl. preceding p. 7, top right, photo of top.

*Wong Collection of Ancient Chinese Jades* [1937], p. 13, no. 185, not illustrated.

CV.27

MATERIAL: Jade, white with black markings; apparently a small section broken off the lower end.

COLLECTION: K. C. Wong (now dispersed).

MEASUREMENTS:

L 3.50

TYPE: 1, variant.

DATE: Probably late antiquarian.

The published photograph is indistinct. At the upper end, an abbreviated, somewhat squared animal mask. Below, a bilaterally symmetrical geometric decor. Four pairs of flat, elongated C's in relief line alternately back upon an apparently undefined central vertical axis and upon the side borders, with perpendicular tangent C-spirals curling from the lower ends of the C's toward the side borders or toward the central axis in accordance with the position of the elongated C. Along the side borders, four opposed pairs of small spirals alternately curling downward and toward the borders, downward and toward the axis. Along the axis are two pairs of volutes opening downward and two pairs of double C-hooks joined at the axis and curling outward and upward to either side. Joined to the under sides of the C-hooks where they converge on the axis are small incised wedges, apparently not filled with cross-hatching. Thin, plain lateral borders.

REFERENCES:

Wong, "Ancient Jades," 14 (1) pl. preceding p. 7, right, second from top, photo of top.

Wong *Collection of Ancient Chinese Jades* [1937], p. 13, no. 186, not illustrated.

CV.28 . . . . . Figure 6

MATERIAL: Jade.

MEASUREMENTS:

L 1.94*	ApL 1.06*
W .88*	ApD .19*
D .41*	
Depth of upper plate over aperture .16.*	

TYPE: 1.

DATE: Late Eastern Chou.

At the upper end an animal mask with striated eyebrows. Below, a bilaterally symmetrical decor consisting of two pairs of elongated C's backing against the central vertical axis with perpendicular tangent spirals from their lower ends extending to the side borders; three pairs of flattened border spirals curling downward, and along the undefined central axis, three pairs of opposed volutes with cross-hatched lozenges where they converge on the axis. There are two small, round knob grains on each side set between the border spirals. Thin, plain borders are separated from the ornamented surface by lateral grooves. The relief appears to be defined by side-cutting and not to exceed the surface level.

The upper plate is slightly arched and the extensions of the plate above and below the aperture are very short. At the lower end the upper plate bends inward, ending in a blunted projection rather than a hook; the forward edge slopes inward and down and a rudimentary hook, slightly undercut, is formed.

The carving, especially in the animal mask, appears to be somewhat coarse for Eastern Chou. The eyebrows are not clearly bordered where they meet in the center above the snout, but are left open.

REFERENCE: Huang Chün, *Ku yü t'u lu* (1939), III, 21:a, lower, rubbings of top and profile; scale uncertain.

CV.29

MATERIAL: Jade.

MEASUREMENTS:

L 1.97*	ApL 1.06*
W .91*	ApD .19*
D .41*	ApX 1.22*
Depth of upper plate over aperture .16.*	

TYPE: 1.

DATE: Late Eastern Chou.

Decor of the upper plate virtually identical to CV.28. The end hooks appear to be slightly more developed. Possibly a slight rise along the central vertical axis.

REFERENCE: Huang Chün, *Ku yü t'u lu* (1939), III, 19:b, upper, rubbings of top and profile; scale uncertain.

CV.30 . . . . . Plate 3e

MATERIAL: Jade.

COLLECTION: National Palace Museum, Taipei, Taiwan.

MEASUREMENTS:

L 3.72	ApL 1.25*
W 1.06*	ApX 1.72*

TYPE: 1.

DATE: Early to mid Eastern Han.

At the upper end an animal mask, partly in relief, partly incised, with striated eyebrows. Between the brows an incised drop-shaped ornament. Similar ornaments along the central vertical axis at the center and at the lower end. Below, a bilaterally symmetrical decor of border spirals in relief curling downward, alternating with thin incised lines perpendicular to the borders customarily defining the lower and inner sides of small relief rectangles here are not evident; paired elongated C's alternately backing upon the central axis and facing it from the side borders, with perpendicular tangent C-spirals projected from their lower ends either toward the central axis or side borders in accordance with the

placement of the elongated C; four pairs of opposed volutes along the axis, two opening upward, two downward, with cross-hatched diamonds where their ends converge on the axis. The central axis is defined by a low beveled ridge at those points where elongated C's back against it (cf. *CV.8*). The paired elongated C's backing upon the axis are joined to it by pairs of incised lines arched upward which meet from either side, but do not cross, the ridge of the axis. The C's backing upon the side borders are joined to these by pairs of incised lines arched upward. The principal elements of the decor appear to be executed in a low, beveled relief line.

## REFERENCES:

*Ku-kung*, no. 36, p. 10, top right, photo of top.

*Ku-kung chou-k'an*, no. 18, p. 1090, slightly oblique top/profile photo.

Na Chi-liang, *Yü ch'i t'ung-shih* (1964), pl. LXXII, 3, photo of top.

## CV.31

MATERIAL: Jade.

COLLECTION: National Palace Museum, Taipei, Taiwan.

## MEASUREMENTS:

L 4.27\*

W .91\*

ApL 1.56\*

Slight tapering toward the lower end where the width is .86.\*

TYPE: 2, variant.

DATE: Han.

The upper surface appears to be worn and considerably decomposed. This condition, in conjunction with indistinct published photographs, renders it difficult to discern the detail of the ornamentation. At the upper end, an animal mask. Below, a bilaterally symmetrical geometric decor consisting of paired elongated C's with perpendicular tangent C-spirals similar to those of Type 1 in conjunction with vertically interlocked elongated C's similar to those of Type 2 (e.g., *CV.14*). Along the side borders, small spirals curling upward as on Type 2 slides. Judging from slightly oblique photographs the profile appears to be similar to *CV.24*. Probably authentic.

## REFERENCES:

*Ku-kung*, no. 36, p. 10, top left, slightly oblique top/profile photo.

*Ku-kung chou-k'an*, no. 18, p. 1096, slightly oblique top/profile photo.

(Slightly differing measurements are quoted in the above two works.)

Na Chih-liang, *Yü ch'i t'ung-shih* (1964), pl. LXXII, 1, photo of top; gives length 4.53.

CV.32 .....Plate 4b

MATERIAL: Jade.

COLLECTION: Minneapolis Institute of Arts, Alfred F. Pillsbury Bequest.

TYPE: 2.

DATE: Mid to late Western Han.

Perhaps identical to C.1. The decor of the upper plate is virtually identical to that of *CV.24* and *SR.1* with the exception of the lower end where the decor pattern is terminated sooner so that the lowermost pair of elongated C's is not extended by a similar pair of C's interlocked at their lower ends.

REFERENCE: "Carved Jades of Shang and Chou" (1942), p. 119, bottom, photo of top.

CV.33 .....Plate 3a

MATERIAL: Jade, pale green with a large central area of softer white surface decomposition; the decorated surface appears to be considerably worn (the striae of the eyebrows being almost effaced) and the inner side of the upper aperture wall appears also to be worn, as though from a strap.

COLLECTION: Dr. Arthur M. Sackler, New York; formerly Mr. and Mrs. Desmond Gure, London.

## MEASUREMENTS:

L 3.35

W 1.00

TYPE: 1.

DATE: Mid Western Han, late second century B.C.

At the upper end an animal mask, partly in relief, partly incised, with striated eyebrows. Along the side borders a single pair of opposed flattened spirals curling downward. Above and below these, on either side, low relief rectangles with incised lines defining the lower and inner sides, similar to *CV.8* or *CV.22*. Four pairs of elongated C's back upon the central vertical axis or face it from the borders, with perpendicular tangent C-spirals attached to the lower ends and extending to the outer borders or toward the central axis in accordance with the placement of the elongated C's. Along the central vertical axis two pairs of opposed volutes open upward, two downward. The two downward-facing volute pairs have cross-hatched triangles where their ends converge on the axis; the upward-opening volutes bracket plastically defined rectangular interiors. The central axis is defined by a low beveled ridge at those points where elongated C's back against it (cf. *CV.8*). The paired elongated C's backing the axis are joined across it, each by a single pair of shallow incised lines arching downward. Near the center and at the lower end, on the axis, small incised circles divided in quarters by two crossing incised lines.

The carving, now worn, was sharp and precise; the



stone has a hard, brittle gloss characteristic of Western Han slides of this type. The upper plate is slightly arched. The upper hook is similar to that of CV.22; the lower end is more rounded and the hook less decisively formed.

## REFERENCES:

Venice, *Mostra d'arte Cinese* (1954), p. 69, no. 206, photo of top, inverted.

Salmony, *Chinese Jade through the Wei Dynasty* (1963), pl. XVI, 6, oblique top/profile photo; ascribed to Late Eastern Chou.

CV.34 . . . . . Plate 1c

MATERIAL: Jade, translucent gray with dark gray and brown markings.

PROVENANCE: Reputedly from Chin-ts'un\* (see CV.4).

COLLECTION: Worcester Art Museum, Worcester, Massachusetts, No. 1955.6.

## MEASUREMENTS:

L 2.91

W 1.10

D .55

There is a slight narrowing at both upper and lower ends, the widest point being just above the center, over the center of the aperture.

TYPE: 1.

DATE: Late Eastern Chou.

At the upper end, partly in relief and partly incised, an animal mask with striated eyebrows. Between the brows where they meet in the center, an incised drop-shaped ornament. Two more similarly shaped ornaments are placed along the undefined central vertical axis between other elements. Below the mask, a complex bilaterally symmetrical geometric ornamentation. Along the side borders are several opposed pairs of small spirals curling downward. These are supplemented by a number of small tight spirals of varied orientation along the borders. Backing upon the undefined central vertical axis and joined across it by pairs of thin incised lines arching downward, are two pairs of elongated C's with perpendicular tangent spirals emanating from approximately the centers of the inward sides of the C's and extending to the outer borders where they curl downward. Along the central vertical axis are four pairs of opposed volutes: the uppermost pair curls upward to bracket the drop-shaped ornament between the brows of the animal mask; the second pair curls downward and from the inward-curling lower ends two lines back-trace upward along the outer sides of the volutes and terminate above the volutes in outward curls; the third pair curls upward and from the inward curls at its upper end, two C-hooks extend upward along the axis and then curl outward toward the borders; the lower volute pair is similar to the second with the addition of a cross-hatched lozenge where

the upper ends of the volutes converge on the axis. In the central position at the bottom of the slide is a small cross-hatched triangle pointing upward, and to either side on the lower end border a small spiral curling outward.

The arrangement of the decor on this comparatively small slide is compact without appearing crowded. The elements of the decor are primarily incised, but the small surface areas between elements are treated so that an illusion of volume is created by the welling up of the surface sharply along the exterior perimeters of the forms and by a gentle sloping away from the incisions on the interior portions of the elements. This technique of carving greatly enlivens the surface of the slide and creates a feeling of interaction between the decorative elements. The workmanship is of extremely high quality and integrity.

## REFERENCES:

Venice, *Mostra d'arte Cinese* (1954), p. 69, no. 207, not illustrated.

Dresser, "Ancient Chinese Jades" (1955), p. 26, lower left, photo of top.

CV.35

MATERIAL: Jade.

COLLECTION: Charles Gabriel Seligman, London.

## MEASUREMENTS:

L 1.88

W 1.03\*

TYPE: 1.

DATE: Late Eastern Chou.

At the upper end, an animal mask with striated eyebrows. Below, a bilaterally symmetrical geometric decor similar to CV.12 of two opposed pairs of elongated C's with perpendicular tangent spirals, flattened border spirals curling downward, and paired volutes joined at the central vertical axis. The upper pair of elongated C's back against the undefined central axis, the lower face toward the axis from the borders. In central position along each side, a small rectangle in low relief projected perpendicular to the border with a thin incised curved line along the lower and inner sides. The principal elements of the decor, including the border spirals, appear to be in low relief, achieved by the pitching downward of the surface around the outlines of the forms. At the lower end, rather indistinct in the published photograph of this piece, are two rather tight spirals curling toward the left.

The profile is not clearly discernible, but it appears that the upper plate is slightly arched and that the ends curve inward, ending in short blunted projections rather than in well-defined hooks.

(Cf. CV.82)

REFERENCE: Hansford, *Seligman Collection* (1957), 1, pl. LXI, B. 34, photo of top; text, p. 112.

**CV.36** ..... Figure 9

MATERIAL: Jade, gray-green, with small spots of surface decomposition; iron-oxide stains on bottom.

COLLECTION: Musée Cernuschi, Paris.

TYPE: 1.

DATE: Early to middle Western Han.

Very similar to **CV.22** in arrangement of decor and in technique of carving. The piece is somewhat shorter, however, with consequently fewer repetitions of the basic decorative units. The sides do not taper, so that the lower aperture plate is fully as wide as the upper plate. The lower aperture plate is somewhat thinner than that of **CV.22**, as also is the forward edge which is slightly back-sloped but does not form a well-defined hook. The lower end of the upper plate turns inward more sharply than on **CV.22**. Possibly it is slightly later in date than **CV.22**, but the differences between the two pieces are not sufficient to suggest the necessity of separating them in time.

The gracefully flowing lines, sense of acute awareness of proportions, and the meticulously accomplished carving combine to make this one of the finest of all scabbard slides.

Unpublished (?).

**CV.37** ..... Figure 6

MATERIAL: Jade, translucent grayish green core, the surface area almost entirely covered with soft whitish decomposed material; fragments of oxidized iron adhering to bottom and inside of aperture and iron-oxide stains in the same areas.

COLLECTION: British Museum, London, 1947.7-12.480.

MEASUREMENTS:

L 1.70	ApL .88
W .77	ApD .25
D .47	ApX 1.13
Depth of upper plate over aperture .13.	

TYPE: 1.

DATE: Late Eastern Chou.

At the upper end, an incised animal mask with striated eyebrows. Between the eyebrows, which overlap in an unusual way (cf. **CG.55**), a small incised drop-shaped ornament. The bilaterally symmetrical geometric ornamentation below consists of two pairs of flattened spirals along the side borders, the upper pair curling downward, the lower pair curling upward and away from the borders (the usual direction of the curl being toward the borders); two pairs of elongated C's, the upper pair backed upon the undefined central vertical axis, with perpendicular tangent C-spirals from their lower ends extending to the borders, the lower pair backed against the side borders

with similar tangent C-spirals extending toward the axis. Along the central axis are two pairs of opposed volutes, the upper pair opening upward and the lower pair opening downward, with cross-hatched triangles at the points where the ends of the volutes converge on the axis. Near the center of each side is a short incised line extending inward for a short distance, the end of which turns upward to parallel the axis. This line does not serve as a partial frame for low relief rectangles as on some later slides of this type (e.g., *CV.8*, **CV.22**). The decorated surface is separated from thin plain borders by lateral grooves; the ends are open.

All elements of the decor are incised. The sides of the incisions are slightly rounded and the surfaces on the inner sides of the elongated C's rise slightly above the normal level so that a slight suggestion of volume is imparted to the forms.

The upper plate is rather strongly arched, with very short extensions above and below the aperture. There are no hooks at the ends of the upper plate, there is only a sharp shallow ridge across the inward side of the upper plate at the upper end. The upper surface of the upper plate is arched horizontally as well, as is customary on most authentic slides of this class, that is, it wells up from each side toward the central axis. In consequence of this, the blunted ends of the upper plate form rounded rectangles, the underside having been ground in a more pronounced down-sweeping arc than the up-curving arc of the upper surface of the upper plate. The sides have no vertical taper, but are squared with the upper and lower plates.

Unpublished.

**CV.38**

MATERIAL: Glass, somewhat porous; tan-colored.

PROVENANCE: Acquired in region of Shou-hsien,<sup>1</sup> Anhui Province.

COLLECTION: His Majesty King Gustaf VI Adolf, Stockholm.

MEASUREMENTS:

L 3.70
W .98
D .67

TYPE: 2.

DATE: Late Western Han.

The published photographs of this slide are unclear. At the upper end, "a somewhat degenerate and indistinct zoö-morphic mask" (A); "with pointed horns [eyebrows?]" (B). Below, a bilaterally symmetrical geometric decor consisting of two columns of paired elongated C's in low relief alternately facing and backing toward the central vertical axis defined by an unbroken relief line. C-spirals curl upward and downward from the ends of the C's

backing toward the central axis, and from the lower ends only of the C's facing the axis. The C's backing toward the axis are joined to it by separate pairs of thin lines (incised?) arched upward; the C's backing toward the borders are joined to these by similar pairs of lines.

The upper plate is slightly arched, with rounded forward edge and well-formed undercut forward hook. The upper plate curves inward at the lower end and a hook is formed by a forward-projecting rounded wedge on the underside. The upper and lower aperture walls slope outward from the lower aperture plate. The contours are somewhat more rounded than on contemporary slides of jade. By analogy with other glass scabbard slides and by the appearance of the aperture wall, it is probable that the sides contract inward from the broader upper plate to a narrower lower aperture plate.

## REFERENCES:

A. Palmgren, *Selected Antiquities from the Collection of Gustaf Adolf* (1948), pl. LV, 2, photo of top; p. 101, fig. 228, drawing of profile.

B. Karlbeck, "Selected Objects from Ancient Shou-chou" (1955), pl. LXI, 2, photo of top.

## CV.39

MATERIAL: Bronze, the upper plate with gold inlays.

COLLECTION: Kiyono Kenji 清野謙次, Kyōto (now dispersed).

## MEASUREMENTS:

L 1.81*	ApL 1.00*
W .75*	ApD .47*
D .59*	

TYPE: Atypical.

DATE: Western Han, or earlier.

The flat upper surface is ornamented with two rows of broad spirals (six in each row) of inlaid gold, curling in various directions. The design continues on the forward edge which forms the upper aperture wall. The spirals are formed into three groupings of four spirals each, a pair on either side. The spirals of each group are interlocked by thin inlaid gold lines with several small spirals branching from them.

The upper plate is slightly arched; there is no extension of this plate forward of the aperture, but below the aperture the upper plate, gradually becoming thinner toward the lower end, extends a short distance and is only slightly bent inward at the end. The contours of the slide are rather rounded so that there is no clear separation of the aperture from the upper plate. It is similar in shape to Form II scabbard slides, except for the lower extension of the upper plate (but cf. *CV.84*, *CG.1*, *CG.58*). The slide appears to be slightly narrower at the lower end where the corners of the upper plate are somewhat more rounded than at the forward edge.

## REFERENCES:

*Shū Kan ihō* (1932), pl. LX, 4, photo of top.

Komai, *Chūgoku kokyō no kenkyū* (1953), pl. XV, 2, photos of top and profile.

## CV.40

MATERIAL: Jade, greenish.

PROVENANCE: Acquired in the vicinity of Shou-hsien,<sup>1</sup> Anhui Province.

COLLECTION: Museum of Far Eastern Antiquities, Stockholm.

## MEASUREMENTS:

L 2.56

TYPE: Atypical.

DATE: Han (?).

The indistinct and slightly oblique published photograph indicates this slide may have an unusual profile. It appears to be a solid rectangle, thicker toward the forward end, the base forming a straight line without the bays to either side of the aperture, which is cut through close to the forward end.

The decor of the flat upper surface is entirely incised and is not enclosed within borders but extends to the edges of the slide. At the upper end, an extremely simplified, somewhat clumsily conceived and executed animal mask with no apparent eyebrows. In the center, above the snout, an incised drop-shaped ornament. Below, a bilaterally symmetrical geometric decor consisting of flat, elongated C's, C-hooks and small spirals in a rather arbitrary, loosely organized pattern. The central vertical axis is undefined. Possibly there are more finely engraved ornaments which are not revealed in the photograph. The incising is irregular and seemingly carelessly executed. Possibly this is an unfinished scabbard slide which had not yet been cut out on the underside and a preliminary pattern only incised on the upper surface. The absence, however, of an allowance for lateral borders makes this suggestion unlikely. It may more likely be a crude serviceable imitation of the more elegant form, made by, or for, someone of limited means, and intended for utilitarian purposes. The sharp slope of the slide toward the shallow lower end is not unique; it may be noted on another unquestionably authentic slide (*CG.18*). Karlbeck ascribes the piece to late Chou or Western Han. The C-shapes are too flat and elongated to agree with such forms on authentic late Chou slides; a date later in Han seems preferable. Close examination might suggest a still later date.

REFERENCE: Karlbeck, "Selected Objects from Ancient Shou-chou" (1955), pl. LIX, 2, photo of top; text, p. 124.

## CV.41

MATERIAL: Jade, rich, bright, opaque orange-red at

upper and lower ends and lower half of lower aperture plate, translucent gray in center; some areas of surface decomposition on upper plate.

COLLECTION: British Museum, London, 1945.10-17.90.

MEASUREMENTS:

L 1.91	ApL .84
W .50	ApD .28
D .47	ApX 1.09

Depth of upper plate over aperture .08. The slide narrows slightly toward each end where the width is .47, the maximum width is reached slightly forward of the center, over the center of the aperture.

TYPE: 2.

DATE: Han, or later.

At the upper end, an animal mask, partly incised and partly in relief, with upswept striated eyebrows. Below, a bilaterally symmetrical geometric decor consisting of two parallel lines of flat, elongated, interlocked C's in relief to either side of the undefined central vertical axis. Attached to the ends of the eyebrows of the animal mask, two long C-spirals in relief line project downward, curling at their lower ends toward the side borders. The curling ends of these C-spirals are connected with the side borders by curved wedges in very slight relief. The surface of the slide between the geometric elements is flat. On the sides are thin, plain, slightly raised borders which are not closed at the ends.

The upper plate is slightly arched. There is a slight back-slope to the rounded forward edge, with a small, pointed, curved wedge on the underside suggestive of a hook. The lower end of the upper plate curves sharply inward and a small hook is formed by a forward-projecting rounded wedge on the underside. The aperture is irregular in shape, uneven on all sides, and not fully cut out in the interior. This appears to be the results of careless workmanship rather than wear. In profile this piece is close to CV.72, but the workmanship is less fine, the proportions less surely conceived, the contours less precisely formed.

Unpublished.

CV.42

MATERIAL: Jade, white with black and rust colored patches and fine veins.

COLLECTION: Metropolitan Museum of Art, New York, 16.144.28.

MEASUREMENTS:

L 2.25	ApL 1.00
W 1.00 to 1.02	ApD .25
D .50	

Depth of upper plate over aperture .16.

TYPE: (?).

At the upper end, an animal mask. Below, a bilaterally symmetrical geometric decor of elongated C's and spirals.

The decorated surface is worn, especially toward the center of the upper plate where the ornamentation is scarcely visible.

The upper plate, slightly arched, terminates at the forward end in a chisel-shaped wedge and is rounded at the lower end. No hooks or inward-projecting ridges are formed.

Unpublished.

CV.43 . . . . . Plate 4f

MATERIAL: Jade, gray translucent with iron-oxide stains on sides, bottom (inside of aperture, on lower and upper hooks and in upper bay).

COLLECTION: British Museum, London, 1947.7-12.507; Henry Oppenheim Bequest.

MEASUREMENTS:

L 3.48	ApL 1.25
W .98	ApD .25
D .53	ApX 1.63

Depth of upper plate over aperture .19. The sides taper inward slightly so that the lower aperture plate is narrower than the upper.

TYPE: 2.

DATE: Late Western Han to early Eastern Han.

Profile and ornamentation similar to CV.23, with the following exceptions. Curled whiskers and stylized teeth are lightly incised on the forward edge. The elongated C's are primarily incised; the surface, otherwise flat, rises slightly to either side of the broad cuts forming the C's. The central vertical axis is an unbroken slightly beveled relief line, without the interruption of cross-hatched diamonds and triangles. The pairs of incised lines joining the elongated C's to the central axis are arched upward; those joining C's to the side borders are arched downward. The eyebrows, where they meet above the snout, are rounded in the usual manner, and the lines of the face are more squared. The incised border at the lower end is scalloped and is unique in this regard. From this lower border, two prolonged C-hooks rise parallel to the axial ridge, terminating in outward curls, and each is joined to this ridge by a pair of incised lines arched upward. The sharp angularity of contour and the brittle gloss of the finished stone, as well as the generally high standard of workmanship it exhibits, speak favorably of its authenticity, as do the tapering of the sides and forceful elegance of profile which is similar to that of CV.23.

REFERENCES:

Jenyns, *Chinese Archaic Jades* (1951), pl. XXXV, B, photo of top.

Watson, *China before the Han Dynasty* (1961), pl. LXVII, photo of top.

Watson, *Handbook* (1963), pl. XXXIV, C, photo of top; dated 4th-3d century B.C.

Savage, *Chinese Jade* (1965), pl. II, C, left center, photo

of top (reduced-size photo from Jenyns [1951]).

Palmer, *Jade* (1967), pl. VII, left, photo of top, slide inverted.

## CV.44

MATERIAL: Jade.

MEASUREMENTS:

L 4.44*	ApL 1.72*
W .88*	ApD .28*
D .52*	ApX 2.09*
Depth of upper plate over aperture .19.*	

TYPE: 2.

DATE: Eastern Han style, but possibly late antiquarian.

At the upper end, an animal mask virtually identical to CV.43. Below, a bilaterally symmetrical geometric decor the principal element of which is paired, flat, elongated C's alternately facing the axis and the side borders, in two columns equidistant from the side borders and the central vertical axis. These C's are joined at their backs near the upper ends to either the central axis or to the borders by pairs of thin incised lines arched downward. The central axis is defined by an uninterrupted relief line which divides at three points to enclose cross-hatched diamonds joined at two corners by curved incised lines to the upper ends of elongated C's facing toward the axis from either side. Along the axial line, five pairs of opposed volutes alternately open downward and upward. Along the side borders, opposed pairs of small spirals curl either downward and toward the border or downward and toward the axis (cf. CV.27). Along the borders also, two opposed pairs of cross-hatched triangles based on the borders and pointing inward (Cf. CV.68, CV.70, CV.77), and two more pairs joined by curved incised lines to the upper ends of elongated C's facing the borders.

The profile appears to be nearly identical to CV.18, but for the contours which are less rigidly defined and the end hooks which are less precisely formed.

REFERENCE: Huang Chün, *Ku yü t'u lu* (1939), III, 18:a, right, rubbing of top; III, 18:b, right, rubbing of profile; scale uncertain.

## CV.45

MATERIAL: Jade.

MEASUREMENTS:

L 2.06*	ApL .81*
W .88*	ApD .22*
D .38*	ApX 1.19*

TYPE: 1, variant.

DATE: Late Eastern Chou.

At the upper end, an animal mask with striated, blunt-ended eyebrows. Between the brows, a drop-shaped orna-

ment. Below, a bilaterally symmetrical geometric decor. Two pairs of rounded elongated C's, the upper backing upon the undefined central vertical axis, the lower backing upon the side borders. Perpendicular tangent C-spirals emanate from the center of the concave side of each elongated C and are projected either toward the central axis or the side borders in accordance with the placement of the C's. Their ends curl downward. The elongated C's of the upper pair are joined across the axis by two incised lines near their upper ends, arched upward. Two pairs of long incised lines, parallel to the borders, are drawn between the tangent C-spirals of the upper pair of elongated C's and the lower pair of elongated C's. Along the central axis, just below the animal mask, a pair of double C-hooks joined at the axis and curling outward and upward to either side (cf. CV.27). Between the two pairs of elongated C's, on the central axis, a pair of opposed volutes opening downward and a cross-hatched triangle at the lower open end of the volutes. Near the upper end, at each side border, a short spiral curling downward. The principal elements of the decor are evidently incised on a flat surface which accentuates their somewhat large, wiry qualities in relation to the surface area of the slide.

The upper plate is slightly arched, terminating at each end in blunt, shallow inward-projecting knobs. The aperture is not of the usual rectangular shape, but a flat oval. The exterior corners of the aperture walls are rounded where they join with the lower aperture plate. These irregularities may derive from the process of taking the rubbing and may not reflect accurately the actual profile.

REFERENCE: Huang Chün, *Ku yü t'u lu* (1939), III, 21:a, upper, rubbings of top and profile; scale uncertain.

## CV.46

MATERIAL: Jade.

MEASUREMENTS:

L 2.06*	ApL 1.00*
W .97*	ApD .33*
D .45*	ApX 1.28*
Depth of upper plate over aperture .08.*	

TYPE: 1, variant.

DATE: End of Chou or early Western Han (if authentic).

The published rubbings of this slide do not permit a reliable chronological estimate to be made.

At the upper end, an animal mask with upswept eyebrows. Between the brows, a drop-shaped ornament, possibly in relief, with incised borders. Below, a bilaterally symmetrical geometric decor almost identical to the surface decor of CV.15 and CV.60. The paired volutes along the central vertical axis are similar to those on CV.33.

The upper plate is strongly arched; the forward edge is rounded, the lower edge, curving down to a point parallel with the inner surface of the slightly curved lower aperture plate, terminates in a sharpened wedge. No hooks are formed at either end. The interior corners of the aperture appear to be rounded so that an oval rectangle is formed, but this appearance may be due to the rubbing. The profile is nearly identical to CV.60; it is unattested among reliably authentic slides.

REFERENCE: Huang Chün, *Ku yü t'u lu* (1939), III, 20:a, right, rubbing of top plate; III, 20:b, left, rubbing of profile.

CV.47 ..... Plate 12a

MATERIAL: Jade.

MEASUREMENTS:

L 4.22*	ApL 1.63*
W 1.03*	ApX 1.88*

TYPE: 2.

DATE: Probably late antiquarian.

Authenticity of this piece cannot be determined on basis of published drawing. The decor appears to be related to that seen on such slides as CV.14, with animal mask at the top and with defined central vertical axis and flattened border spirals curling upward (the lowermost pair curling downward). The eyes of the animal mask are provided with pupils, a characteristic rare or unknown among reliably authentic examples. The arrangement of the decor elements, especially those placed along the central vertical axis, is unattested among reliably authentic examples.

REFERENCES:

Wu Ta-ch'eng, *Ku yü t'u k'ao* (1889), II, 115:a, drawing of top, with foreshortened profile at left; ascribed to Han dynasty. (See note with CP.6).

Laufer, *Jade* (1912), p. 260, fig. 165, after Wu Ta-ch'eng. Ginters, *Das Schwert der Skythen und Sarmaten* (1928) p. 71, pl. XXIX,d, after Wu Ta-ch'eng.

CV.48 .. Plate 12b

MATERIAL: Jade, white.

MEASUREMENTS:

L 3.78*	ApL 1.17*
W .91*	ApX 1.50*

TYPE: 2, variant.

DATE: Probably late antiquarian.

Authenticity cannot be established on the basis of the published drawing. The decor seems to reflect a type similar to that of CV.23, but the similarity does not extend beyond the existence on both of elongated C's with tangent C-spirals curling upward and downward from each end. There are no spirals along the side

borders. The central vertical axis, here defined by cross-hatched lozenges and knob grains, suggests a hybrid of antiquarian design.

(Cf. CV.66 and CV.72)

REFERENCES:

Wu Ta-ch'eng, *Ku yü t'u k'ao* (1889), II, 114:b, drawing of top with foreshortened profile at left; ascribed to Han dynasty. (See note with CP.6.)

Laufer, *Jade* (1912) p. 258, fig. 163, after Wu Ta-ch'eng.

Ginters, *Das Schwert der Skythen und Sarmaten* (1928), p. 71, pl. XXIX, b, after Wu Ta-ch'eng.

Na Chih-liang, *Yu ch'i t'ung-shih* (1964), Appendix, p. 19, fig. 24, after Wu Ta-ch'eng, but redrawn and abbreviated.

CV.49

MATERIAL: Jade, milky green with brown and black patches.

COLLECTION: Metropolitan Museum of Art, New York, 13.40.177.

MEASUREMENTS:

L 3.81	ApL 1.22
W 1.08	ApD .19
D .47	
Depth of upper plate over aperture .19.	

TYPE: (?).

Animal mask at upper end; bilaterally symmetrical geometric decor below.

Unpublished.

CV.50

MATERIAL: Jade, dark green.

COLLECTION: Osvold Sirén, Stockholm.

MEASUREMENTS:

L 4.13

TYPE: (?).

Described as being decorated with stylized clouds.

REFERENCE: Sirén, *Documents d'art chinois* (1925), p. 68, no. 507, not illustrated, ascribed to Sung dynasty.

CV.51

MATERIAL: Jade, light green.

MEASUREMENTS:

L 4.38

TYPE: (?).

Animal mask at upper end; bilaterally symmetrical geometric decor of spiral combinations below. Photo inadequate.

REFERENCE: New York, Yamanaka, *Far Eastern Art* (1943), no. 291, photo of top, ascribed to Han dynasty.

## CV.52

MATERIAL: Jade, light green and brown.

MEASUREMENTS:

L 3.50

TYPE: (?).

Animal mask at upper end; bilaterally symmetrical geometric decor of spiral combinations below. Photo inadequate.

REFERENCE: New York, Yamanaka, *Far Eastern Art* (1943), no. 309, photo of top; ascribed to Han dynasty.

## CV.53

MATERIAL: Jade, light green and tan.

MEASUREMENTS:

L 1.88

TYPE: (?).

Animal mask at upper end; bilaterally symmetrical geometric decor of spiral combinations below. Photo inadequate. Profile possibly similar to CV.37. Possibly identical to CV.82.

REFERENCE: New York, Yamanaka, *Far Eastern Art* (1943), no. 318, slightly oblique top/profile photo; ascribed to Late Eastern Chou.

## CV.54

MATERIAL: Jade, grayish, with iron oxide stains.

COLLECTION: Sunglin (Dr. Herbert Müller), Peking (now dispersed).

MEASUREMENTS:

L 2.50

TYPE: (?).

Described as being decorated with scroll design. Ascribed to the Han dynasty.

REFERENCE: *Sunglin Collection* (1939), p. 44, no. H-915, not illustrated.

## CV.55

MATERIAL: Jade, white, decomposed, with iron-oxide stains.

COLLECTION: Sunglin (Dr. Herbert Müller), Peking (now dispersed).

MEASUREMENTS:

L 2.50

TYPE: (?).

Described as being ornamented with geometric design. Ascribed to Ch'in or Han dynasty.

REFERENCE: *Sunglin Collection* (1939), p. 44, no. H-917, not illustrated.

## CV.56

MATERIAL: Jade, brownish-black.

COLLECTION: Sunglin (Dr. Herbert Müller), Peking (now dispersed).

MEASUREMENTS:

L 2.75

TYPE: (?).

Described as being decorated with an "unusual geometric design." Ascribed to the Han dynasty.

REFERENCE: *Sunglin Collection* (1939), p. 44, no. H-918, not illustrated.

## CV.57

MATERIAL: Jade, translucent gray with dark gray and brown markings.

MEASUREMENTS:

L 2.88

W 1.06

TYPE: 1.

DATE: Possibly late Western Han.

At the upper end, an animal mask with upswept striated eyebrows; below, a bilaterally symmetrical geometric decor possibly similar to CV.6. Photograph inadequate. Unlikely to be Eastern Chou as ascribed.

REFERENCE: West Palm Beach, Norton Gallery, *Exhibition of Chinese Archaic Jades* (1950), pl. LIX, 4, photo of top.

## CV.58

MATERIAL: Jade.

COLLECTION: King-Kwei (Chin-kuei<sup>r</sup>), i.e., the late J. D. Chen, Hong Kong.

MEASUREMENTS:

L 3.35

W 1.02

D .49

TYPE: 1.

DATE: Possibly late Western Han.

At the upper end, an animal mask; below, a bilaterally symmetrical geometric decor similar to CV.7. Unlikely to be Late Eastern Chou as ascribed.

REFERENCES: Ch'en Jen-t'ao, *Chin-kuei lun ku ch'u chi* (1952), p. 43, fig. 41, photo of top.

## CV.59

MATERIAL: Jade, translucent white.

COLLECTION: K. C. Wong (now dispersed).

MEASUREMENTS:

L 3.75

TYPE: Atypical.

DATE: Late antiquarian.

At the upper end, an animal mask; below, to either side of the central vertical axis defined by a thin, uninterrupted relief line, elongated C's in low relief alternately facing and backing toward the axis. A smaller opposing C is bracketed by each of the larger C's. The decor surface is flat. Thin, plain, raised side borders are defined by incised grooves. The C-forms are shallower and longer, more rigid than related forms on authentic pieces. The slide is extremely narrow in relation to its length and these proportions are emphasized by the elongated nature of the decor elements.

REFERENCES:

Wong, "Ancient Jades" 14 (1), plate preceding p. 7, third from top right, photo of top.

*Wong Collection of Ancient Chinese Jades* [1937], p. 13, no. 187, not illustrated.

CV.60

MATERIAL: Jade.

MEASUREMENTS:

L 2.17*	ApL 1.06*
W .94*	ApD .31*
D .44*	ApX 1.31*
Depth of upper plate over aperture .13.*	

TYPE: 1, variant.

DATE: End of Chou or early Western Han (if genuine).

The published rubbings of this slide do not permit a reliable chronological estimate.

At the upper end, an animal mask, possibly with pupiled eyes; between the eyebrows a drop-shaped motive. Below, a bilaterally symmetrical geometric decor of elongated C's, downward-curling border spirals (not flattened), and relief rectangular shapes at borders. The published rubbing of the surface ornamentation suggests greater plastic volumes to the various elements than they probably have. The arrangement of the geometric elements and suggested carving style are similar to CV.15 and CV.46. The paired volutes along the vertical axis are similar to those on CV.33.

The upper plate is more sharply arched than usual, and does not terminate in hooks. The forward end is rounded, the lower terminates in an acute angle. In the rubbing of the profile the lower aperture plate appears slightly curved. The profile is identical to CV.46; it is unattested among reliably authentic slides.

REFERENCES:

Huang Chün, *Ku yü t'u lu* (1939), III, 20:a, left, rubbing of top; III, 20:a, right, rubbing of profile.

*Chung-kuo ku tai kung i* (1960), p. 302, upper left, rubbing of top.

CV.61

MATERIAL: Jade.

MEASUREMENTS:

L 3.91*	ApL 1.72*
W 1.06*	ApD .31*
D .56*	ApX 1.81*
Depth of upper plate over aperture .17.*	

TYPE: Mixed 1 and 2.

DATE: Late antiquarian.

At the upper end, an animal mask; below, a bilaterally symmetrical geometric decor of elongated C's, paired volutes, cross-hatched lozenges, spirals. The geometric decor combines characteristics of Type 1 (elongated C's, with perpendicular tangent spirals curling upward, alternately facing and backing upon the central axis) and Type 2 (side spirals curling upward; defined central axis interrupted by pairs of volutes alternately opening upward and downward with cross-hatched triangles where they join to the vertical axis). The eyes of the animal mask are provided with pupils (cf. CV.47). Only the elongated C's backing upon the central vertical axis have the tangent C-spirals, projected toward the side borders; only the C's backing upon the borders are joined to these by pairs of thin incised lines arched slightly downward. The upward curl of the tangent C-spirals is, with the possible exception of CV.20, unattested on reliably authentic slides of this class.

The rubbing of the profile suggests a degraded type familiar among the late antiquarian pieces, with drooping forward end and amorphous globular hook. The forward and rear aperture plates are thinner than on authentic slides. The profile of the lower hook lacks the precise angularity of the better pieces.

REFERENCE: Huang Chün, *Ku yü t'u lu* (1939), III, 18:a, left, rubbing of top; III, 18:b, left, rubbing of profile; scale uncertain.

CV.62

MATERIAL: Jade.

MEASUREMENTS:

L 3.00*	ApL 1.25*
W .92*	ApD .32*
D .52*	ApX 1.56*
Depth of upper plate over aperture .56.* The slide tapers regularly toward the lower end where the width is .84.*	

TYPE: 1, variant.

DATE: Early to middle Eastern Han (?).

At the upper end, an animal mask with striated eyebrows. Below a bilaterally symmetrical geometric decor of paired elongated C's with perpendicular tangent C-spirals from their lower ends projected either toward the side borders or toward the undefined central vertical axis in accordance with the orientation of the elongated



C's; two pairs of opposed flattened border spirals, the upper pair curling upward, the lower pair curling downward; two pairs of low relief rectangles projected perpendicular to the borders with thin incised lines defining the lower and inward sides; three pairs of opposed volutes with cross-hatched lozenges where their ends converge along the central axis. The decor surface is separated from the thin plain borders by lateral grooves. The principal elements of the ornamentation are in low relief, but the technique of carving cannot be discerned from the published rubbings.

REFERENCE: Huang Chün, *Heng-chai ts'ang chien* (1935), II, 32:a, rubbing of top; II, 32:b, rubbing of profile; scale uncertain.

## CV.63

MATERIAL: Jade, brown.

COLLECTION: W. Perceval Yetts, London (now dispersed).

MEASUREMENTS:

L 2.64

TYPE: Atypical.

DATE: Late antiquarian.

At the upper end, an abbreviated animal mask executed in predominantly straight lines and squared angles; its round eyes are provided with pupils. Below, a decor of four pairs of opposed elongated C's parallel to the side borders and bracketing small round knob grains, defined by relief borders, set along the undefined central vertical axis. At the lower end, a similar pair of C's set perpendicular to the axis, bracketing a knob grain.

This type of decor has no parallel among authentic scabbard slides; grains of this type, enclosed by exaggeratedly long C's, seem not to appear before the Sung dynasty and become increasingly common after this date. The workmanship of the piece is inferior to that of the authentic scabbard slides in this class.

REFERENCE: Pope-Hennessy, *Early Chinese Jades* (1923), pl. XXIX, 1, photo of top; ascribed tentatively to Sung dynasty.

## CV.64

MATERIAL: Jade, brownish yellow.

COLLECTION: W. Perceval Yetts, London (now dispersed).

MEASUREMENTS:

L 4.72

TYPE: Atypical.

DATE: Late antiquarian.

The upper third of the decorated surface on this exceptionally long slide is occupied by an extremely simplified design basically derived from the more fully

developed animal masks on authentic pieces. The eyes are formed by small tight curls at the ends of lines sloping upward from the borders and indicating the eyebrows. At the point which corresponds to the convergence of the brows on the mask on conventional slides there is a cross-hatched pear-shaped element. The central vertical axis is defined by an incised line interrupted by a small round knob grain and a cross-hatched lozenge. To either side of the central axis, a bilaterally symmetrical composition of hooked "blades," small round knob grains and, at the lower end, paired elongated C's perpendicular to the axis. Two long parallel lines extend upward from the open side of the lower C in each pair and join these to the open sides of the upper two C's in each pair. All elements of the decor, except the grains, appear to be incised.

REFERENCE: Pope-Hennessy, *Early Chinese Jades* (1923), pl. XXIX, 2, photo of top; ascribed tentatively to Sung dynasty.

## CV.65

MATERIAL: Jade, grayish green with red- and black-brown markings; some areas of surface decomposition; no evidence of wear.

COLLECTION: Musée Guimet, Paris, MG 18423.

MEASUREMENTS:

L 3.22

ApL 1.06

W .84

ApD .22

D .44

ApX 1.38

TYPE: 2, variant.

DATE: Late antiquarian.

At the upper end, an animal mask. Below, a bilaterally symmetrical geometric decor of interlocked large and small elongated C's, those backing along the undefined central vertical axis joined by pairs of thin downward-arched incised lines extending across the axis, or by double pairs of similar lines reaching the axis from either side. Some of the elongated C's have smaller pendant C's from their lower ends, or rising from their upper ends. Small perpendicular tangent C-spirals spring from the upper ends of one pair of C's backing upon the central axis, and curl around and toward the axis. Along the central axis, a small round knob grain near the upper end, and near the middle a cross-hatched lozenge. Above, and joined to, the incised arched lines joining the uppermost pair of C's at the axis are several comblike scratches similar to the striae on CV.18, CV.20, and CV.96, but here in an upward rather than downward direction. Carving is by incision and by the definition of varying surface planes to suggest volumes. The ornamented surface is separated from thin plain borders by incised lines.

The upper plate is strongly arched and thick. The end hooks, carelessly formed, extend inward to a point

parallel to the base of the aperture. The aperture walls and lower aperture plate are of uniform thickness. The quality of workmanship is generally poor.

Unpublished (?).

#### CV.66

MATERIAL: Jade, white with orange markings.

COLLECTION: K. C. Wong (now dispersed).

MEASUREMENTS:

L 3.25

TYPE: 2, variant.

DATE: Late antiquarian.

At the upper end, a very abbreviated linear animal mask; eyebrows squared, unstriated spirals; eyes in low relief and square; other elements produced by straight lines and right angles. Below, a bilaterally symmetrical geometric decor of elongated C's. Along the partially defined central vertical axis are round knob grains, cross-hatched lozenges and round C-spirals presumably derived from the opposed volute pairs of authentic pieces. There are no small spirals along the side borders. The C's, more shallow and elongated than on authentic pieces, alternately face and back upon the side borders, and are isolated vertical units, neither having perpendicular tangent C-spirals, nor being joined together end to end. Midway along the surface, an opposed pair of C's is set at about a thirty-degree angle to the central axis, an arbitrary placement never encountered on authentic pieces.

The relief appears to be produced by low lines square in cross-section (more easily cut than beveled relief lines), in places carelessly hacked from the surface. The design is ultimately derived from such authentic types as CV.19, but here is only a crude, simplified, debased reflection of these.

(Cf. CV.48 and CV.72).

REFERENCES:

Antiquus, "Sui and Ancient Chinese Swords" (1928), fig. 2, fourth from top, photo of top.

Wong, "Ancient Jades," 14 (1), pl. preceding p. 7, second from top left, photo of top.

Wong *Collection of Ancient Jades* [1937], pl. IX, no. 179, oblique top/profile photo.

#### CV.67

MATERIAL: Jade, dark gray-green.

COLLECTION: Chicago Natural History Museum, no. 116560.

MEASUREMENTS:

L 3.31

W .87

D .59

TYPE: 2.

DATE: Antiquarian (?).

At the upper end, an animal mask in low relief with striated eyebrows extended downward along the sides. Below, a bilaterally symmetrical geometric decor of five pairs of elongated C's in beveled relief line alternately facing and backing toward the central vertical axis defined by a thick, beveled relief line. From the upper inside end of each C a thin incised C-spiral curls upward toward either the axis or the border depending on the orientation of the elongated C. Half-way along the C-spirals curling toward the central axis another incised line branches off and curls in the opposite direction. The C's backing to the outer borders are joined to these by pairs of incised lines arched slightly upward; those backing upon the central axis are joined to it by similar pairs of lines reaching, but not passing over, the axis. Along each side border are two short, downward-curving incised lines, evidently derived from the flattened spirals in relief on reliably authentic slides. The elongated C's are flatter, more rigid, drier than on authentic slides of this type. The decorated surface is separated from these plain side borders by grooves, closed at the ends by incised lines. The surface between the relief elements is unmodulated.

The workmanship is, on the whole, very careful, and is similar in decor and style to CV.23 and CV.43, but a somewhat perfunctory execution, and the introduction of elements which suggest innovation (such as the contrapuntal line on the C-spirals), or debasement of traditional forms (the lateral incised lines), point to a date later than Han.

REFERENCES:

Laufer, *Jade* (1912), pl. XXXIII, 4, photo of top; ascribed to Han dynasty; L and W measurements on p. 260 differ slightly from those given above.

Hobson, "Jade" (1913), fig. D, photo of top.

Egami, *Yūrasia kodai hoppō bunka* (1948), pl. XXIX, 2, upper, photo of top; considered Han.

#### CV.68

MATERIAL: Jade, light gray with reddish specks on surface.

PROVENANCE: Reputedly excavated in a village in Hsi-an 西安 Prefecture, Shensi<sup>c</sup> Province; acquired in China between 1908 and 1910.

COLLECTION: Chicago Natural History Museum, no. 116564.

MEASUREMENTS:

L 3.19

W .79

D .39

TYPE: 2, variant.

DATE: Late antiquarian.

At the upper end, an animal mask facing downward rather than upward as on reliably authentic slides (cf. CG.44, CG.51). Two curved, pointed fangs protrude through distended lips. There are no eyebrows and the eyelids are unusually thick. The face is incised on a slightly raised surface. Below the animal mask are two rows of five elongated C's in beveled relief line interlocked so as to form a continuous chain to either side of the undefined central vertical axis. Along the axis, bracketed by the alternate pairs of C's facing the axis, are three cross-hatched lozenges. Along each side border are two large cross-hatched triangles, based on the border and pointing inward toward the centers of the pairs of C's backing to the central axis (cf. CV.44, CV.70, CV.77). The thin, plain, side borders are separated from the decorated surface by deep grooves, closed at the upper and lower ends by incised lines. The undecorated portions of the surface are flat. The decor at the lower end of the upper plate is not discernible.

REFERENCES:

Laufer, *Jade* (1912), pl. XXXIII, 5, photo of top; ascribed to Han dynasty; L and W measurements on p. 260 differ slightly from those given above.

Hobson, "Jade" (1913), fig. E, photo of top.

CV.69

MATERIAL: Jade, black.

COLLECTION: Chicago Natural History Museum, no. 116561.

MEASUREMENTS:

L 2.76  
W .71  
D .59

TYPE: 2.

DATE: Late antiquarian.

At the upper end, a very crudely incised animal mask with plain curving eyebrows resembling water-buffalo horns. Below, four pairs of opposed, deeply incised, elongated C's backing to the central vertical axis which is defined by a deeply incised line interrupted at three points by carelessly cross-hatched lozenges. From the curled ends of each C a thin, curved incised line extends to the border. The decorated surface is separated from thin, plain, side borders by deep grooves. The carving of the decor is of exceptionally poor quality.

REFERENCES:

Laufer, *Jade* (1912), pl. XXXIII, 6, photo of top; ascribed to Han dynasty; L and W measurements on p. 260 differ slightly from those given above.

Egami, *Yūrashia kodai hōppō bunka* (1948), pl. XXIX, 2, lower, photo of top; considered Han.

CV.70 ..... Figure 18

MATERIAL: Jade.

TYPE: Atypical.

DATE: Late antiquarian.

An exceptionally long and narrow piece. At the upper end, an extremely degenerate animal mask consisting of several meaningless scratched lines with some suggestion of a snout. Below, crudely scratched onto an otherwise plain, flat surface, a decor of symmetrically arranged elongated C's (with no appreciable curl at their ends), small round circles and, along the border and at the lower end, cross-hatched triangles based on the borders and pointing inward (cf. CV.44, CV.68, CV.77). The upper pair of elongated C's face each other and are set perpendicular to the undefined central vertical axis and enclose an incised circle; the second pair back along the axis and bracket incised border triangles; the third pair are set back to back perpendicular to the axis, each bracketing an incised circle; the lowermost pair repeats the orientation of the second pair.

The workmanship is very coarse and clumsy. The upper plate is flat rather than slightly arched in the customary manner. The end hooks are inward-turned pointed wedges. Both in shape and decor the piece exhibits extreme crudeness.

REFERENCES:

Hommel, "Chinese Sword Furniture" (1928), fig. 1, top and profile drawings; fig. 2, left, oblique top/profile photo.

Hommel, "Notes on Chinese Sword Furniture" (1951), p. 145, oblique top/profile photo; p. 144, second fig. from top, upper right, photo of top.

CV.71

MATERIAL: Jade, white and green; identified by Tanner (see below) as *fei-ts'ui* 翡翠 jade which, if correct, should indicate jadeite and provide conclusive evidence for a late date.

COLLECTION: P. de Tanner, Berlin (now dispersed).

TYPE: Atypical.

DATE: Late antiquarian.

The surface of the upper plate is decorated with a bilaterally symmetrical composition of irregularly shaped curvilinear designs in low relief sometimes referred to as "sleeping silk worms." Along the undefined central vertical axis are five unevenly spaced round knob grains. There is no animal mask at the upper end. The workmanship appears to be of indifferent quality.

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV, no. 564, reduced scale photo of top. (See annotation in bibliography.)

CV.72

MATERIAL: Jade, opaque gray.

COLLECTION: P. de Tanner, Berlin (now dispersed).

TYPE: 2, variant.

DATE: Late antiquarian.

At the upper end, an animal mask with curving sharply upswep; eyebrows and elongated slanting eyes. Below, a bilaterally symmetrical geometric decor similar to CV.66. The three cross-hatched lozenges along the undefined central vertical axis have either single or double line borders. The elongated C's are interlocked in five opposed groups of two, parallel to the central axis and situated alternately nearer to the border and near the axis. At the center on either side two rising incised lines meet to form peaks pointing toward the central vertical axis. The ends of the elongated C's are less spiraled than on reliably authentic pieces and some open outward, rather than curling inward, at one end.

(Cf. CV.48 and CV.66)

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV. no. 982, small, poor photo of top; ascribed to Han dynasty. (See annotation in bibliography.)

### CV.73

MATERIAL: Jade, white.

COLLECTION: British Museum, London, 1955.7-18.41.

MEASUREMENTS:

L 4.03  
W 1.00  
D .63

TYPE: (?).

DATE: Late antiquarian.

At the upper end, an animal mask. Below, a bilaterally symmetrical geometric decor of elongated C's and spirals.

The upper plate is lightly arched, the end hooks poorly formed. In the center of the lower bay, halfway between the lower aperture wall and the lower hook, is a round unornamented knob of oval cross-section raised from the inner surface of the upper plate on a short round post, similar in shape and placement to that on CH.45 (see pl. 14a here). Scabbard slides with knobs of this sort were evidently produced during periods when the function of the object was believed to be similar to that of belt hooks which are furnished with such a knob on the underside at one end.

(Cf. CG.49, CH.45, C.6)

Unpublished.

### CV.74

MATERIAL: Jade.

MEASUREMENTS:

L 3.44\*  
W .84\*

TYPE: Probably imaginary.

It is doubtful whether this published drawing of the

decoration on the upper plate of a scabbard slide was based on the observation of either authentic or antiquarian pieces in jade. The design of two columns of paired vertical C's bracketed by transverse C's and scalloped central vertical axis below an abbreviated animal mask has no near parallel among authentic or antiquarian scabbard slides in jade. No borders are indicated. The ends of the upper plate are represented as being convex. The original edition of the *Ku yü t'u* was supposedly published in A.D. 1341 (Goette, *Jade Lore* [1936], p. 301), but is lost and the work is known only through references and incorporated portions in later compilations. It seems likely that this probably imaginary design reflects uninspired nonlapidary pattern concepts of the eighteenth century to which the edition of this work I have seen belongs.

(Cf. CV. 75, CV.76, CH. 70, CH.71, CH.72, CH.73; also Ca-Cm)

REFERENCE: *Ku yü t'u* (1752), Chapt. 2, p. 11:a, right, drawing of top; scale uncertain.

### CV.75

MATERIAL: Jade.

MEASUREMENTS:

L 3.75\*  
W .98\*

TYPE: Probably imaginary.

Similar in most respects to CV.74. Along the broad central vertical axis defined by three lines evidently indicating relief are four quartered lozenges and one rosette. Narrow, plain side borders are indicated by straight lines, the end borders by a scalloped line. The ends of the upper plate are represented as being convex.

(Cf. CV.74, CV.76, CH.70, CH.71, CH.72, CH.73; also Ca-Cm)

REFERENCE: *Ku yü t'u* (1752), Chapt. 2, p. 11:a, left, drawing of top; scale uncertain (see CV.74, for text commentary).

### CV.76

MATERIAL: Jade.

MEASUREMENTS:

L 3.25\*  
W 1.00\*

TYPE: Probably imaginary.

At the upper end, an animal mask of extraordinary stylized form. Below, a bilaterally symmetrical decor of curvilinear forms which has no near parallel among extant scabbard slides, but which may be loosely based on degraded Type 2 systems of Form I, Class CV. Along the central vertical axis defined by double, scalloped lines are two cross-hatched lozenges and one oval rosette. Along

the borders are several pairs of very small C-shaped designs. The ends of the upper plate are represented as being convex.

(Cf. CV.74, CV.75, CH.70, CH.71, CH.72, CH.73; also Ca-Cm)

REFERENCE: *Ku yü t'u* (1752), Chapt. 2, p. 12:b, drawing of top; scale uncertain (see CV.74 for text commentary).

## CV.77

MATERIAL: Jade.

TYPE: 2.

DATE: Late antiquarian.

At the upper end, an animal mask, partly in relief and partly incised, with striated eyebrows. Below, a bilaterally symmetrical geometric decor of four pairs of elongated C's alternately facing and backing toward the central vertical axis defined by an unbroken relief line. The paired C's backing upon the axis have incised C-spirals emanating from their upper ends, curling upward, and are joined to the central axis by two thin, incised lines which are not arched in the usual manner. The lines reach from the center back of each C to the axis, but do not cross over it. The paired C's facing the axis are joined to the side borders by single, straight, incised lines. Along each side border are two cross-hatched triangles, based on the borders and pointing inward (cf. CV.44, CV.68, CV.70). At two points along the axis small spirals rise to either side and curl downward.

The elongated C's and central vertical axis are in low relief with incised outlines. The work is dull and perfunctory.

REFERENCE: Chang Mo-chün, *Chung-kuo ku yü* (n.d.), tenth pl. following p. 18, left, photo of top.

## CV.78

MATERIAL: Jade.

PROVENANCE: Ch'ang-sha,<sup>d</sup> Hunan<sup>e</sup> Province; excavated in 1938.

MEASUREMENTS:

L 3.78	ApL 1.30
W 1.00	ApD .31
D 1.18	

(The proportions indicated by the above measurements are extraordinary and suggest that the published figures are incorrect, or not in the metric system as indicated.)

TYPE: (?).

DATE: Late Eastern Chou (?).

The ornamentation of the upper plate is described as consisting of an animal mask and *yün-wen* 雲紋 cloud pattern, or, a decor corresponding to one type described in this class. The scabbard slide was found *in situ* on the remains of the lacquered scabbard of a tanged, double-

edged iron sword fitted with jade guard. The length of the sword is given as 27.00.

REFERENCE: Shang Ch'eng-tso, *Ch'ang-sha ku wu wen chien chi* (1939), II, 3:a and b, not illustrated.

CV.79 . . . . . Plate 5a

MATERIAL: Jade, white, surface partly decomposed; on underside iron-oxide stains.

PROVENANCE: Tomb 240, Ch'ang-sha,<sup>d</sup> Hunan<sup>e</sup> Province.

MEASUREMENTS:

L 3.19

W .94

D .63

The upper plate appears to narrow slightly toward each end from a maximum width near the center.

TYPE: 2.

DATE: Late first century B.C. to early first century after Christ.

At the upper end, an animal mask, partly in relief and partly incised, facing upward, with striated eyebrows. Below, a bilaterally symmetrical geometric ornamentation consisting of paired elongated C's, cross-hatched areas, and incised lines. The uppermost pair of C's is attached to the brows of the animal mask, curling downward and backing upon the central vertical axis to which each C is joined by a pair of upward-arched incised lines. Below, two pairs of interlocked C's, one pair backing upon the side borders, the other upon the central axis, each pair joined at center back by two upward-arched incised lines to the side borders and central axis respectively. At the lower end, an opposed pair of elongated C's facing the axial ridge and joined to the lower border by pairs of incised lines between the lower curl of the C and the border. Between the brows of the animal mask, a roughly rectangular cross-hatched area, bordered by rounded relief lines which converge to form the central axial ridge, spreading apart again at four evenly spaced intervals below to enclose small cross-hatched, diamond-shaped areas along the axis. Alternate diamonds are attached to the upper ends of the elongated C's facing the axis by thin curved incised lines from the corners not on the axis to the upper ends of the C's. The other diamonds are placed at points where widespread paired volutes curl outward perpendicular to the axis. From the downward-curved end of these volutes, a contrapuntally curved line is drawn out to the side borders. The curled ends of the volutes are joined to the side borders by upward-arched pairs of incised lines. The central axis and elongated C's and subsidiary attached C-hooks are raised in thin, rounded relief line above an unmodulated surface. Along the sides are borders formed by a groove with a comparatively high relief ridge separating the groove from the ornamented surface area.

The published profile drawing is rather crude, but the following basic traits are observable. The upper plate is slightly arched. The forward end curves inward in a rounded elliptical curve, seemingly slightly backsloped, terminating in an involuted hook ridge. The lower end of the upper plate curves inward and is terminated bluntly, with a short, narrow, squared forward-projecting wedge. The end hooks terminate at a level above that of the lower aperture interior so that the ends of the upper plate presumably did not rest against the scabbard wall.

The tomb in which the slide was found contained no sword. The presence of iron-oxide stains on the underside of the slide indicates that the iron sword to the scabbard of which the slide was evidently attached, now totally decomposed, had been buried with the slide. The sword was probably similar to the double-edged, tanged iron sword with bronze guard found in another Western Han tomb (No. 270) at this site (p. 120). The length of this sword is 84.8 cm., but the tang is broken off just above the guard. Total length of sword in scabbard was probably just over one meter.

Tomb 240 contained an inscribed bronze mirror (p. 116) with astronomical type decor on its back. Mirrors of this type, with single band of inscription, are hardly earlier in date than the first half of the first century B.C. (see Hamada, *Senoku seishō* [1934], pt. 2, pl. LI, 1) and, in slightly varying forms, continue in fashion well into the second century after Christ (e.g., Watson, *Ancient Chinese Bronzes* [1962], pl. XCVII, b).

REFERENCE: *Ch'ang-sha fa-chüeh pao-kao* (1957), p. 128, fig. 107, 2, reduced-scale top and profile drawings; pl. XCIII, 12, photo of top; text, p. 127 f., s.v. 240:13.

#### CV.80

MATERIAL: Jade-like stone, greenish-yellow.

PROVENANCE: Tomb IA, Mān-thōn, northern Annam, Viet-Nam; excavated 1939.

MEASUREMENTS:

L 1.89

TYPE: 1.

DATE: Coins of Wang Mang<sup>u</sup> (r. A.D. 9–23) were found in the tomb. Hence slide was probably carved between the last years of the first century B.C. and the first quarter of the first century after Christ.

At the upper end, an incised animal mask with striated eyebrows, facing upward. Below, a bilaterally symmetrical geometric decor of a single pair of extraordinarily elongated C's backing upon the undefined central vertical axis. From the lower end of each C, a downward-arching C-hook is projected to the side borders. Above the centrally placed elongated C's is a pair of upward-curling volutes enclosing a small incised circle and rectangular ornament; below the elongated C's a similar pair of

volutes with cross-hatched diamond pattern at the vortex where the two volutes join on the central axis. At the bottom are two rounded C's placed side by side, opening upward. The decorated area is separated from narrow plain side borders by an incised line. At intervals along the borders are downward-curling C-spirals. All elements of the ornamentation are incised and the lines are crudely and imprecisely drawn, the decor elements poorly formed. The piece is to be considered a locally made imitation of a more sophisticated Chinese model. The profile has not been published.

The richness of the funerary deposit in this tomb of typical Han, vaulted brick construction covered by an earth mound has led the excavators to assume the dead must have been a "military mandarin" (2, p. 219). The scabbard slide was found lying upon the much decomposed blade of an iron sword on which remains of an iron scabbard were also found. The sword, double-edged, with a flat tang girded by two elliptical iron rings, lay near the center of the chamber. The preserved portion is 1.25 meters in length and is compared by Janse to the iron sword illustrated here on Figure 36b, 97.6 cm. long. It is not possible to determine from the published photographs the distance ratio between hilt and point and slide. Between the elliptical rings of the tang were traces of wood, and an organic matter adhering to the iron scabbard remains may be leather. Conglomerated with the upper end of the sword blade were the remains of an iron dagger, suggesting that sword and dagger fitted into sockets on the same scabbard, a form known from regions to the north of China and from the Lo-lang district in Korea where a similar set was found, belonging to about the same period as *CV.80*.

While it seems likely that this sword of unprecedented length may be an import from China, the scabbard slide was certainly locally made, and the leather (?) covered iron scabbard may as well be of local manufacture. Bronze sheaths are sometimes encountered in China for knife or dagger-axe blades (e.g., Stanford University, *Arts of the Chou Dynasty* [1958], no. 158), but metal scabbards for swords, especially swords of such length, are, to my knowledge, unknown. The ensemble must have been extremely heavy and unsuited for any but ceremonial use. Among the finds at Shih-chai-shan in Yünnan Province were a large number of swords with gilt bronze scabbards (see *CP.1*) of local, non-Chinese manufacture.

In the same tomb a small bronze belt hook was found (1, pl. CXXII, 1a)

The stone from which the slide is carved has not been identified nor its origin localized, but the excavators note that Chinese sources refer to jade from Tonkin and jadeite from Annam.

REFERENCE: Janse, *Archaeological Researches in Indo-China* (1958), 2, p. 218, fig. 129, drawing of top; 1,

pl. CXXII, 1c, photo of slide resting on sword blade as found; 1, pl. CXV, 2, photo of sword and slide *in situ*; 1, pl. CXXI, 1, photo detail of sword with conglomerated iron dagger; text, 1, pp. 48 and 54; 2, pp. 219 and 224 ff.

CV.81 ..... Plate 3c

**MATERIAL:** "Pagodite" (agalmatolite); the material has possibly been incorrectly identified, as agalmatolite, with a hardness of only 2.25 on the Moh scale, is an extremely soft stone which can be scratched with the fingernail. It is unsuitable for use in the manufacture of a scabbard slide.

**PROVENANCE:** Said to have been found in Tonkin region, Viet-Nam.

**COLLECTION:** Musée Louis Finot, Hanoi, no. A22.80.

**TYPE:** 1.

**DATE:** Late first century B.C. to early first century after Christ.

The ornamentation of the upper surface is similar to that of CV.8, but here is executed with slightly less technical perfection. As it is shorter than CV.8, the lowermost unit of paired elongated C's backing upon the central vertical axis, together with their related C-spiral tangents, have been eliminated. As on CV.8, there are no pairs of lightly incised lines joining the paired elongated C's across the axis or to the borders. The upper plate is widest at a point above the middle which probably corresponds to the center of the aperture below. It narrows slightly toward the upper and lower ends. The profile has not been published.

**REFERENCES:**

Hanoi, Ecole française d'Extrême-Orient (1920), pl. V, B, photo of top; text, p. 197, tentatively identified as a girdle clasp.

Janse, *Archaeological Researches in Indo-China* (1958), 2, p. 219, fig. 130, drawing of top (incorrectly copied).

CV.82 ..... Figure 6

**MATERIAL:** Jade, dark gray-green originally, but now largely decolorated, with areas of decomposition.

**COLLECTION:** Dr. Arthur M. Sackler, New York; no. J-274.

**MEASUREMENTS:**

L 1.81	ApL 1.00
W 1.06	ApD .25
D. .44	ApX 1.28

The lower aperture plate is of exceptional thinness: .05.

There is a slight, probably unintentional, vertical tapering, on one side only; the other side connects upper and lower plates perpendicularly.

**TYPE:** 1.

**DATE:** Late Eastern Chou.

At the upper end, an incised animal mask with striated eyebrows. Between the brows is a small incised

drop-shaped ornament. Below, a bilaterally symmetrical geometric decor. At the side borders near the upper end, a pair of flattened spirals curling downward; at the side borders near the lower end are short incised lines extending inward perpendicular to the borders. The upper pair of elongated C's back upon the undefined central vertical axis, with perpendicular tangent C-spirals extending from their lower ends to the borders; the lower pair of elongated C's back against the side borders with similar tangent spirals extending to the axis. Along the central axis are two pairs of opposed volutes, the upper opening upward, the lower downward, with cross-hatched triangles at the point where the ends of the volutes converge on the axis. The ornamented surface is separated from thin plain borders by lateral grooves; the ends are open.

All elements of the decor are incised. The sides of the incisions are slightly rounded and the surfaces on the inner sides of the elongated C's rise slightly above the mean level so that a slight suggestion of volume is imparted to these forms.

The upper plate is rather strongly arched, with very short extensions above and below the aperture. There are no involuted terminal hooks on the upper plate.

The ornamented surface of the slide appears to be considerably worn. The upper left interior corner of the aperture has been deeply worn by the action of the sword belt over a long period of time, the upper aperture wall being worn nearly through at its left corner, the point of most constant contact with the belt when the sword is in normal suspension position (cf. SR.1).

Possibly same as CV.53.

(Cf. CV.4, CV.12, CV.35)

Unpublished (?).

CV.83 ..... Plate 4c

**MATERIAL:** Jade.

**PROVENANCE:** Tomb 6002, western suburbs of Lo-yang,<sup>h</sup> Honan<sup>i</sup> Province; excavations conducted 1957-1958 by the Institute of Archeology, Chinese Academy of Sciences.

**TYPE:** 2.

**DATE:** Late Western Han.

At the upper end, an animal mask, partly in relief and partly incised, with striated eyebrows extended upward from the head, down along the side borders. Between the brows, a flattened double volute opening upward toward the head. Below, a bilaterally symmetrical geometric decor of flattened border spirals curling upward, elongated C's and paired volutes along the central vertical axis defined in areas by a low, beveled rise, interrupted at three points by the paired volutes opening downward. The elongated C's are in two interlocked groups of four, each group consisting of an opposed pair backing on the

central vertical axis and a second pair joined to the upper ends of the former and backing against the borders. From the free, spiraled end of each C, an incised curved line extends to either the axis or the border in accordance with the orientation of the open side of the C. The C's backing upon the axis are joined at their centers by a pair of incised lines arching upward across the central axis. Presumably the C's backing against the side borders are linked with the borders by similar pairs of incised lines, but these are not certainly visible in the poor photograph of this seemingly somewhat worn piece. Just below the animal mask is a single pair of opposed elongated C's backing toward the axis and joined to the side borders by a curved line drawn from the lower end of each C. The principal elements are executed in thin, rounded, relief line on a nearly flat, unmodulated surface. The thin, plain side borders appear to rise in relief equal in height to that of the main geometric elements.

The forward end curves inward and is slightly undercut; at the lower end, the upper plate turns inward abruptly at a pronounced angle, broadening to form a thick inward-projecting ridge which is possibly slightly undercut on the inner side.

The slide was found in association with a tanged, double-edged iron sword (6002:11) preserved to approximately its full length. On page 55, the length of this sword is given as 67 cm. This is probably an error as in the scaled photograph (pl. XIV) of three swords with scabbard slides, sword 6002:11 is only slightly shorter than sword 9002:49 (see *CV.84*) with a recorded length of 98.5 cm., whereas sword 3247:5 (see *CG.60*), shorter than 6002:11, has a length of 89.5 cm. Two iron swords were found in tomb 6002 and it may be that the measurements have been transposed. Sword 6002:13 is reported as 102.5 cm. in length, which may be somewhat too long for sword 6002:11, but is more nearly correct than the given measurement for 6002:11. No guard is reported as having been found with the sword. The thin, rapier-like blade, tapers into the tang with no pronounced shoulders at the butt of the blade. The point is long and slender. There were apparently fragmentary remains of a scabbard of unspecified material found in association with the sword.

The date of the tomb is provided by numerous coins among the inventory.

(See also *CV.84*, *CG.59*, *CG.60* from this area.)

REFERENCE: Chung-kuo k'o-hsüeh yüan, "Lo-yang hsi chiao Han mu" (1963), pl. XIV, 11, oblique top/profile photo of slide; pl. XIV, 2, photo of sword with slide resting on blade, presumably approximately the find position of the slide; p. 36, general text on scabbard slides recovered from the excavations; p. 33, general text on swords recovered from the excavations.

### *CV.84*

MATERIAL: Jade.

PROVENANCE: Tomb 9002, western suburbs of Lo-yang,<sup>h</sup> Honan<sup>i</sup> Province; excavations conducted 1957–1958 by the Institute of Archeology, Chinese Academy of Sciences.

TYPE: 2.

DATE: End of Western Han, or Han Interregnum.

At the upper end, an animal mask, probably partly in low relief and partly incised, with striated eyebrows extended upward from the head down along the side borders. Between the brows, a double volute opening upward toward the head, with possibly an incised ornament directly between the brows. Below, a bilaterally symmetrical geometric decor only partly visible in the poor published photograph. To either side of a well-defined relief axial ridge, the decor seems to consist of three pairs of opposed elongated C's centrally placed on the surface area to either side of the axial ridge and opening toward the axis and side borders alternately. The open face of each C is joined to the border or axial ridge, according to its orientation, by a thin tangent line arched downward. There are opposing pairs of small spirals along the borders, but the direction of these may not be ascertained. Possibly there are still other elements which cannot be seen. A concave groove appears to separate the decorated surface from narrow, plain side borders. The principal elements of the decor appear to be incised, but may actually be carved in a low, "thread-line" relief. The surface area surrounding the ornaments is unmodulated.

The upper plate is extremely short, extending only slightly beyond the upper wall of a normal-sized aperture, utilitarian in appearance. The forward edge of the upper plate appears to curve inward slightly. Below the aperture the upper plate has a somewhat shorter than normal extension, curving rather gradually inward and terminating in a blunt, inward-projecting ridge which is not undercut to form a hook ridge.

The slide was apparently found lying on or near a long iron sword (9002:49) in the west alcove of a vaulted brick tomb. The sword lay at the left side of the body inside the coffin. At the right side was a shorter, ring-pommeled iron knife. The preserved portion of the long, double-edged, tanged iron sword is 98.5 cm. (p. 55). The tip of the blade is missing as well as perhaps a portion of the tang. The guard, presumably of bronze, is of the common Western Han variety with raised, rounded shoulders to either side of a central saddle where it is pierced for the tang (similar to the guards shown here on Figure 37). There were apparently fragmentary remains of a scabbard of unspecified material found with the sword.

The date of the tomb is provided by the similarity of its inventory to that of adjoining burials in which coins



were found, and by a small bronze seal (p 32, fig. 25, 3 and p. 31) with the inscription *Wang Fu chih-yin* 王福之印 (“King Fu’s seal”). The seal was not found inside the coffin (p. 10, fig. 8, item 57) and probably did not belong to the burial with which the slide was found, but to one of the other two burials in the same tomb.

(See also *CV.83*, *CG.59*, *CG.60* from this area.)

REFERENCE: Chung-kuo k'o-hsüeh yüan, “Lo-yang hsi chiao Han mu” (1963), pl. XIV, 13, oblique top/profile photo of slide; pl. XIV, 1, photo of sword with slide resting on blade (the slide inverted; original find position not represented by this photo); p. 10, fig. 8, plan of tomb showing find position of sword; p. 36, general text on scabbard slides recovered from the excavations; p. 33, general text on swords recovered from the excavations.

#### CV.85

MATERIAL: Jade, grayish white, with scant earth incrustations on under side.

COLLECTION: His Majesty King Gustaf VI Adolf, Stockholm.

#### MEASUREMENTS:

L 5.94

TYPE: 2.

DATE: Late Antiquarian.

At the upper end, a simplified animal mask, partly incised, with the outline of the eyebrows in “thread-line” relief. The rather squared eyes are provided with small round incised pupils. The broad eyebrows, extending farther down the snout than usual, and terminating in small, tight curls with very slight upsweep, are not marked with striae simulating hair. Between the brows, a cross-hatched lozenge shape. Below, a bilaterally symmetrical pattern of interlocking C-spirals in two parallel vertical columns to either side of the central vertical axis defined by an incised groove on a slightly peaked ridge, interrupted at three points below the animal mask by rather large, cross-hatched lozenges. The C-spirals throughout are executed in thin “thread-line” relief, with surfaces depressed by incision to either side of these lines. The C-spirals are interlocked in four opposed groupings, starting from the upper end: 1) C-spirals backed upon the central axis, with C-spirals springing from their lower ends and backing toward the side borders; 2) C-spirals springing from the axis in a direction perpendicular to it and curling downward, and linked to these, chains of four C-spirals alternately backing upon the axis and side borders; 3) another grouping similar to the preceding; 4) a final grouping originating as the preceding two, but lacking the lower three C-spirals. The surfaces are otherwise plain, possibly slightly concave to either side of the central axis. The decorated surface is separated from

narrow plain borders by an incised line along both sides and across the lower end. At the upper end, the incised side border lines terminate in tight inward curls parallel to the snout of the animal mask.

The size of this piece alone precludes its having been used on a scabbard wall. Though unambitious and simplified, the execution of the surface pattern appears to be of relatively high quality, though of a sort not represented on authentic early slides of this class.

#### REFERENCES:

Stockholm, *Celedon-Jade* (1963), p. 23, no. 39, not illustrated; ascribed to Han.

Gure, “Jade Exhibition at Stockholm” (1964), pl. I, 3, photo of top; text, p. 122, s.v. 3.

#### CV.86

MATERIAL: Jade, light gray, tinged with brown.

COLLECTION: Sir Alan and Lady Barlow, London.

#### MEASUREMENTS:

L 3.38

W 1.00

D .63

TYPE: 2.

DATE: Late antiquarian.

At the upper end, an animal mask, partly in relief and partly incised, with striated eyebrows extended downward along the side borders. Below, a bilaterally symmetrical geometric decor of incised elongated C's alternately facing and backing toward the central vertical axis defined for most of its length by a beveled relief ridge. The elongated C's have perpendicular tangent spirals projected from both ends on their inner sides to either the borders or the central axis in accordance with the orientation of the C's, producing thick, curvilinear T-shapes. Along the side borders, two opposed pairs of degraded flattened spirals, possibly curled upward. Near the lower end the central axial ridge divides and forms into two perpendicular C-spirals. Below this point are other interrelated C-spiral forms. The surface area between the various geometric elements appears to have slight modulation. A narrow plain border along each side is defined by an incised groove.

The upper plate is slightly arched. No further details are discernible from the poor published photograph.

#### REFERENCES:

Hansford, “Exhibition of Chinese Jades” (1947–1948), p. 53, no. 34 not illustrated; ascribed to Warring States.

Sullivan, *Barlow Collection* (1963), pl. CLVII, c, oblique top/profile photo (blurred); ascribed to late Warring States or early Han; author incorrectly describes the piece as having the animal mask at the lower end.

## CV.87

**MATERIAL:** Jade, opaque gray with brown veins and brown surface staining.

**COLLECTION:** Museu Luis de Camões, Macao.

**TYPE:** 1.

**DATE:** Late antiquarian.

At the upper end, an animal mask, partly in low relief and partly incised, with striated eyebrows extended downward along the side borders. Below, a bilaterally symmetrical geometric decor of elongated C's alternately backing toward the slightly defined central vertical axis and toward the side borders. Elongated C-spirals are projected at right angles from the lower end of each elongated C. At intervals along the central vertical axis are pairs of opposed volutes opening downward. The spirals along the side borders extend downward and outward. The surface between the geometric relief elements is flat. The carving of the surface decor is relatively carelessly executed, with irregularities in the thickness of the relief lines.

The profile is weakly formed, with rounded terminals. The edges are beveled, imparting a softness to the form.

## CV.88

**MATERIAL:** Jade.

**PROVENANCE:** Tomb near village of Liu-chia-ch'ü 劉家渠, Shan-hsien 陝縣, Honan<sup>1</sup> Province.

**TYPE:** 1.

**DATE:** Western Han, mid first-century B.C.

The published photograph and drawing of this scabbard slide do not permit a detailed description of its decor or form. The slide is not separately described in the report. A few general observations only may be made. At the upper end facing upward is an animal mask. Between the downward curving brows is a small incised drop-shaped element. Below the mask, a bilaterally symmetrical decor of at least four pairs of elongated C's alternately backing upon the slightly defined central vertical axis and toward the side borders. C-spirals perpendicular to the elongated C's emanate from the lower end of each. Along the side borders are at least two opposing pairs of spirals curving downward and outward. Two, possibly three pairs of opposed volutes along the axis open downward. Possibly there are still other elements of decor on the surface which cannot be seen. The principal geometric elements appear to be executed in low relief, the surrounding surface to be slightly modulated.

The very small side profile drawing permits us to say only that in form and proportion the slide appears to resemble CV.36. The treatment of the upper surface suggests, however, a slightly later stage in the development of this class of slide.

The scabbard slide was found in one of 46 vaulted

brick tombs excavated in 1956 by the Yellow River Reservoir Archeological Team. The tombs range in date from late Western Han to the second century after Christ. Tomb 8 in which coins belonging to the reigns of emperors Wu 武 (140-87 B.C.) and Chao 昭 (86-74 B.C.) were found is to be placed among the earlier in the group. Tomb 8 contained three burials (p. 116, fig. 9, plan of tomb). Lying at the left side of one of the skeletons was a ring-pommel iron saber (p. 157, fig. 42, 2). The cord wrapping of the grip appears to have been well preserved. Four similar sabers were recovered from the 46 tombs; in length, they range from 108 cm. to 114 cm.

In the same tomb, but unassociated with any of the three burials, was the long iron rapier (8:64) with which the scabbard slide was found. The sword lay near the center of the eastern chamber among other tomb furnishings. The tanged rapier is 115 cm. long. In its original state, with hilt and pommel and scabbard, it probably was about 120 cm. long. The sword is apparently fitted with a separately cast bronze guard of typical Han form. Adhering to the surface of the blade chiefly near the center where the slide is represented as having been found, were fragments of the lacquered (wooden?) scabbard. No photograph showing the slide *in situ* is published; if the drawn reconstruction is correct, the slide was set exceptionally low on the scabbard. It is set approximately 50 cm. from the tip of the tang; this suggests that the scabbard must have been provided with a heavy chape in order to effectively counterbalance the weight of the sword above the tension point at the upper aperture wall.

Among the 46 tombs seven other iron rapiers were recovered. The measurements of these are not given in the report. No bronze swords are recorded.

**REFERENCE:** Huang-ho shui-ku . . . "Ho-nan Shan-hsien Lui-chia-ch'ü" (1965), pl. XXVI, 4, poor, reduced scale photo of top; p. 157, fig. 42, 1, reduced scale top and profile drawings of sword with scabbard slide resting on blade; text p. 156.

## CV.89 . . . . . Plate 12c

**MATERIAL:** Jade, translucent grayish green; carved from material which contained areas of decomposed or decolored mineral, chiefly near the lower end and in the lower aperture wall and plate.

**COLLECTION:** Margaret McC. and Walter S. Hurley, Laurinburg, North Carolina.

**MEASUREMENTS:**

L 3.94	ApL 1.44
W 1.00	ApD .28
D .66	

**TYPE:** 1.

**DATE:** Late antiquarian.

The surface of the upper plate is ornamented with an animal mask at the upper end, facing upward, and below the mask with a perfunctorily executed and regularized geometric decor. The mask is defined by broad unsteady lines incised in a flat surface, without the slightest suggestion of plastic qualities. Between the striated brows is an incised arch derived from the drop-shaped ornament seen on authentic pieces. The ornamentation below the mask is bilaterally symmetrical, the central vertical axis undefined. Five pairs of flattened, elongated C's alternately back toward or face the undefined central axis. From the upper end of each C, a C-spiral is projected at right angles toward either the axis or the border in accordance with the placement of the elongated C. At two points along the axis a small circle is incised. Springing from the side borders are two pairs of opposed spirals, the upper pair curling downward and outward, the lower upward and outward. The principal geometric elements are carved in a low "thread-line" relief achieved by cutting a deep incision along the inner sides of forms (the incision itself constituting the defined motives), the depth of which is exaggerated by a thin relief ridge along their exterior. The surface is otherwise flat. The forms are rough, the carving unsteady and carelessly executed.

The slide is widest at the upper end, tapering slightly but regularly toward the lower end. The edges appear to be beveled and the plates heavier than those encountered on late Western Han slides whose basic proportions are copied by this slide. The upper end is rounded, terminating in a slightly involuted terminal lacking the sharp crisp precision of authentic pieces. The lower terminal hook is beveled at all edges and disproportionately small; the forward-projecting wedge is unusually thick, having been defined by a simple undercutting immediately below the upper plate.

Unpublished.

**CV.90** .....Plate 5b

**MATERIAL:** Jade, translucent white, with iron-oxide stains on under surface of aperture and on lower aperture wall.

**COLLECTION:** Royal Ontario Museum, Toronto; 930.21.84.

**MEASUREMENTS:**

L 4.16	ApL 1.31
W .91	ApD .28
D .59	ApX 1.97

**TYPE:** 2.

**DATE:** Early Eastern Han.

At the upper end an animal mask, partly in relief, partly incised, with striated upswept eyebrows. From the end of each eyebrow is an incised spiral. Below the animal mask, a bilaterally symmetrical geometric decor

similar to that of CV.23 and CV.43. Six pairs of elongated C's in low relief, defined by an incised contour, alternately face and back upon the central vertical axis. From those C's opening toward the axis, lightly incised C-spirals emanate from their lower curls and are drawn toward the axis. From those C's opening toward the side borders, similar incised spirals are drawn toward the borders and downward. A peculiar feature of both this slide and CV.23 is this interrupted spiral; it proceeds in an arc from the lower end of the elongated C, is interrupted by the incised groove which defines the plain borders, and reenters the decor surface below. The vertical axis is defined by a prominent relief ridge marked with a deep axial incision. The axis is interrupted at three points by enclosed cross-hatched lozenges, is divided in two at the lower end, forming a triangle with cross-hatching and terminates in two curved, incised lines. Between each pair of elongated C's, short, lightly incised paired spirals are drawn toward each border from the axis, alternately curling upward and downward. The backs of the elongated C's are joined to either the side borders or the central axis, in accordance with their orientation, by pairs of incised lines, arching upward between C and border, downward between C and axis. Only the axis and the elongated C's are in low relief; other elements are incised. The borders slope inward from an edge ridge and are separated from the flat decor surface by an incised groove.

The upper plate is slightly arched, terminating above with an inward-projecting, undercut hook. The lower end turns inward less abruptly and is undercut to form an acute forward-projecting wedge. The surfaces of the stone have a high gloss and all edges are sharp. The highly refined, yet lifeless and dull carving has the perfunctory elegance of the finest late Western and early Eastern Han slides.

**REFERENCE:** Dohrenwend, *Chinese Jades* (1971), p. 95, photo of top.

**CV.91**

**MATERIAL:** Jade, light green with reddish brown areas.

**COLLECTION:** Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

**MEASUREMENTS:**

L 3.00
W .88
D .63

**TYPE:** Atypical.

**DATE:** Late antiquarian (recent).

The upper surface is ornamented with eight large elongated C's defined along their convex line by a low relief ridge, along their interior concave line by deep incisions. The eight C's are arranged in two parallel

vertical rows, all backing toward the undefined vertical axis. From the upper and lower hooks of each C, small incised C-spirals are projected horizontally toward the side borders, those from the upper end curving upward, those from the lower downward. Set on the border between each elongated C is a cross-hatched triangle. The upper and lower ends of pairs of opposing elongated C's are joined across the undefined vertical axis by upward- and downward-pointing chevrons. The vertical orientation of the elongated C's is accentuated by parallel incised lines joining the ends of those in each of the two rows. The individual elongated C's, uniform neither in size nor in form, reflect the general poor standard of workmanship exhibited by this piece. The decor panel is closed by incised grooves at the upper and lower ends and by narrow plain borders at the sides. The piece appears to be widest at the upper end, tapering regularly toward the lower end.

The profile has not been published or described.

REFERENCE: Hansford, *Jade* (1969), p. 88, B54, photo of top: ascribed to late Eastern Chou.

#### CV.92

MATERIAL: Jade, honey-colored with darker brown flecks.

COLLECTION: Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

#### MEASUREMENTS:

L 4.13  
W 1.13  
D .56

TYPE: 1.

DATE: Late Western Han.

At the upper end, facing upward, is a superbly executed animal mask in low relief, with striated eyebrows upswept in a rather more freely curving manner than is usual. Between the eyebrows is an incised drop-shaped ornament. Below the mask, a bilaterally symmetrical decor of paired elongated C's in thin relief line alternately backing upon the slightly defined vertical axis and facing it from the outer borders. From the lower end of each elongated C, a curving spiral in relief is drawn laterally toward either the axis or border in accordance with the orientation of the elongated C, curving downward. Along the axis are two pairs of downward-facing volutes in relief, and two upward-facing, more open pairs, in relief line. A cross-hatched diamond marks the juncture of the volute halves at the axis. Along the side borders are three opposing pairs of C-spirals in relief, curving inward and downward. Between these border C-spirals are two pairs of rectangles in low relief with their lower and inner edges defined by an incised line. No arched, paired incised lines join the backs of the elongated C's across the axis or to

the borders. The surface between the principal decor elements executed in thin, rather abrupt relief line is generally flat, with only slight undulations in the areas bracketed by C's or volutes or defining the volume of incised elements. Along each side is a thin, rounded, plain border defined by an incised line. The mask at the upper end is contained within these borders.

REFERENCE: Hansford, *Jade* (1969), p. 95, C3, photo of top; ascribed to Han or earlier. It is unclear from the text whether the scabbard slide published in profile on this page is the above-described one, or another. The profile is not inconsistent with the style and date of our CV.92.

#### CV.93

MATERIAL: Jade, honey-colored.

COLLECTION: Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

#### MEASUREMENTS:

L 4.00  
W 1.00  
D .44

TYPE: 1.

DATE: Eastern Han.

At the upper end, facing upward, is an animal mask in low relief with thick upswept eyebrows marked with striae. Between the eyebrows is an incised drop-shaped ornament and an incised bracket volute. Below the mask, a bilaterally symmetrical decor of paired geometric elements, incised and in relief, principally elongated C's, lateral C-spirals and volutes in low relief line. The paired elongated C's backing upon the undefined central vertical axis are joined by pairs of incised lines arched slightly downward, while those backing against the side borders about these rather than being joined to them by similar pairs of incised lines. Lateral relief C-spirals are projected from the lower end of each elongated C, and those curving inward and downward are joined across the axis by pairs of incised upward-arched lines. The alternately incised and relief volutes along the axis are marked with cross-hatched diamonds where the halves meet the axis. Along the side borders are three opposed pairs of spirals curving inward and downward, the upper pair incised, the lower two pairs in relief line. Between these, projecting perpendicular to the borders and curving upward at their interior ends, are two pairs of incised lines which seem not to define relief rectangles as in earlier stages of this decor type. There are thin, rounded, plain borders along the sides; springing from the plain border at the lower end are two spirals curving upward and outward. The surface between the decor elements appears to be flat, the execution of the decor to be of inferior quality, its elements attenuate and graceless.

The profile has not been published or described.

REFERENCE: Hansford, *Jade* (1969), p. 96, C4, photo of top; ascribed to Han or earlier.

## CV.94

MATERIAL: Jade, white translucent.

COLLECTION: Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

MEASUREMENTS:

L 4.00  
W .94  
D .44

TYPE: 2.

DATE: Eastern Han, or later.

At the upper end, facing upward, a conventionalized animal mask carved in low relief, with prolonged upswept eyebrows marked with light striae. Below the mask, a bilaterally symmetrical decor of elongated C's in two parallel lines to either side of the central vertical axis defined by an uninterrupted relief ridge. From the upper end of each elongated C defined by an incised line on a relief ridge, an incised spiral curls upward toward the narrow plain side borders, and is interrupted by these. From the upper end of each elongated C opening toward the axis, an incised line is drawn laterally to the axis which is marked with a cross-hatched diamond where the incised lines from either side meet. The elongated C's backing toward the axis are joined to it by pairs of downward-arched incised lines which reach, but do not cross over, the axis; the C's backing toward the side borders are joined to these by pairs of similar incised lines. Opposing cross-hatched triangles are based at intervals along the side borders and along the central axis. Between opposed pairs of C's, paired incised volutes open alternately upward and downward. The elongated C's are irregular in size and form as are the various incised elements. The quality of the workmanship is not distinguished.

The profile has not been published or described.

REFERENCE: Hansford, *Jade* (1969), p. 96, C5, photo of top; ascribed to Han or earlier.

## CV.95

MATERIAL: Jade, yellowish with deeper brown areas.

COLLECTION: Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

MEASUREMENTS:

L 3.75  
W 1.00  
D .56

TYPE: 1.

DATE: Mid Western Han.

At the upper end, facing upward, an animal mask in

relief, with upswept eyebrows marked with striae. Between the eyebrows in an incised drop-shaped ornament bracketed by a pair of incised upward-curved volutes. Below the mask is a bilaterally symmetrical decor of geometric forms, the principal elements in relief to either side of a central vertical axis defined in places by a relief ridge. Opposed pairs of elongated C's, in relief with incised inner line, alternately back upon the axis and open toward it from positions near the side borders. From the lower end of each elongated C, a C-spiral in relief is projected laterally toward either the axis or the side border in accordance with the placement of the elongated C's. These spirals, curving downward, are in low relief, defined by incised interior edges. At intervals along the side borders opposed pairs of relief spirals curl outward and downward. Between these border spirals incised lines are projected from the borders, curving upward at their ends; the rectangles in low relief that such lines define in this and earlier stages in the development of this type decor appear to be missing here, or to be in very slight relief imperceptible on the published photo. The pairs of elongated C's backing toward the axis are joined by pairs of widely separated incised lines arching downward. Along the central axis pairs of volutes, alternately in relief and incised, face alternately upward and downward; where they join at the axis there are cross-hatched triangles. The surface of the slide appears to be worn as though through long use, certain elements of the decor being partially obliterated.

The profile has not been published or discussed.

REFERENCE: Hansford, *Jade* (1969), p. 96, C6, poor photo of top; ascribed to Han or earlier.

## CV.96

MATERIAL: Jade, white translucent with brown areas.

COLLECTION: Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

MEASUREMENTS:

L 3.63  
W 1.13  
D .50

TYPE: 1, variant.

DATE: End of Western or early Eastern Han.

At the upper end, facing upward, an animal mask in relief, with striated upswept eyebrows. The incised drop-shaped ornament where the brows meet above the nose, generally present on slides of this type, is here missing; the double-volute bracket which usually encloses this form has been placed directly against the brows. Below the mask is a bilaterally symmetrical decor of geometric forms densely ordered on a flat surface, the principal elements executed in a thin "thread-line" relief. Pairs of opposed elongated C's alternately back upon the unde-

finned central vertical axis, and open toward it from a position near the thin plain side borders. From the lower end of each elongated C, a C-spiral is projected laterally, curving downward along the border or curling upward to fuse with the curled ends of paired volutes opening downward along the vertical axis. Several decor elements usually found on slides of this type are here lacking: upward-opening incised volutes, down-curling spirals along the side borders, cross-hatched diamonds, and incised lines perpendicular to the axis defining the lower and inner sides of relief rectangles. The open face of the axial volutes is marked by a triangle in low relief, defined along its lower side by an incised line. Such elements, rare on scabbard slides, are usually marked with striae (cf. CV.18, CV.20, CV.65) in a comb-like pattern. Though there are some irregularities in the execution of the forms, the standard of craftsmanship appears to be high. The overall composition suffers from the dense crowding of elements none of which is relegated to a subordinate role.

The profile has not been published or described.

REFERENCE: Hansford, *Jade* (1969), p. 96, C7, photo of top; ascribed to Han or earlier.

#### CV.97

MATERIAL: Jade, light green, with some surface discoloration; fragments of iron corrosion on under side.

COLLECTION: Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

##### MEASUREMENTS:

L 3.25  
W 1.00  
D .50

TYPE: 1.

DATE: Mid Western Han.

At the upper end, facing upward, an animal mask in low relief, with upswept eyebrows marked with striae. Between the eyebrows is an incised drop-shaped ornament bracketed by a pair of incised upward curled volutes. Below the mask is a bilaterally symmetrical decor of geometric forms, the principal elements in relief to either side of a partially defined central vertical axis. Opposed pairs of elongated C's in low relief alternately back upon the axis and open toward it from a position near the side borders. From the lower end of each elongated C, a C-spiral is projected laterally toward either the axis or the side border in accordance with the orientation of the elongated C's. These spirals, in low relief, curve downward and inward. Along the axis paired volutes alternately open upward and downward, the upward-opening volutes being incised, their opposed pairs in low relief, each pair marked with a cross-hatched diamond when its halves meet at the axis. At regular intervals

along the side borders small spirals curve inward and downward, and between these is at least a single pair of incised lines, rather freely drawn, which ordinarily define the lower and inner sides of relief rectangles. It is impossible to ascertain from the published photo whether these rectangles exist on this slide, and whether the spirals springing from the narrow plain borders are in relief or are incised. The elongated C's backing toward the axis are joined by pairs of short straight incised lines crossing the axis. The surface of the slide between the decor elements appears to be flat, but may be slightly modulated.

The profile has not been published or discussed.

REFERENCE: Hansford, *Jade* (1969), p. 97, C8, photo of top; ascribed to Han or earlier.

#### CV.98

MATERIAL: Jade, light green translucent.

COLLECTION: Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

##### MEASUREMENTS:

L 2.75  
W 1.00  
D .50

TYPE: 1.

DATE: Early to mid Western Han.

At the upper end, facing upward, an animal mask in relief, with upswept eyebrows marked with striae. Below the mask is a bilaterally symmetrical decor of geometric elements in relief, consisting of paired elongated C's alternately backing upon the partially defined central axis and facing it from positions near the side borders. Perpendicular C-spirals spring from the lower end of each elongated C and curve downward along either the exceptionally thin plain side borders, or along the central axis. Paired volutes open downward at two points along the axis. Elongated C's backing upon the central axis are joined across a low axial ridge by pairs of straight incised lines. The workmanship appears to be of indifferent quality, but to reflect a relatively early stage in the development of this composition in that the surfaces are gently undulating and are used to define certain, here faintly discernible, forms ordinarily incised (upward-opening volutes), or partially defined by incised lines (border rectangles). This treatment of the surface imparts certain plastic qualities derived from implicit rendering of certain forms more explicitly defined on other slides which must be its contemporaries. The opposed pairs of border spirals, for example, are treated as low relief areas partially defined by incised lines drawn along their inner downward curve. The relief areas replacing upward-opening incised volutes would not be recognizable except by relation to contemporary slides where these are more clearly defined elements. Possibly somewhat old-fashioned

at the time it was carved, the well-defined relief elongated C's contrast rather harshly with the surrounding curved surfaces.

The profile has not been published or discussed.

REFERENCE: Hansford, *Jade* (1969), p. 97, C9, photo of top; ascribed to Han or earlier.

#### CV.99

MATERIAL: Jade, light green, almost completely altered to opaque white.

COLLECTION: Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

##### MEASUREMENTS:

L 2.50  
W 1.00  
D .50

TYPE: 1.

DATE: Early to mid Eastern Han.

At the upper end, facing upward, is an animal mask in low relief, with upswept striated eyebrows. Below the mask is a bilaterally symmetrical decor of attenuate geometric forms in line relief, arranged in the customary manner of Type 1 Geometric Class slides. The border spirals curving downward and outward, appear to be incised rather than in relief. The published photo does not permit closer observation of incised details. At the sides are thin plain borders. The central axis is undefined and the surfaces surrounding the relief forms appear to be flat.

The profile has not been published or described.

REFERENCE: Hansford, *Jade* (1969), p. 97, C10, photo of top; ascribed to Han or earlier.

#### CV.100

MATERIAL: Jade, originally dark green, the lower portion flecked with areas of decomposition, the remainder of the surface area totally decolored; on the underside traces of iron oxide.

COLLECTION: Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

##### MEASUREMENTS:

L 1.88  
W 1.00  
D .50

TYPE: 1.

DATE: Late Eastern Chou.

At the upper end, facing upward, an exceptionally prominent animal mask in low relief, with large, broadly outlined eyes and upswept eyebrows marked with faint striae. Below the animal mask, covering the remainder of the upper surface of this short scabbard slide, is a bilaterally symmetrical decor of geometric forms. Between

the brows of the animal mask is an incised drop-shaped motive bracketed by a symmetrical pair of incised, upward opening volutes. Two pairs of elongated C's, the upper backing toward the undefined central vertical axis, the lower pair facing the axis from positions near the side borders, are rendered in full rounded volumes defined partly by incised lines and partly by the lowering of the surrounding surface. The perpendicular C-spirals projected toward either the borders or the axis in accordance with the orientation of the elongated C's, are rendered in the same manner, and spring from a position nearer to the inside center of the elongated C's rather than being clearly attached to the lower curl of these C's. The pair of elongated C's backing toward the axis are joined by two widely separated incised lines, either straight or arching downward slightly. Along the axis, between the two pairs of elongated C's is a downward-opening pair of volutes marked where the parts join at the axis by a cross-hatched diamond. This volute appears to be an incised line with raised surrounding surfaces imparting to it a plastic character. A single pair of opposed border spirals curling downward and outward seems to be defined in the same manner. Projected from the side borders, between the two pairs of elongated C's, are slightly raised, rounded rectangular areas, defined along their lower and inner sides by faintly incised lines. Along the vertical sides are narrow plain borders defined by a rounded groove.

The profile has not been published or described.

REFERENCE: Hansford, *Jade* (1969), p. 97, C11, photo of top; ascribed to Han and identified as a "fitting for scabbard of knife or dagger."

#### CV.101

MATERIAL: Jade, light green and reddish brown. A band of decomposed iron is described as passing completely around the lower aperture plate. Hansford believes this to be the remains of a fixture which served to attach the slide to the scabbard. It may represent, in the interior of the aperture, portions of such a band, with corrosion products of a decomposed iron blade adhering to the underside of the lower aperture plate.

COLLECTION: Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

##### MEASUREMENTS:

L 1.50  
W .75  
D .38

TYPE: 1.

DATE: Late Eastern Chou.

The decor of this slide is virtually identical to that of CV.100 except that the geometric forms appear to be incised only. Otherwise, the shape, position and orienta-

tion of the forms are equivalent. The workmanship has a free, but sketchy quality. The surface, except for vertical grooves defining narrow plain side borders, appears to be flat, but may be slightly modulated. The animal mask, in low relief, has large eyes, again provided with broad relief outlines.

The profile has not been published or discussed.

REFERENCE: Hansford, *Jade* (1969), p. 97, C12, slightly oblique top/profile photo; ascribed to Han and identified as a "dagger scabbard fitting."

#### CV.102

MATERIAL: Jade, decolored white.

PROVENANCE: Recovered in 1954 from a tomb located at Shao-kou 燒溝, about one and one-half kilometers west by north of Lo-yang,<sup>h</sup> Honan<sup>i</sup> Province.

MEASUREMENTS:

L 1.77	ApL .87
W .91	ApD .24
D .51	

TYPE: 1.

DATE: Late Eastern Chou.

The tomb in which this scabbard slide was found was discovered during large-scale excavations in the Shao-kou area near Lo-yang. On the basis of tomb construction, artifacts, and coins, the excavators assigned all of the tombs published in their report to the Han dynasty, ranging from mid Western Han to late Eastern Han. Tomb 1039, one of the simpler earth chamber burials, is assigned to the later part of Eastern Han. Its contents were few, and for the most part simple. In addition to several pottery jars, three bronze crossbow trigger mechanisms were found (pl. L, 10, illustrates one of these) and the corroded remains of several unidentifiable iron objects, among which may have been a knife. Two pieces of jade were recovered from the tomb which had been rifted in antiquity: a plain flat rectangular plaque perforated at each corner (pl. LXIII, 8) and the scabbard slide which lay near the left side of the decomposed coffin. The sword, to which the slide may have been attached, was missing. While other elements of the tomb inventory may belong to the Eastern Han period, typologically the scabbard slide is early. It cannot reasonably be dated later than the end of Chou. I propose, therefore, that it may have been an esteemed relic at the time it was placed in the tomb. Since it is extremely unlikely that scabbard slides were used, even, in late Eastern Han for the practical suspension of swords, it can by no means be certain that this particular specimen was associated with a sword at the time of its burial.

Nothing concerning evidence of long use is revealed in the published description of the slide (p. 208, item 1039:9), and the published photograph of its upper plate

is inadequate for the purpose of such observations. The slide and its decor may be described, however, on the basis of two scaled drawings of dubious accuracy published in the text of the report.

At the upper end, facing upward, an animal mask in relief with striated upswept eyebrows and large, broadly outlined eyes. Below the mask is a bilaterally symmetrical decor of geometric elements which appear to be executed in low relief on a slightly modulated surface. Near the upper end a pair of elongated C's back upon the undefined central vertical axis and are joined by two incised lines reaching across the axis, the upper represented as curving downward, the lower curving upward. At the lower end, a similar pair of elongated C's open toward the axis from positions by the borders. Springing from near the center of each elongated C is a downward-curling C-spiral, the upper pair projected toward the side borders, the lower toward the axis. According to the drawing, the lower pair of C-spirals are joined across the axis, in the manner of the elongated C's, by two incised lines, in this case both arching upward. Along the axis are two bracket volutes marked with a cross-hatched triangle at the axis, the upper pair opening upward, the lower opening downward. On the axis at the lower end is a small cross-hatched triangle. Near the upper end, a single pair of opposed border spirals curl downward and outward. Along the sides are narrow plain borders defined by a groove.

The upper plate is rather strongly arched, its extension above and below the aperture being of approximately equal length. Both ends of the upper plate are slightly rounded, but terminate without the suggestion of a hook. In profile, it is similar to CV.37. Upper and lower aperture plates and aperture walls are represented as being of approximately equal thickness.

REFERENCE: *Lo-yang Shao-kou Han mu* (1959), pl. LXIII, 9, indistinct photo of top; p. 212, fig. 91, 1, scaled drawings of top and profile (possibly inaccurate); text, p. 208, s.v. 1039:9; p. 81, fig. 43, 3, plan of tomb.

#### CV.103 . . . . . Plate 2b-e

MATERIAL: Jade, pale grayish green translucent, the upper part heavily decolored; iron-oxide stains on exterior aperture plate; upper left interior aperture wall deeply worn by belt, with correspondingly less wear visible at lower right interior aperture wall.

COLLECTION: Dr. Arthur M. Sackler, New York; no. J-266.

MEASUREMENTS:

L 3.50	ApL 1.38
W 1.07	ApD .31
D .59	ApX 1.75

The aperture walls have a slight vertical taper so that the width of the lower aperture plate is .98.



TYPE: 1.

DATE: Mid Western Han.

The decorated surface of the slide is much worn, indicating, as does the wear visible on the aperture walls, that this scabbard slide was in use for a long period. One cannot, of course, judge from the condition of the jade how long this period of use or carrying might have been. I know of few scabbard slides exhibiting more wear: **CV.82**, of Late Eastern Chou date, and **SR.1**, carved about the same time as **CV.103** in China and recovered from a burial in South Russia which may be ascribed to the third or fourth century after Christ.

At the upper end, facing upward, is an animal mask in low relief, with upswept eyebrows. The striae which marked these relief brows are largely obliterated, and some details of the face, such as the outlining of the eyes and contours of the muzzle, are now indistinct. Between the brows is an incised drop-shaped motive bracketed by an incised double volute rising at the undefined central vertical axis and opening upward and outward. Below this volute are three opposed pairs of elongated C's, backing upon the axis, or facing it from positions near the side borders. Springing from the lower end of each elongated C is a C-spiral, projected laterally toward either the side border or the central axis in accordance with the orientation of the elongated C, curling downward. These and the elongated C's are executed in low rounded relief. Along the side borders, at two places, are opposed spirals curling downward and outward. These are incised and form the perimeters of low, rounded relief areas. Below each C-spiral projected from an elongated C toward the side borders is a low relief rectangular area defined along its lower and inner side by an incised line. Along the central axis are two downward-opening double volutes, marked by a cross-hatched diamond where their halves meet at the axis. The lower left and right corners are filled by pairs of C-spirals forming brackets curling inward and upward. As with the border spirals and rectangles, these spirals define and enclose areas in low relief. The surface area between the geometric elements undulates slightly and represents a stage between such surfaces as that of **CV.22** where surfaces and geometric forms are fused, and **CV.8** where the surfaces surrounding the geometric forms in relief are essentially flat. Along the vertical sides are plain rounded borders, defined by an incised groove.

The upper plate is slightly arched, terminating above in a rounded slightly back-sloped and undercut hooked ridge. The lower end of the upper plate turns inward quite abruptly and is undercut more on one side than the other, to form a forward-projecting wedge.

Unpublished.

### Ridge Class

**CR.1** ..... Plate 5*d*

MATERIAL: Jade, translucent rich green and greenish brown, marked with small dark inclusions of actinolite; slight evidence of wear at interior upper left aperture corner.

COLLECTION: Dr. Arthur M. Sackler, New York; no. J-785.

MEASUREMENTS:

L 2.63	ApL 1.20
W .96 (upper end)	ApD .56
W .89 (lower end)	
D 1.07	

DATE: Fifth or fourth century B.C.

The surface of the arched upper plate is divided into five parallel concave lengthwise bands of equal width. No other markings appear on the surfaces of the slide. The profile is basically identical to that of **CG.19**, though the latter is smaller, the craftsmanship of superior refinement.

The date assigned to this unique scabbard slide must be considered as tentative. Though in form it resembles the earlier stages in the development of the CG class slides, in decor and proportions, especially the shape and dimensions of the aperture, it is more closely related to the XCR class slides, none of which can with certainty be ascribed a Chou date.

Unpublished.

### Grain Class

**CG.1** ..... Figures 5 and 6, Plate 6*a*

MATERIAL: Jade, white, probably decomposed.

PROVENANCE: Tomb 25, Yang-t'ien-hu 仰天湖, Ch'ang-sha,<sup>d</sup> Hunan<sup>e</sup> Province.

DATE: Late Eastern Chou.

The upper surface is decorated with fully plastic, comma-shaped, grain-spirals raised in high relief slightly above the mean surface level which is depressed around the grains. The grains, with both right and left spirals, form two basic groups, separated by an undefined horizontal axis. To either side of the center are five horizontal rows with three and two grains alternately. In the lower section, each grain curls in the opposite direction to its counterpart in the upper section. The upper plate does not extend forward of the aperture, but curves inward to become the forward aperture wall. Below the aperture the upper plate extends for a short distance, the upper surface curving downward to meet the straight line of the lower. The rectangular aperture extends upward into the upper plate. The aperture walls and upper plate are thick, the lower aperture plate somewhat thinner.



of this type belong generally to the earlier part of Western Han. The plain raised border and scalloped relief band are similar to those on mirrors in Karlgren's "G category" (Karlgren, "Huai and Han" [1941], a "subsidiary type . . . probably created at Shou-chou and spreading to a certain extent also to Lo-yang centre" in the third century B.C. [p. 107]. However, the background ornamentation of these Shou-chou mirrors (Karlgren, pls. LXV-LXVI) bears no relation to this more provincial, naive and almost certainly later example. Watson (*Ancient Chinese Bronzes* [1962], p. 89 f. and pl. XCII, b) places the majority of this class of mirrors in the second century B.C., but the type probably endured in provincial areas well into the first century after Christ.

It is of interest to note that tomb 20 which produced fragments of a tanged, double-edged iron sword with bronze guard (p. 25, fig. 15, upper) and lacquered scabbard, and tomb 28 which produced a single-edged iron sword 26.10 long (p. 25, fig. 15, lower), and tomb 23 which produced a similar sword, none of which contained any jade sword furniture, may be dated on the basis of coins found to the later part of Western Han.

REFERENCE: Szu-ch'uan sheng, "Ch'eng-tu tung pei chiao Hsi-Han mu tsang" (1958), p. 28, fig. 19, scaled rubbings of top and profile.

#### CG.4

MATERIAL: Stone (*shih* 石), possibly jade stone.

PROVENANCE: Ch'ang-sha,<sup>d</sup> Hunan<sup>e</sup> Province; excavated 1956.

MEASUREMENTS:

L 4.06  
W .95

DATE: Western Han, probably late first century B.C.

The piece is very poorly published, very briefly described; it is identified as sword ear-ornament (*chien-erh* 劍珥). The upper surface is ornamented with rows of closely set grains in low relief, offset horizontally to form diagonals. Grain type uncertain. Traces of a screen of lines in three directions appear to be visible on the surface. There are narrow, plain, probably raised borders along the sides; the ends appear to be open. The slide is evidently quite decomposed and the upper plate is broken to either end of the aperture so that the slide is in three pieces. No sword is reported as having been found in association with the scabbard slide, jade pommel disk, jade guard, and jade chape. The guard only is illustrated (pl. X.1, center) and is seemingly crudely fashioned. No iron artifacts are reported so that it seems likely they, and the sword which was probably of iron, had entirely decomposed.

REFERENCE: Hu-nan sheng, "Hu-nan Ch'ang-sha Hsi-

Han mu" (1957b) pl. X, 1, lower right, photo of top; text, p. 31.

#### CG.5

MATERIAL: Jade, perhaps badly decomposed.

PROVENANCE: Chiu-lung-kang 九龍崗 ("Nine dragon mound"), Ho-chin 河津, on the Yellow River in south-west Shansi<sup>n</sup> Province.

DATE: Late Eastern Chou.

The surface of the upper plate is ornamented with grains of uncertain form in offset rows forming diagonals. Wide, plain borders. Photo inadequate; no further information available.

REFERENCE: *Ch'üan kuo chi pen chien she* (1955) 1, pl. XXXVI, 3, lower left, photo of top.

#### CG.6. . . . . Plate 6d

MATERIAL: Jade, light green, partly decomposed; a small part of the lower end missing.

COLLECTION: Alfred F. Pillsbury, Minneapolis.

MEASUREMENTS:

L 3.50

DATE: Western Han.

The surface of the upper plate is ornamented with six parallel vertical rows of twenty-five small, circular, rounded knob grains each, in low relief, now scarcely visible in places owing to the decomposition of the surface. Between the grains are short incised lines interlocked to form a pattern of diagonal stepped T's. The surface area surrounding the grains is softly beveled, establishing a gradual transition between flatter areas and the incisions forming the T-patterns. The sides and ends are provided with narrow plain borders set off from the decorated surface by incised lines. Attached to the right border, and wholly outside the surface area of the slide, is a stylized bird-headed serpent motive carved in flat openwork. The animal form is executed in silhouette essentially, with slight modeling. It reproduces a well-known variety of late Chou design, but is more constrained, heavy, lifeless than those, lacking the spontaneous grace and brittle elegance of the late Chou creations.

REFERENCES:

Salmony, *Carved Jade of Ancient China* (1938), pl. LVIII, 1, photo of top.

New York, Arden Gallery, *Three Thousand Years of Chinese Jade* (1939), p. 40, no. 196, not illustrated.

#### CG.7

MATERIAL: Jade, gray with brown stains; a small chip from left forward edge; no vertical taper.

COLLECTION: Art Institute of Chicago, 50.834; Edward and Louise B. Sonnenschein Bequest.

## MEASUREMENTS:

L 3.81	ApL 1.34
W .94	ApD .19
D .63	ApX 1.84

DATE: Late antiquarian.

The surface of the upper plate is ornamented with four parallel vertical rows of twenty-four circular, rounded knob grains interlocked by incised lines (curved downward and toward the left) between pairs of grains in a continuous fashion to form a diagonal step pattern. No traces of a screen of lines by which the pattern and spacing were laid out remain. Along the sides are narrow, concave, plain borders cut lower than the decor surface and separated from it by an incised groove. The end borders, scarcely visible in the published photographs, are of the same type. The surface of the upper plate retains a high gloss.

The upper plate is disproportionately thick and is nearly flat. At the upper end, the poorly formed, pendulous, and slightly undercut hook penetrates inward to a depth equal to that of the exterior of the lower aperture plate. The lower end reaches an equal depth and is curved inward through a gradual arc rather than through an obtuse angle and oblique plane. The proportions and workmanship are generally of inferior quality, the incisions unsteady.

REFERENCE: Salmony, *Sonnenschein Collection* (1952), p. CVII, 2, photo of top.

## CG.8

MATERIAL: Nephrite, white shading into gray, slightly translucent; iron-oxide stains in several places; a small part of the upper end missing.

PROVENANCE: Acquired in the region of Shou-hsien,<sup>1</sup> Anhui<sup>†</sup> Province.

COLLECTION: His Majesty King Gustaf VI Adolf, Stockholm.

## MEASUREMENTS:

L 2.68
W .59
D .51

DATE: Ascribed to late Eastern Chou or Early Han.

The surface of the upper plate is ornamented with four parallel vertical rows of eighteen small round knob grains in low relief. Between the grains are short incised lines forming diagonal rows of T's. Narrow, plain borders at the sides and lower end, defined by incised grooves; a somewhat wider, plain border at the top. On the forward edge, the fully modeled figure of a recumbent tailless animal with a single foot.

The decor of the upper surface generally agrees with jades of early Han age, but the profile indicates a degree

of clumsiness unusual in authentic scabbard slides of either Chou or Han. Uncharacteristic of authentic slides is the extreme narrowness in relation to depth. Furthermore, the slide increases in depth toward the lower end (contrary to the normal decrease) which would result in the lower end projecting out from the scabbard wall, producing a less attractive and less useful appendage to the scabbard. The upper plate terminates at the forward end in a rounded inward-projecting wedge. The lower end is bent inward in an ungraceful, thick curve ending in a pointed, forward-projecting wedge. The lower aperture plate, from the midpoint upward, slopes toward the upper plate so that it could not have been effectively inserted into a socket in the scabbard wall. However, the profile is published as a drawing only, and the irregularities may, therefore, be somewhat exaggerated by inaccuracies in the drawing.

This unusual piece would have to be examined first-hand before any final conclusions on its date could be drawn.

## REFERENCES:

Palmgren, *Selected Chinese Antiquities from the Collection of Gustaf Adolf* (1948), pl. LIV, 3, photo of top; p. 100, fig. 226, drawing of profile; p. 100, fig. 227, drawing of animal on forward edge.

Karlbeck, "Selected Objects from Ancient Shou-chou" (1955), pl. LXI, 9, photo of top.

## CG.9

MATERIAL: Jade, white with brown patches; some surface decomposition.

PROVENANCE: Presumably acquired in Shou-hsien,<sup>1</sup> Anhui<sup>†</sup> Province.

## MEASUREMENTS:

L 1.69
W 1.02*

DATE: Ascribed to Late Eastern Chou; possibly early Western Han.

The surface of the upper plate is marked with a screen of parallel lines in at least two directions diagonal to the vertical axis, dividing the surface area into polygonal areas from which circular grains in rows offset horizontally to form diagonals have been carved. Traces of the reticulation remain on the background. The slide is not sufficiently well published to determine whether the grains are of the comma or knob variety. Narrow, plain borders, equal in height to the grains, are drawn along the two sides; the ends are open.

No profile of this slide has been published, but its shortness indicates that it may be closely related to slides of the XCG class.

REFERENCE: University of Pennsylvania, University Museum, *Archaic Chinese Jade* (1940), p. 51, no. 265 and

pl. XIV, 265, small, blurred photo of top.

CG.10. . . . . Figure 8

**MATERIAL:** Nephrite, ivory white with gray and brown areas; traces of rust (iron?) on underside.

**COLLECTION:** His Majesty King Gustaf VI Adolf, Stockholm.

**MEASUREMENTS:**

L 2.24  
W .67  
D .51

**DATE:** Early Western Han.

The surface of the upper plate is ornamented with three parallel vertical rows of twelve square knob grains, flat on top. No traces of screening lines by which the pattern and spacing of the grains on slides of this class are laid out remain on the flat surface. Along the sides are broad plain borders recessed below the level of the decor surface which subsides at each end to the level of the borders. The upper plate is slightly arched, with a very short beak-shaped forward extension. The lower end of the upper plate curves inward, increasing in thickness very slightly and is bluntly terminated. The profile is similar to that of CZ.1.

(Slides with similar grain type: CG.2, CG.11)

**REFERENCE:** Palmgren, *Selected Chinese Antiquities from the Collection of Gustaf Adolf* (1948), pl. LIV, 2, photo of top; p. 100, no. 954, fig. 225, drawing of profile.

CG.11. . . . . Plate 7a

**MATERIAL:** Jade, a jade-like stone; white with black and brown spots.

**COLLECTION:** Museum of Far Eastern Antiquities, Stockholm, no. 9629; acquired in Peking.

**MEASUREMENTS:**

L 2.53  
W .81  
D .63

**DATE:** Early Western Han.

The surface of the upper plate is ornamented with five parallel vertical rows of sixteen square knob grains, flat on top. No traces of screening lines by which the pattern and spacing of grains on slides of this class are laid out remain on the flat surface. Along the sides are narrow plain borders recessed below the level of the decor surface which subsides at each end to the level of the borders. The upper plate is slightly arched. The forward end of the upper plate curves inward slightly; the forward edge is beveled and no hook is formed. At the lower end the upper plate curves inward abruptly. A sharp, ninety-degree angle is formed on the underside, but the outer surface curves more gradually so that the plate thickens.

It terminates in a blunt knob ridge.

(Slides with similar grain type: CG.2, CG.10)

**REFERENCES:**

Janse, "Notes sur quelques épées anciennes" (1930), pl. XVIII, 2a, photo of top; pl. XVIII, 2b, photo of profile.

Janse, "L'empire des steppes" (1935), pl. IV, 8, photos of top and profile.

**CG.12**

**MATERIAL:** Jade, pale green.

**COLLECTION:** Fogg Art Museum, Harvard University, Cambridge, Massachusetts, 1943, 52.128; Grenville L. Winthrop Bequest.

**MEASUREMENTS:**

L 2.28	ApL .97
W .75	ApD .31
D .56*	
Depth of upper plate over aperture .13.	

**DATE:** Early Western Han.

The surface of the upper plate is ornamented with four parallel vertical rows of grains interlocked by incised lines (curved upward and toward the left) between pairs of grains to form a diagonal step pattern. Thin, plain borders along the sides and across the ends.

The scabbard slide was presumably found with the fragmentary iron sword to which it is presently attached, apparently by means of some adhesive applied at a later time. The slide rests directly on the much corroded blade, but is surrounded by permineralized fragments of the wooden scabbard which doubtless was once lacquered.

The upper plate is slightly arched. At the lower end it curves inward and the end is cut at an angle without the formation of an undercut hook. The inner corners of the aperture are squared; the two outer corners are rounded so that the aperture resembles a segment of an ovaloid space.

**REFERENCE:** Na Chih-liang, *Yü ch'i t'ung-shih* (1964), pl. LXXIII, photo of slide in position on fragmentary sword and scabbard; top view of slide.

**CG.13**

**MATERIAL:** Jade, light brown, flecked with white, bone white, and dark brown.

**PROVENANCE:** Acquired in the region of Shou-hsien,<sup>1</sup> Anhui Province.

**COLLECTION:** O. Karlbeck, Stockholm.

**MEASUREMENTS:**

L 2.95  
W .79

**DATE:** Western Han (?).

The substantially decomposed condition of this slide precludes verification of details of its decor. The upper

surface, enclosed on all four sides by narrow, plain, raised borders, is ornamented with rows of closely set circular, rounded knob grains offset horizontally to form diagonals. The slide visibly tapers toward each end. The screen of lines by which the pattern was laid out is not visible in the published photograph, but apparently traces of it remain on the surface.

REFERENCE: Karlbeck, "Selected Objects from Ancient Shou-chou" (1955), p. 126 and pl. LXI, 7, photo of top.

CG.14 ..... Figure 8, Plate 6f

MATERIAL: Jade, orange-brown and yellowish cream, slightly translucent; small patches of surface decomposition on upper plate near forward end; traces of iron oxide on exterior of lower aperture plate; some soil in aperture; part of lower aperture plate and lower hook decomposed.

PROVENANCE: Reputed to have been acquired in the region of Shou-hsien,<sup>1</sup> Anhui Province.

COLLECTION: British Museum, London, 1947.7-12.500; Henry Oppenheim Bequest.

MEASUREMENTS:

L 2.47	ApL .97
W .86	ApD .17
D .42	ApX 1.25
Depth of upper plate over aperture .16. The sides slope inward toward the base so that the width of the lower aperture plate is .81. The slide tapers slightly from the center downward to the lower end where the width is .84.	

DATE: Western Han.

The surface of the upper plate is ornamented with six parallel vertical rows of nineteen circular, rounded knob grains interlocked by incised lines (curved downward and toward the right, except for the lines connecting grains of the left-hand row which curve toward the left) between pairs of grains to form a diagonal step pattern. Along each side is a shallow groove separating the decorated area from a thin, plain border which curves from the outer edge downward to join the groove. The upper and lower ends of the decorated area are closed by incised lines connecting across the ends to the lateral grooves. The grains slightly exceed in height the side borders.

The upper plate is very slightly arched. The forward edge is rounded but not back-sloped as is customary with the Western Han pieces of most careful workmanship; the inward curve is undercut to form a sharply defined hook. At the lower end the upper plate curves abruptly inward and a hook is formed by a thin, squared, forward-projecting ridge rising from the underside of the upper plate. The lower hook is parallel to the line formed by the inner side of the lower aperture plate so that it may be presumed to have rested against the scabbard wall. The upper hook does not project inward so far and presumably was not thus supported.

The workmanship of this handsomely proportioned

piece is of high quality, the contours strongly, sharply, surely formed.

REFERENCES:

London, Royal Academy of Arts, International Exhibition of Chinese Art, *Catalogue* (n.d.), p. 45, no. 616, not illustrated.

London, Royal Academy of Arts, *The Chinese Exhibition: a Commemorative Catalogue* (1936), p. 25, no. 616, not illustrated.

Jenyns, *Chinese Archaic Jades* (1951), pl. XXXV, E, photo of top.

Karlbeck, "Selected Objects from Ancient Shou-chou" (1955), pl. LXI, 10, photo of top; text, p. 126.

Savage, *Chinese Jade* (1965) pl. II, C, lower right, photo of top (reduced-size photo from Jenyns [1951]).

CG.15..... Figure 6

MATERIAL: Jade, pale translucent grayish green, with decomposed areas on the lower aperture plate and at the upper right side of the upper plate; traces of iron oxide on underside.

COLLECTION: Dr. Arthur M. Sackler, New York; no. J-818.

MEASUREMENTS:

L 1.94	ApL 1.00
W .91	ApD .27
D .56	ApX 1.38
The sides slope inward toward the lower aperture plate with a width of .84.	

DATE: Late Eastern Chou.

The surface of the upper plate is ornamented with thirteen horizontal rows of plastic comma-spirals, offset horizontally in such a manner that diagonal rows are formed. The character of these diagonal rows suggests use of a pattern turned at less than forty-five degrees from the vertical so that the progression of grains toward the left side (beginning with the uppermost centralized grouping) required the introduction of irregular plain surface areas at the side borders, or the addition of partial grains to these spaces. The individual grains are carved in both right and left spirals, beginning near the crest of rounded relief knobs and terminating in incised lines below the general surface level. At each side is a narrow plain border rising to a ridge at the edge of the slide. At the upper and lower ends are narrow borders in relief marked with curved incisions to simulate rope patterns (cf. CG.22). A comparable motive appears on a jade beaker assigned to late Chou (Umehara, *Sen'goku jidai no gyokuren gyokuhai* [1956], pl. XIII, B).

The upper plate is very slightly arched, the upper surface of the plate curving inward to meet the briefly extended flat underside of the plate. A short beak-like projection is thus formed. The extension of the upper

plate below the aperture is greater, the plate growing thinner toward the lower end where it curves inward and is cut off bluntly, the end forming a line parallel to that of the lower aperture plate.

REFERENCE: West Palm Beach, Norton Gallery of Art, *Exhibition of Chinese Archaic Jades* (1950), pl. LVIII, 2, photo of top.

## CG.16

MATERIAL: Jade.

COLLECTION: Minneapolis Institute of Arts; Alfred F. Pillsbury Bequest.

DATE: Early Western Han.

Possibly identical to C.1.

The surface of the upper plate is ornamented with three parallel vertical rows of twenty-three circular, rounded knob grains interlocked in pairs (alternating diagonally) vertically by incised arcs. The grains of the left row are interlocked in a continuous chain, the arcs drawn between them alternately curving toward the right and left. A short, incised, horizontal line projects toward the left from the inner side of the incised arc of each pair of grains and, with the arcs, constitutes a variety of the stepped-T pattern. The lines, projecting into the adjoining row of grains to the left, are set close to the upper grain in each pair. Thin, plain borders appear to be defined by a narrow groove along the sides, with an incised border line closing each end. An incised line at each corner marks forty-five degrees in the corner right angles.

REFERENCE: "Carved Jades of Shang and Chou" (1942), p. 119, center, photo of top.

## CG.17

MATERIAL: Jade, white, opaque, with deep rust-colored veins and patches; green and red bronze patination and fragments of wood adhering to exterior of lower aperture plate.

COLLECTION: James Marshall Plumer, Ann Arbor, Michigan.

MEASUREMENTS:

W .70	ApL .94
	ApD .25
	ApX 1.34

Depth of upper plate over aperture .16.

DATE: Western Han.

The upper plate is broken just below the aperture, and the lower portion is missing. The surface of the upper plate is ornamented with four parallel vertical rows of circular, rounded knob grains interlocked by incised lines (curved downward and toward the right) between pairs of grains to form a diagonal step pattern. The decorated surface is recessed below plain borders rather broader

than usual along the sides which subside at the forward edge to the level of the decor surface and are joined by an incised line separating the decor surface from a plain border at the forward edge. The upper plate is slightly arched and projects only slightly forward of the aperture. The forward edge curves inward to meet the slightly lowered undersurface at an acute angle, forming a blunted beak-like projection.

Unpublished.

## CG.18

MATERIAL: Jade, translucent gray-green with clouds and fine interior veins of gray-brown; a part of the lower aperture plate missing.

COLLECTION: James Marshall Plumer, Ann Arbor, Michigan.

MEASUREMENTS:

L 2.34	ApL 1.00
W .72	ApD .13 to .19
D .38	ApX 1.22

Depth of upper plate over aperture .09.

DATE: Western Han.

The surface of the upper plate is ornamented with five parallel vertical rows of nineteen small, circular, rounded knob grains interlocked by incised lines (curved upward and toward the right, except for those connecting grains of the left-hand row which curve toward the left) between pairs of grains to form a diagonal step pattern. The decorated area is recessed, but the grains rise in relief to a level just above that of the plain borders on all four sides. The decorated area is not centered on the upper surface of the slide, but is offset toward the right so that use of a single (and accidentally miscentered) die for the carving of the pattern may be presumed. The lower aperture plate is unusually thin, but evidence of regrinding suggests that the plate may have been reduced in depth in an effort to remove irregularities, perhaps associated with a breakage. The lower aperture wall slopes outward at an angle roughly perpendicular to the slope of the upper plate. The cant of the upper plate, which slopes sharply down from the deepest point at the top to the shallowest at the lower end, is unusual (but not unique—see CV.40), and determined the irregular ovaloid shape of the aperture. The upper plate projects slightly forward of the aperture and curves inward to form a blunt knob. At the lower end, the upper plate curves inward on one side at right angles and terminates bluntly; on the other side the inward projection of the upper plate has been ground away flush with the undersurface of the plate. The lower end of the upper plate is little more than a millimeter above the line formed by the outer surface of the lower aperture plate, but was perhaps slightly more elevated before the regrinding of the lower aperture plate.

REFERENCE: University of Michigan, Ann Arbor, *Early Chinese Jades* (1953), no. 120, not illustrated.

**CG.19** . . . . . Figure 6, Plate 6*b*

**MATERIAL:** Jade, brown stone with translucent gray-green patches; possibly not nephrite.

**COLLECTION:** British Museum, London, 1947.7-12.479; Henry Oppenheim Bequest.

**MEASUREMENTS:**

L 1.72	ApL .91
W .98	ApD .44
D .78	ApX 1.38

Depth of upper plate over aperture .22. The side walls taper slightly so that the width across the lower aperture plate is .94. The upper plate is widest at the upper end, tapering to .97 over the center of the aperture, and .95 at the lower end.

**DATE:** Fifth or fourth century B.C.

The surface of the upper plate is ornamented with thirteen somewhat haphazardly arranged horizontal rows of comma-spirals offset horizontally. The spirals, with both left and right curl, and without regular orientation, are unevenly spaced so that use of a die or pattern is doubtful. The end of each spiral begins as an incised line below the surface level and increases in relief height as it progresses toward the center. The surface is depressed slightly around each grain. The decorated surface is enclosed by narrow plain borders on all sides. The upper plate is slightly arched, projecting very slightly forward of the aperture to form a curved ridge. The projection of the upper plate below the aperture is only somewhat longer, becoming thinner and curving inward slightly, and terminating bluntly. The workmanship is of superior quality.

REFERENCE: Trousdale, "Possible Roman Jade" (1969), p. 59, fig. 4, oblique top/profile photo.

**CG.20** . . . . . Figure 8, Plate 7*c*

**MATERIAL:** Nephrite (by X-ray diffraction); deeply decomposed over most surfaces, apparently originally yellowish green to gray; heavy iron corrosion (goethite) on top, side, and underside of left side of upper plate over aperture (slide possibly lay on its side on the iron blade of a sword); smaller iron oxide stains in interior left side and bottom of lower aperture plate; iron-oxide discoloration penetrates through stone of lower aperture plate; excavation earth in aperture and adhering to undersurfaces; small chips out of both upper and lower end hooks.

**COLLECTION:** Freer Gallery of Art, Washington, D.C., 15.233.

**MEASUREMENTS:**

L 2.47	ApL .88
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W .81	ApD .28
D .50	ApX 1.19

Depth of upper plate over aperture .16. The sides slope inward toward the base so that the width of the lower aperture plate is .75. The depth is greater along the right side than along the left where the maximum depth is .45.

**DATE:** Western Han.

The surface of the upper plate is ornamented with a very coarse and irregular grain pattern produced by a screen of deeply cut lines in three directions intersecting irregularly. Along the sides are narrow recessed plain borders separated from the decorated area by a groove. The condition of the surface at the upper and lower ends is too badly decomposed to determine the existence of borders. The upper plate is slightly arched. The forward edge curves inward, terminating in a rounded, back-sloped hook on the left side, but on the right side it terminates in a rounded inward-projecting knob only, possibly as a result of an early break and subsequent regrinding.

The upper plate, in keeping with the general shape of the piece, is projected further inward on the left side, so that the aperture is deeper on one side than the other. At the lower end, the upper plate slopes sharply inward with a slight forward-projecting wedge at the end on the underside. The formation of the aperture walls is irregular. Two curved bays on the inner sides of both the upper and lower aperture walls are evidently evidence of the drill used to bore the aperture, the small peaks of stone between the round drillings not having been ground off (cf. CG.22). The lower aperture plate is of uneven thickness, being extremely thin at the center. The several irregularities which could not have been effectively corrected suggest that this is not an unfinished piece, but rather one of inferior quality, perhaps manufactured as burial equipment.

Unpublished.

**CG.21** . . . . . Figure 8, Plate 7*b*

**MATERIAL:** Jade, badly decomposed; earth and wood debris and iron corrosion in aperture and adhering to bottom of lower aperture plate.

**COLLECTION:** British Museum, London.

**MEASUREMENTS:**

L 3.11	ApL 1.41
W .95	ApD .27
D .55	ApX 1.69

Depth of upper plate over aperture .17.

**DATE:** Western Han.

The surface of the upper plate is ornamented with five parallel rows of eighteen circular, rounded knob grains in very low relief defined by incised circumferences and interlocked in pairs by incised lines grouping units of six grains into partially enclosed rectangles. Along the sides and at the upper end are narrow plain borders separated



from the decorated surface by incised lines; at the lower end, a broader plain area is similarly separated from the decor surface. The upper plate is slightly arched, and terminates at the upper end in a blunt beak-like projection. The longer extension of the upper plate below the aperture is terminated in a blunt right-angle curve inward.

REFERENCE: Umehara, *Shina kogyoku zuroku* (1955), pl. CVI, upper right, photos of top and profile.

CG.22..... Plate 7d

MATERIAL: Jade.

COLLECTION: Eguchi Jirō,<sup>m</sup> Ōsaka.

MEASUREMENTS:

L 3.13*	ApL 1.19*
W .97*	ApD .28*
D .56*	ApX 1.56*
Depth of upper plate over aperture .19.*	

DATE: Mid to late Western Han (?).

The surface of the upper plate is decorated with twenty horizontal rows of grains with generally six and five grains in alternate rows, offset horizontally to form diagonals. The grains are of the left spiral variety, incised on small rounded knobs. The grains nearest to the side borders have not been incised with the comma design, but have been left as plain knob grains. The surface between the grains is flat. The relief of the grains appears to rise slightly above the narrow plain side borders separated from the decorated surface by an incised line. Use of a die is evident in the incorrect centering of the pattern and in the appearance of partial grains along the borders. At the lower end a narrow border is marked with diagonal lines suggestive of a rope design (cf. CG.15). At the upper end, an animal mask, partly in flat relief and partly incised, with upswept striated eyebrows. The eyebrows run together above the snout with no line separating one from the other. Above the center of the eyebrows is a half-oval, cross-hatched area with a short incised spiral curling outward from each side. This ornament is not represented on any other scabbard slide. The upper plate is very slightly arched. The upper end of the upper plate is bent in sharply, but the forward edge inclines somewhat upward rather than being back-sloped, or straight; the plate terminates in a rounded, back-curved knob ridge. The lower end of the upper plate is also bent sharply inward and a hook is formed by a squared, forward-projecting wedge on the underside of the plate. The contours of this piece are sharp and bold, but the ornamentation is not executed with precision and care. The interior aperture walls evince evidence of drilling similar to those of CG.20.

REFERENCE: Umehara, *Shina kogyoku zuroku* (1955), pl. CVII, 10, top and profile photos.

CG.23

MATERIAL: Glass, greenish-white, translucent; iron-oxide stains (presumably chiefly on underside).

COLLECTION: His Majesty King Gustaf VI Adolf, Stockholm.

MEASUREMENTS:

L 3.66
W .75
D .20
Shallowest piece recorded.

DATE: Late Western or early Eastern Han.

The surface of the upper plate is ornamented with five parallel vertical rows of twenty-six evenly spaced, small, circular, rounded knob grains. The surface between the grain is flat and recessed between narrow, plain, rounded side borders. The ends appear to be unbordered. The upper plate is very slightly arched. At both the upper and the lower ends, the upper plate turns inward at right angles and is terminated in a blunt inward-projecting ridge.

REFERENCE: Palmgren, *Selected Chinese Antiquities* (1948), pl. LV, 3, photo of top; p. 101, fig. 229, drawing of profile.

CG.24

MATERIAL: Glass, white (or decomposed surface only?).

COLLECTION: Dr. Carl Kempe, Sweden.

MEASUREMENTS:

L 3.78
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DATE: Han, perhaps Eastern.

The surface of the upper plate is ornamented with five parallel vertical rows of rounded knob grains. The upper end of the upper plate appears to be extended straight, the lower end to be curved inward, possibly with a forward-projecting wedge on the undersurface forming a hook ridge. The piece is too poorly preserved, too poorly published, for more detailed observation.

REFERENCE: Karlbeck, "Selected Objects from Ancient Shou-chou" (1955), pl. LXI, 6, photo of top; text, p. 126.

CG.25 ..... Figure 8, Plate 8b

MATERIAL: Glass, pale green, now entirely encrusted with rough white decomposed material.

PROVENANCE: Acquired in the region of Shou-hsien,<sup>1</sup> Anhui<sup>f</sup> Province.

COLLECTION: British Museum, London, 1935.1-15.2.

MEASUREMENTS:

L 2.97	ApL 1.06
W .72	ApD .23
D .50	ApX 1.41
Depth of upper plate over aperture .14. The maximum width is attained slightly above the center of the aperture.	

Tapering inward slightly toward each end, the width at the upper end is .70, at the lower end .69. The sides slope inward toward the base so that the width of the lower aperture plate is .61.

DATE: Han, probably Western.

The surface of the upper plate is ornamented with four parallel vertical rows of eighteen evenly spaced, small, circular, rounded knob grains on a flat surface. At the upper end, cast in low relief, is a small, abbreviated, stylized animal mask of unique form, without eyebrows and with large, leaf-shaped eyes with small round pupils in relief. The mask is now almost invisible in the decomposed material of the surface. The decorated surface is enclosed on all four sides by narrow, flat, plain borders elevated to a height equal with crests of the grains.

Here, as on other glass scabbard slides of this class, the cast grains are not as distinctly formed as the carved grains on the jade pieces, but rise in more gently curved mounds on the surface. The fact that knob grains only appear on the glass slides of this class may be owing to a general Han predilection for grains of this type, but may also be dictated by the relatively poor response of Chinese glass of this period to the casting or impressing of more complicated forms.

The upper surface of the slide was once smooth, clear, and glossy; the other surfaces are opaque, as though frosted. This condition appears to be the result of filing, and perhaps the slide was shaped from a rough casting. The upper plate is slightly arched. Both the forward and rear edges are back-sloped and provided with rounded, inward-projecting ridges across the undersides.

A general characteristic of the glass scabbard slide is the slight outward slope of the aperture walls, more pronounced on the rear, or lower, aperture wall. This slope is rarely evident on the jade slides. The slope of the sides inward toward the base is also generally more pronounced on glass slides than on stone. Glass slides generally are narrower in relation to length than are the stone slides.

REFERENCE: Karlbeck, "Selected Objects from Ancient Shou-chou" (1955), pl. LXI, 8, photo of top; text, p. 126.

### CG.26

MATERIAL: Glass, light milky green, translucent; surface shows no signs of decomposition (possibly cleaned—see below); some surface flaws in casting.

COLLECTION: British Museum, London, 1940.12-14.113.

#### MEASUREMENTS:

L 4.00	ApL 1.28
W .78	ApD .25
D .50	ApX 1.56
Depth of upper plate over aperture .16. The slide is widest over the center of the aperture, about two-fifths of the	

total length down from the head, and tapers slightly toward each end: width at top .75; width at lower end .69. The sides slope inward so that the maximum width of the lower aperture plate is .63.

DATE: Late Western or early Eastern Han.

The surface of the upper plate is ornamented with four parallel vertical rows of eighteen evenly spaced, circular, rounded knob grains of somewhat irregular size on a clear, glossy, slightly concave surface between broad, flat, plain side borders, lower than the relief of the grains. The ends are unbordered. The interior borderlines are straight and parallel so that, as a result of the tapering of the slide toward either end, the borders are broadest over the aperture and narrower toward each end. At the upper end, an elongated, abbreviated, stylized animal mask of unusual form in linear relief. The surface of the slide occupied by the animal mask is flat and the relief of the mask, lower than that of the grains, does not exceed the height of the borders. The animal mask, bovine in aspect rather than feline as on the slides of the Geometric Class, is reminiscent of one carved on a small jade handle-socket in the British Museum (Jenyns, *Chinese Archaic Jades* [1951], pl. XXXIII, d) which has been variously ascribed to the Chou and Han periods.

All surfaces except the upper appear frosted (result of filing?) as on the preceding slide. The slope inward of the sides toward the narrower base, as on CG.25, is more pronounced than on jade slides. The aperture walls slope outward as on CG.25, again the slope of the lower wall being more pronounced. The upper plate is very slightly arched. Both forward and rear edges are slightly back-sloped and provided with rounded, inward-projecting ridges across the underside.

The glass of this piece was studied by Seligman and Beck. The chemical analysis of this piece showed a sufficient quantity of barium to indicate that it was cast of glass manufactured in China. The authors believe it to be of Han date (p. 48).

REFERENCE: Seligman and Beck, "Far Eastern Glass" (1938), p. 48, fig. 11, line drawing to scale of top and profile; analysis results, Table III, pre-Han or Han material, item 4. (The above drawings contain some minor inaccuracies. The drawing of the upper surface indicates a border at the lower end where there is none. It also indicates that the lower end is squared whereas it is slightly rounded in an irregular fashion, being cut upward more on the right than on the left side. The profile drawing does not indicate the back-slope of the forward and rear edges, nor the greater outward slope of the lower aperture wall. The lower end is also inaccurately rendered. It is not roundly curved as indicated, but turns inward in a series of two planes, the first, a short, flat plane at about a forty-five degree inward slope, the second, a deeper, back-sloped plane, meeting the former

at an obtuse angle. The inward-projecting ridge on the underside is broader and somewhat more angular than here drawn. The nature of the inaccuracies in the drawing does not suggest alteration in the form of the slide owing to the removal of samples for analysis.)

CG.27

MATERIAL: Glass, white (decomposed?); upper end badly decomposed.

COLLECTION: Mr. Louis Clarke (now dispersed).

MEASUREMENTS:

L 2.52

DATE: Han.

The surface of the upper plate is ornamented with five parallel vertical rows of evenly spaced, circular, cone-shaped knob grains. There is evidently an animal mask cast at the now badly decomposed upper end; the eyes and snout only are partially visible. The rectangular recessed area decorated with the grains is out of line with the sides of the slide so that the plain borders around it are of irregular width as the decorated area moves from nearer to the right side at the lower end toward the left side below the decomposed area at the upper end. The poor centering of the decor suggests that the molds in which the glass scabbard slides were cast were composed of at least two sections and that the section containing the decor might have been interchangeable. An alternative to this might be that a die was used to press the design into the soft upper surface of the slide after the glass had been poured into an open mold and allowed to partly solidify, and that in this instance the die was applied imprecisely.

REFERENCE: Karlbeck, "Selected Objects from Ancient Shou-chou" (1955), pl. LXI, 11, photo of top; text, p. 126.

CG.28

MATERIAL: Jade, brown.

COLLECTION: Museum of Far Eastern Antiquities, Stockholm; formerly Osvald Sirén, Stockholm.

MEASUREMENTS:

L 4.13

DATE: Probably antiquarian, but possibly Eastern Han.

The surface of the upper plate is ornamented with four parallel vertical rows of nineteen evenly spaced, circular, rounded knob grains interlocked by incised lines (curved downward and toward the right) between pairs of grains to form a diagonal step pattern. The decorated surface is separated from plain, raised borders on all sides by an incised groove. On the forward edge of the slide is the figure of a hydra carved in high relief.

The figure prolongs the length of the slide rather than being carved into the forward edge. No traces remain of the reticulation by which the pattern and spacing of the grains were laid out.

REFERENCES:

Sirén, *Documents d'art chinois* (1925), pl. XXXVII, no. 506, photo of top; ascribed to Sung dynasty.

Stockholm, *Celedon-Jade* (1963), p. 24, no. 40, not illustrated; ascribed to Han dynasty.

Gure, "Jade Exhibition at Stockholm" (1964), pl. I, 1 oblique top/profile photo; text, p. 122, ascribed to Han dynasty.

CG.29 .. ..... Figure 14

MATERIAL: Jade, pale green and brown.

COLLECTION: The late Seiichi Ueno,<sup>a</sup> Ōsaka.

MEASUREMENTS:

L 4.65

W 1.00

D .55

ApL 2.06\*

ApD .19\*

ApX 2.38\*

DATE: Han, probably Eastern.

The surface of the upper plate is ornamented with fifty-six horizontal rows of generally ten or eleven fine, closely set knob grains offset horizontally to form diagonals. The pattern was achieved by the screen of deeply cut, closely set lines laid in three directions and forming small polygonal knobs by the intersection of the lines. The screen lines were not ground away and the grains, which appear to be poly-sided pyramids, were only partially shaped. The decorated surface is bounded on all four sides by a raised plain border. The exceptionally long upper plate (and proportionately long aperture) is flat in profile. At the upper end it is turned inward at right angles, terminating in a blunt ridge. The lower end of the upper plate is turned inward at right angles through a series of two flat planes on the upper surface diverging successively at forty-five degree angles and by a right-angle turn on the inner side, terminating in a broad, squared ridge across the underside of the lower end.

The exceptional length and angularity of this slide, both of which are more characteristic of the majority of non-Chinese slides, together with the relatively simplified carving, suggest that the slide might have been produced in the northern Chinese border regions in imitation of long Chinese examples similar to the following example (CG.30).

REFERENCES:

Hamada, *Yūchikusaizō kogyokufu* (1925), 2, pl. XXI, 45, color photo of top; 1, pl. V, 45, reduced scale drawing of profile and rubbing (?) of top.

*Shū Kan ihō* (1932), pl. XXXIII, 2, photo of top.

## CG.30 ..... Figure 14

MATERIAL: Jade.

MEASUREMENTS:

L 4.06*	ApL 1.41*
W 1.06*	ApD .25*
D .56*	ApX 1.75*
Depth of upper plate over aperture .19.*	

DATE: Eastern Han.

The surface of the upper plate is ornamented with six parallel vertical rows of twenty-four evenly spaced, circular, rounded knob grains interlocked in pairs by curved incised lines which group units of six grains into partially enclosed rectangles. Besides these incised lines, there are others forming regular, bilaterally symmetrical patterns on the surface, independent of, or incorporating, several grains. The decorated surface is bounded on all four sides by plain borders. The upper plate appears in profile to be almost flat, with the rounded, involuted forward end terminating in a sharp hook. The lower end of the upper plate is curved inward and terminates in a short, pointed, forward-projecting ridge. The compact proportions and sturdy contours of the earlier slides are here lacking. The ends of the upper plate are especially weakly conceived.

REFERENCE: Huang Chün, *Ku yü t'u lu* (1939), III, 19:a, rubbings of top and profile.

## CG.31

MATERIAL: Jade.

MEASUREMENTS:

L 3.47*	ApL 1.34*
W 1.00*	ApX 1.63*

Authenticity cannot be established on basis of published line drawing. The upper surface is ornamented with thirty-three horizontal rows of closely set knob grains offset horizontally to form diagonals. Plain borders, narrow on the sides, broad at top and bottom.

REFERENCE: Wu Ta-ch'eng, *Ku yü t'u k'ao* (1889), II, 114:b, drawing of top, with foreshortened profile at left; (see note with CP.6).

## CG.32

MATERIAL: Jade.

COLLECTION: Art Institute of Chicago, 50.876; Edward and Louise B. Sonnenschein Bequest.

MEASUREMENTS:

L 2.47	ApL .94
W .75	ApD .19
D .44	ApX 1.28
Depth of upper plate over aperture .13.	

The surface of the upper plate is ornamented with small, closely set knob grains. Probably Han dynasty.

Unpublished.

## CG.33

MATERIAL: Jade.

COLLECTION: Art Institute of Chicago, 50.875; Edward and Louise B. Sonnenschein Bequest.

MEASUREMENTS:

L 3.50	ApL 1.06
W .84	ApD .16
D .34	
Depth of upper plate over aperture .13.	

At the upper end, an animal mask. The surface of the upper plate below is ornamented with knob grains. Possibly Eastern Han.

Unpublished.

## CG.34

MATERIAL: Glass, extremely decomposed with heavy surface incrustations.

COLLECTION: Art Institute of Chicago, 50.878; Edward and Louise B. Sonnenschein Bequest.

MEASUREMENTS:

L 2.63	ApL 1.00
W .66	ApD .28
D .56	ApX 1.44
Depth of upper plate over aperture .13.	

The surface of the upper plate is ornamented with a pattern of small round knob grains now almost obliterated. Undoubtedly authentic Han dynasty work.

Unpublished.

## CG.35

MATERIAL: Jade, brown; partly decomposed.

MEASUREMENTS:

L 4.00

The surface of the upper plate is ornamented with a pattern of grains. Published photograph inadequate. Ascribed to Han dynasty.

REFERENCE: New York, Yamanaka and Company, *Far Eastern Art* (1943), no. 296, photo of top.

## CG.36

MATERIAL: Jade, light green with tan markings; partly decomposed.

MEASUREMENTS:

L 3.88

At the upper end, an animal mask. Below, surface of the upper plate decorated with grain pattern. Published photograph inadequate. Ascribed to Late Eastern Chou; probably late antiquarian.

REFERENCE: New York, Yamanaka and Company, *Far Eastern Art* (1943), no. 297, photo of top.

## CG.37

MATERIAL: Jade.

COLLECTION: National Palace Museum, Taipei, Taiwan.

## MEASUREMENTS:

L 4.34	ApL 1.56*
W 1.03*	ApD .31*
D .63*	ApX 2.09*
Depth of upper plate over aperture .19.	

DATE: Late antiquarian.

At the upper end, an animal mask, partly in relief and partly incised, with small, thin, upswept striated (?) eyebrows. From either side of the muzzle end, whiskers curl upward and away from the muzzle, turning inward at their ends and terminating in points below the eyes. Covering the surface of the upper plate below are six vertical rows of closely set, circular, rounded knob grains interlocked by incised lines (curved upward or toward the left) between pairs of grains to form a diagonal step pattern. Thin, plain borders at sides and across lower end.

The upper plate is slightly arched, terminating above in a weakly conceived and executed blunt inward curl. At the lower end, the upper plate turns inward at a nearly perpendicular angle, terminating without the formation of a forward-projecting hook-ridge. The contours are soft, the angles beveled and polished.

## REFERENCES:

*Ku-kung*, no. 36, p. 10, lower left, photo of top.

Na Chih-liang, *Yü ch'i t'ung-shih* (1964), pl. LXXII, 4, photo of profile.

## CG.38

MATERIAL: Jade.

DATE: Late antiquarian.

The surface of the upper plate is ornamented with five vertical rows of large, circular, rounded knob grains offset vertically to form diagonals. The grains appear to be broad, flat nodules in very low relief. Narrow, plain side borders.

## REFERENCES:

Hommel, "Chinese Sword Furniture" (1928), fig. 5, left, photo of top.

Hommel, "Notes on Chinese Sword Furniture" (1951), p. 144, second fig. from top, lower left, photo of top; p. 144, lower fig., lower right, photo of top (somewhat larger scale than other photo of same slide in this source).

## CG.39

MATERIAL: Jade, yellow.

COLLECTION: Formerly Tuan-fang 端方 Collection, China.

## MEASUREMENTS:

L 3.25*	ApL 1.13*
W .95*	ApD .33*
D .56*	ApX 1.44*
Depth of upper plate over aperture .16.*	

The surface of the upper plate is ornamented with five parallel vertical rows of eighteen circular, rounded knob grains interlocked by incised lines (curved downward and toward the right) between pairs of grains to form a diagonal step pattern. Forward edge rounded with inward-curling hook ridge on inward side; lower end of upper plate curved inward with square wedge projecting forward from under side to form a hook ridge. Published drawing inadequate.

REFERENCE: *T'ao-chai ku yü t'u* (1936), p. 76:a, drawings of profile and top; scale uncertain.

## CG.40

MATERIAL: Jade, pale yellowish green, translucent; broken below the aperture.

COLLECTION: British Museum, London, 1955.7-18.40.

## MEASUREMENTS:

W .91
D .47

DATE: Late antiquarian.

At the upper end, an animal mask, partly in relief and partly incised, with exceptionally broad, upswept, striated eyebrows. Between wide, plain borders below, four parallel vertical rows of circular knob grains, flat on top and with incised perimeters.

The forward edge is rounded and undercut to form a sharp hook ridge. The lower aperture plate is uncommonly thick. The contours and quality of workmanship suggest late, careless imitation.

Unpublished.

## CG.41

MATERIAL: Jade, white; fragments of corroded iron inside aperture and red (cinnabar?) stains on exterior of lower aperture plate.

COLLECTION: British Museum, 1937.4-16.33.

## MEASUREMENTS:

L 2.78
W .97
D .38

DATE: Possibly Han (cf. CG.20).

The surface of the upper plate is marked by deep, slant-cut lines in three directions. These are not placed so that, intersecting at regular points, triangles are formed, but are haphazardly cut and spaced so that rough polygonal areas of varying shape and size are produced. The area



Depth of upper plate over aperture .22. The sides slope inward so that the width of the lower aperture plate is less than that of the upper plate.

DATE: Late antiquarian.

At the upper end, an animal mask. Covering the surface of the upper plate below, a cross-hatching produced by deeply incised diagonal lines in two directions which divide the surface into small squares. Within each square, a low rounded knob grain has been fashioned. Thin, plain borders along sides and lower end.

The upper plate is strongly arched (resembling Form II slides of A-2 profile) so that the ends of the plate curve inward to a point just above the level of the lower aperture plate. The forward end terminates in a blunt wedge; the lower end is rounded, with a pointed wedge on the underside. Both the upper and lower aperture walls slope outward, meeting the arched upper plate at ninety-degree angles.

Unpublished. (Cf. Rostovtsev, "Le porte-épée des Iraniens" [1930], fig. 262, left)

**CG.47**

MATERIAL: Jade, milky white with brown veins.

COLLECTION: Metropolitan Museum of Art, New York, 16.144.21.

MEASUREMENTS:

L 3.28	ApL 1.22
W .84	ApD .28
D .66	

Depth of upper plate over aperture .25. Resting on its lower aperture plate, the slide is of greater depth at the lower than upper end (cf. CH.50). At the lower aperture wall the depth is .06 greater than at the upper aperture wall.

DATE: Late antiquarian.

The surface of the upper plate is ornamented with eight vertical rows of circular, rounded knob grains offset vertically to form diagonals. The surface is irregular and the grains in very low, indistinctly carved relief which does not appear to be the result of age or wear. The upper plate is unusually thick and is terminated at the upper end by a rounded inward-projecting wedge, and at the lower end by an oval-shaped, inward-sloping broadening of the upper plate. A clumsy, poorly proportioned, poorly carved piece.

REFERENCE: Rostovtsev, "Le porte-épée des Iraniens" (1930), fig. 266, oblique profile/top photo.

**CG.48**

MATERIAL: Jade, pale green with dark brown veins and patches.

COLLECTION: Metropolitan Museum of Art, New York, 16.144.22.

MEASUREMENTS:

L 3.00	ApL 1.00
W .92	ApD .13
D .50 to .53	

Depth of upper plate over aperture .25. Slides are generally slightly wider over the center of the aperture, narrowing toward each end, or else the width is uniform. This slide is narrowest in the center where its width is .88.

DATE: Late antiquarian.

At the upper end, an animal mask, partly in relief and partly incised, with round pupils incised on the eyes. Covering the surface of the upper plate below, approximately six vertical rows of circular knob grains offset vertically to form diagonals. The rows of grains slant toward the right and are gradually cut off, a portion of a grain at a time as the rows advance upward, while new rows similarly emerge at the left. The grains are round, smooth hemispheres which recede into the surface without sharp outlines. Thin, plain lateral borders, recessed below the level of the decorated surface. The upper plate is unusually thick. The hook-ridges at the upper and lower ends are only somewhat less clumsily fashioned than on the preceding piece.

REFERENCE: Rostovtsev, "Le porte-épée des Iraniens" (1930), fig. 265, oblique profile/top photo.

**CG.49** .....Plate 13a

MATERIAL: Jade, translucent gray with clouds and flecks of reddish brown.

COLLECTION: Musée Guimet, Paris, MG 18425.

MEASUREMENTS:

L 2.84	ApL 1.16
W .88	ApD .16
D .41	ApX 1.31

DATE: Late antiquarian.

At the upper end, an incised, extremely abbreviated, degenerate design based on an animal mask. The animal mask is separated from thin, plain borders equal in height to the surface upon which the mask is incised by shallow, concave grooves. Covering the depressed surface of the upper plate below, eight vertical rows of closely set, irregularly shaped knob grains offset vertically to form diagonals. The incised lines in three directions by means of which small polygonal areas were created (from which the grains were fashioned) were not completely ground away. The decorated surface lies between raised, plain side borders which recede to the level of the decor surface at the open lower end. The left-hand row of grains is cut by the border. The upper plate is slightly arched and terminates at both ends in crudely formed wedges, the forward edge slightly undercut to suggest a hook-ridge. The end ridges project inward to the level of the exterior of the lower aperture plate, thus preclud-

ing the lower aperture plate having fitted into a socket in a scabbard wall in the normal fashion.

Centered on the underside of the upper plate, in the lower bay halfway between the lower aperture wall and the lower end ridge, is an undecorated rectangular hook raised from the undersurface of the upper plate on a short post. The diameter of the post is .23; the length of the forward-projecting hook is .25. Cf. similar hooks on CV.73, CH.45, C.6.

Workmanship crude. Ascribed to Late Eastern Chou.

Unpublished (?).

**CG.50** . . . . . Plate 13*b*

**MATERIAL:** Jade, brown.

**COLLECTION:** Musée Guimet, Paris, MG 18426.

**MEASUREMENTS:**

L 3.19	ApL 1.69
W .81	ApD .22
D .44	ApX 1.94

**DATE:** Late antiquarian.

The surface of the upper plate is ornamented with four vertical rows of widely and irregularly spaced round knob grains offset vertically to form diagonals. The grains are flattened on top and rise only slightly above the surface, but are sharply defined by deeply incised perimeters. Grains of this type are common on jade work of the Ming and, especially, Ch'ing dynasties, but have no clear counterpart on the jades of earlier periods. The decorated surface, open at both ends, is separated from thin, plain side borders, equal in height to the decor surface, by an incised groove.

The upper plate is slightly arched, rounded at the upper end with a round hook-ridge on the underside and curved inward at the lower end with a hook-ridge formed by a rounded, forward-projecting wedge. The profile closely resembles that of authentic slides of late Western and early Eastern Han, but the carving reflects later modes. The edges are rounded rather than sharply squared, the contours are softly defined, the shape has the arbitrary appearance of imitative work.

Ascribed to Late Eastern Chou.

Unpublished (?).

**CG.51**

**MATERIAL:** Jade, gray with clouds, flecks and veins of reddish brown.

**COLLECTION:** British Museum, London, 1947.7-12.478; Henry Oppenheim Bequest; formerly K. C. Wong.

**MEASUREMENTS:**

L 3.44	ApL 1.25
W 1.03	ApD .13
D .45	ApX 1.59
Depth of upper plate over aperture .19.	

**DATE:** Late antiquarian.

At the upper end, a highly schematic, degenerate animal mask facing downward (cf. CV.68, CG.44). Covering the surface of the upper plate below, twenty-two horizontal rows of closely set round knob grains offset horizontally to form diagonals. Vertically the rows of grains veer slightly toward the right and are gradually cut off by the narrow plain border while new rows gradually emerge from the left. The individual grains are carelessly formed, are rarely perfectly circular; about the base of each grain are remains of straight cuts which were not polished off.

The core from which this slide was fashioned was imperfectly shaped, or an error was made in the carving of the upper plate. Near the upper end, the right border dips downward below the level of the decorated interior surface and rises again just before the forward edge. The upper plate terminates in inward-curling rounded ridges at either end which project inward to a point parallel with the base of the aperture, thus precluding the slide ever having been attached to a scabbard in the normal fashion. The lower aperture plate is equal in thickness to the upper plate. The edges of the plates are beveled, and the stone has the soft, oily feeling of live jade.

**REFERENCES:**

Antiquus, "Sui and Ancient Chinese Swords" (1928), fig. 2, third from top, photo of top.

Wong, "Ancient Jades" (1931), 14(1), pl. preceding p. 7, third from top, left, photo of top.

Wong *Collection of Ancient Chinese Jades* [1937], pl. IX, no. 180, oblique top/profile photo.

Jenyns, *Chinese Archaic Jades* (1951), pl. XXXV, C, photo of top; text, p. xxxvii, ascribed to early Han.

Savage, *Chinese Jade* (1965), pl. II, C, center right, photo of top (reduced-size photo from Jenyns [1951]).

**CG.52**

**MATERIAL:** Jade.

**DATE:** Late antiquarian.

The upper surface is ornamented with grains in relief which rise above the lateral borders.

An extremely clumsy piece, crudely and irregularly fashioned, with a rounded ridge on the underside at the forward end and a shallow, pointed wedge on the underside of the upper plate at the lower end. The upper plate, aperture walls, and lower aperture plate are of equal thickness. Below the aperture, the under edges of the sides of the upper plate are slant-cut.

**REFERENCE:** Hommel, "Chinese Sword Furniture" (1928), fig. 3, lower right, photo of profile.

**CG.53**

**MATERIAL:** Jade.



## MEASUREMENTS:

L 3.75*	ApL .94*
W 1.19*	ApD .16*
D .56*	ApX 1.31*
Depth of upper plate over aperture .56* (measurements from cut in book).	

TYPE: Probably imaginary.

At the upper end, a fanciful animal mask; iris and pupils drawn in eyes. Below, twelve vertical rows of closely set, small, circular, rounded grains offset vertically to form diagonals. Thin, plain borders on all sides.

The upper plate is straight on top, is bent inward at each end with no suggestion of hook-ridges. The aperture is set under the center of the upper plate. The walls and lower plate of the aperture are equal in thickness to the upper plate.

REFERENCE: *K'ao ku t'u* (1752), VIII, 8:a, drawings of top and profile.

## CG.54

MATERIAL: Jade, greenish brown.

COLLECTION: P. de Tanner, Berlin (now dispersed).

DATE: Late antiquarian.

At the upper end, a crudely incised, degenerate animal mask with diamond-shaped eyes, with ears formed by triangles triply defined, and with a round circle between the abbreviated eyebrows. Covering the surface of the upper plate below, large, coarsely fashioned comma grains. The slide tapers toward the lower end.

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV, no. 1145, reduced-scale photo of top; ascribed to Han dynasty. (See annotation in bibliography.)

## CG.55

MATERIAL: Jade, gray translucent with rust-colored stains over entire surface; slight surface decomposition in a few places and some pitting of surface; two deep grooves on forward end where calcified jade has fallen away.

COLLECTION: British Museum, London, 1945.10-17.149.

## MEASUREMENTS:

L 4.09	ApL 1.50
W 1.23	ApD .09
D .41	ApX 1.83
Depth of upper plate over aperture .16.	

DATE: Late antiquarian.

At the upper end, an animal mask, partly in relief and partly incised, with pupils carved on eyes and with upswept, overlapping, striated eyebrows (cf. CV.37). Covering the surface of the upper plate below, six vertical rows of finely carved comma grains offset vertically to form diagonals. The grains in alternate rows curl upward toward the left and downward toward the right; those in the left-hand row change direction in the middle of the

row. The incised lines in three directions by means of which small polygonal areas were created (from which the grains were fashioned) were not completely ground away. The decorated surface area is separated from narrow, plain, rounded borders by square-cut grooves along the sides, closed at the lower end by an incised line.

The upper plate is straight. The forward end is rounded and tapers to a sharp hook on the underside less tightly involuted than usual on authentic pieces. At the lower end, the upper plate curves inward, the small rectangular forward-projecting wedge which formed a hook-ridge being largely broken off. The lower aperture plate is equal in thickness to the upper plate. The end hooks project inward to within .02 of the base of the slide.

The unusually fine quality of the carving, together with evident, possibly natural, signs of age, suggest that this scabbard slide may be an antiquarian piece of Sung age.

Unpublished.

## CG.56

MATERIAL: Jade.

DATE: Late antiquarian.

At the upper end, a schematic animal mask. Covering the surface of the upper plate below, circular, hemispheric grains in high relief. The incised surface reticulation has not been entirely ground away. The borders on either side cut through the outermost rows of grains.

REFERENCE: Chang Mo-chün, *Chung-kuo ku yü* (n.d.), tenth pl. following p. 18, second from right, photo of top.

## CG.57

MATERIAL: Jade.

Figure 6

DATE: Late antiquarian.

At the upper and lower ends, feline-like animal masks facing inward toward a central panel decorated with five vertical rows of large, flattened dome-shaped grains. The central panel is arched upward across the width of the slide between narrow, plain side borders. At the upper and lower ends, narrow borders with five concave scallops.

REFERENCE: Chang Mo-chün, *Chung-kuo ku yü* (n.d.), tenth pl. following p. 18, second from left, photo of top.

## CG.58

MATERIAL: Jade.

Figure 6

PROVENANCE: Tomb 2717, Chung-chou-lu 中州路, Lo-yang,<sup>h</sup> Honan<sup>1</sup> Province; excavated in 1955.

## MEASUREMENTS:

L 1.89
W .79

DATE: Mid fifth- to early fourth-century B.C.

Within narrow, plain borders on the sides and ends, the surface of the upper plate is ornamented with fully plastic, comma-shaped, grain-spirals raised in relief above the surrounding surface which is depressed slightly about each grain. The grains, with both right and left spirals, are not arranged in any clearly apprehended order, though there may be some symmetrizing elements in the composition. The upper plate is very slightly arched and does not extend forward of the aperture, but curves inward to become the forward aperture wall. Below the aperture, the upper plate extends for a short distance, thinning and curving inward slightly at the lower end. The aperture walls and upper plate are of approximately even thickness. The central portion of the lower aperture plate is missing.

The sword with which the scabbard slide was associated (2717:31) is not described in the report. (The slide appears to have been mistakenly linked with sword 2717:101, described in the report [p. 97]. It is clearly evident from the illustrations and brief references elsewhere in the report that slide and sword 2717:31 belong together.) Sword 2717:31, apparently a rather short, double-edged, tanged bronze sword, was well preserved, but the scabbard and possible wooden casing for the tang had evidently entirely disintegrated. The sword was provided with a jade pommel disk and jade guard, both decorated with comma-like grain-spirals carved, as on the slide, in full plastic relief. The guard does not reflect the usual form of those with central saddle between two raised, rounded shoulders, but is a narrow rectangle slightly rounded on top. It seems to represent a simpler and perhaps more archaic type than the guard with shoulders. The sword closely resembles a probably somewhat longer tanged bronze sword in the Werner Jannings Collection (Loehr, *Chinese Bronze Age Weapons* [1956], no. 104) which is placed by Loehr in his category Chou IV, ca. 450 B.C. to the end of the Chou dynasty. Another bronze sword from the same tomb, 2717:32, with solid, plain hilt, and rhombus-plate base for the blade, related to the somewhat earlier similar sword with hollow handle, represents a type placed by Loehr (*ibid.*, p. 204) in his categories Chou III-IV and, on the whole, probably vanished during the course of the fifth century B.C. with the gradual emergence of the "classic" Chou sword with ringed hilt. However, recent excavations suggest that the two types continued side by side for a considerable period and that the hollow, or plain solid-hilted, swords may not wholly disappear before the middle of the fourth century B.C. (see Watson, *China* [1961], p. 139).

The rich finds from this tomb pose a complex chronological problem which cannot be resolved entirely on the basis of the published summary report with its frequently rather indistinct photographs. The objects evidently span a considerable period of time, possibly several centuries,

according to present estimates. A *ko* 戈 (pl. LXVI, 4), with high, long, arched blade and long, curved *nei* 內 sharpened on the scalloped under edge, corresponds to Li Chi's final typological stage in the development of this weapon (*The Beginnings of Chinese Civilization* [1957] p. 57, fig. 9, LLK:K), hardly earlier than the last century of the Chou dynasty. In the same tomb were other *ko* weapons typologically earlier. Weapons of the latter type Loehr has assigned to his Chou III category (*op. cit.*, no. 74), not continuing beyond about 450 B.C. There were also in this tomb several bronze vessels of the *ting* 鼎 type with decor in the so-called Li-yü 李峪 style (pl. LXIII), on one of which (p. 91, fig. 60, 5, no. 2717:103) is a band of intertwined serpents in flat relief almost identical to one on a bronze *ting* in the British Museum which Watson dates to the late sixth or early fifth century B.C. (*Chinese Bronzes* [1962] p. 59, fig. 1 and pl. LX, a). Another bronze vessel of the *hu* 壺 type (pl. LXIV, 2), with narrow bands of closely set relief knobs on a fine background pattern is similar to a *hu* in the British Museum ascribed by Watson (*ibid.*, pl. LXXVI, a) to the fourth or third century B.C.

Closely related as this slide is in profile to *CG.1*, and in profile type seeming to fall between *CG.1* and *CG.19*, it is difficult to ascribe a much earlier date to it. Though evidently somewhat more advanced than *CG.1* from Ch'ang-sha,<sup>d</sup> the Lo-yang<sup>h</sup> slide, in keeping with suggested tendencies for more advanced jade work in northern and central China, may in fact be somewhat earlier, perhaps early fourth century, or even as early as the middle of the fifth century B.C. The bronze *ting* are, on the whole, to be considered somewhat later than similar Li-yü style vessels from the tomb of the Marquis of Ts'ai at Shou-hsien<sup>1</sup> (cf. *Shou-hsien Ts'ai-hou mu* [1956], pls. III and IV) which is probably to be dated to the earlier part of the fifth century B.C. (Watson, *Chinese Bronzes* [1962], p. 61), or, according to Ch'en Meng-chia and Alexander Soper, even to the end of the sixth century B.C. (Soper, "Tomb of the Marquis of Ts'ai" [1964], p. 155 f.).

REFERENCE: *Lo-yang Chung-chou-lu* (1959), Pl. LXVI, 8, top/profile photo of jade pommel disk, detail photo of sword guard and upper section of sword blade; pl. LXVI, 7, photo of full sword, pommel disk and slide in relative find positions; p. 90, figs. 5-7, rubbings of guard, pommel disk and top, and profile of slide.

#### CG.59

MATERIAL: Jade.

PROVENANCE: Tomb 3203, western suburbs of Lo-yang,<sup>h</sup> Honan<sup>1</sup> Province; excavations conducted 1957-1958 by Institute of Archeology, Chinese Academy of Sciences.

DATE: Late Western Han.

At the upper end, facing upward, an animal mask carved partly in low relief with incised striations on the eyebrows and a double chevron across the bridge of the muzzle between the eyes. Below the convergence of the eyebrows is incised a small, curved double volute opening upward and enclosed by squared incised lines. Below the mask the upper surface is decorated with an average of five parallel vertical rows of circular, rounded knob grains interlocked by incised lines (with upward and right orientations) between pairs of grains in a continuous fashion to form a diagonal step pattern. The pattern is offset slightly toward the left so that at the lower end rows of half-grains appear at either side while near the top the right-hand row has fully emerged on the surface, the left-hand row disappeared. The narrow, plain side borders appear to be slightly recessed, rising to an angle at the extreme edges which may still be lower than the flat surface of the decor plain upon which the grains are raised.

The profile is not clearly seen, but it appears that the forward end curves inward, terminating in a blunt ridge not back-curved or undercut, while at the lower end the upper plate curves inward rather abruptly, also terminating in a blunt inward-projecting ridge possibly of only slightly greater thickness than the upper plate. The find number of the scabbard slide is not given.

The slide was apparently found lying beside the remains of an iron sword in the northern chamber of a tomb of roughly cruciform plan, constructed with hollow-tile slab walls and vaulted brick roof. The tanged, double-edged iron sword (3203:34) is poorly preserved; the tip of the blade and part of the hilt are missing. Its total preserved length is 70 cm. (p. 54). The guard, presumably of bronze, is of the common Western Han variety with raised, rounded shoulders to either side of a central saddle where it is pierced for the tang (similar to the guards on our Figure 37). There were apparently fragmentary remains of a scabbard of unspecified material found in association with the sword.

The date of the tomb is provided by the similarity of its inventory to that of adjoining burials in which coins were found.

(See also *CV.83*, *CV.87*, *CG.60* from this area.)

REFERENCE: Chung-kuo k'o-hsüeh yüan, "Lo-yang hsi chiao Han mu" (1963), pl. XIV, 9, oblique top/profile photo of slide; pl. XIV, 8, photo of sword with slide resting on blade at a point presumably equivalent to its find position beside the blade; fig. 4 (facing p. 6), plan of tomb showing find position of sword and slide; p. 36, general text on scabbard slides recovered from the excavations; p. 33, general text on swords recovered from the excavations.

#### CG.60

MATERIAL: Jade.

PROVENANCE: Tomb 3247, western suburbs of Lo-yang,<sup>h</sup> Honan<sup>i</sup> Province; excavations conducted 1957–1958 by Institute of Archeology, Chinese Academy of Sciences.

DATE: End of Western Han, or Han Interregnum.

The surface of the upper plate is ornamented with about twenty-six horizontal rows of alternately three and four small, circular, rounded knob grains offset horizontally to form diagonals. The surface between the grains appears to be flat and separated from narrow, plain side borders by concave grooves. The upper and lower ends appear to be unbordered. The rather thick upper plate curves inward at the forward end, terminating in an inward-projecting (but not undercut) ridge. Near the lower end, the upper plate curves inward abruptly at an oblique angle, terminating in a squared, inward-projecting ridge slightly undercut at the upper end so that a small, square ridge projects forward. The slide appears to taper rather more sharply than usual toward the lower end, being widest at the forward edge. The ample aperture with substantial upper and lower walls suggests utilitarian qualities. The find number of the scabbard slide is not given.

The scabbard slide was apparently found lying beside a sword in the south aisle of a vaulted brick tomb. The tanged, double-edged iron sword (3247:5) was fairly well preserved, apart from the tip of the blade which had entirely disappeared through corrosive action. Its total preserved length is 89.5 cm.; hilt, with fragments of braided wrapping, 21 cm.; blade fragment 68.5 cm. (p. 55). The guard, presumably of bronze, is of the common Western Han variety with raised, rounded shoulders to either side of a central saddle where it is pierced for the tang (similar to the guard on our Figure 37). There were apparently fragmentary remains of a scabbard of unspecified material found in association with the sword.

The date of the tomb is provided by the similarity of its inventory to that of adjoining burials in which coins were found.

(See also *CV.83*, *CV.87*, *CG.59* from this area.)

REFERENCE: Chung-kuo k'o-hsüeh yüan, "Lo-yang hsi chiao Han mu" (1963), pl. XIV, 10, oblique top/profile photo of slide; pl. XIV, 3, photo of sword with slide resting on blade (the slide is inverted and placed too low on the blade; original find position not represented by this photo); p. 9, fig. 7, plan of tomb showing find position of sword and slide; p. 36, general text on scabbard slides recovered from the excavations; p. 33, general text on swords recovered from the excavations.

#### CG.61

MATERIAL: Jade.

DATE: Late antiquarian.

At the upper end, an extremely degenerate animal mask form executed in curved incised lines, identifiable as a mask only by analogy with other slides of this class. The surface below the mask is ornamented with six vertical rows of circular, rounded knob grains offset vertically to form diagonals. Along the sides, irregularly formed grooves separate the decorated surface from narrow, plain borders. The ends are not visible in the published photograph, but the lateral grooves are probably joined by incised lines drawn across the upper and lower ends. The workmanship appears to be of poor quality.

REFERENCE: Hommel, "Notes on Chinese Sword Furniture" (1951), p. 144, second fig. from top, lower right, photo of top; p. 144, bottom fig. upper right, photo of top (larger scale photo).

### CG.62

MATERIAL: Jade, gray with rust-colored stains; areas of surface decoloration.

COLLECTION: Mr. Louis Zara, Philadelphia.

MEASUREMENTS:

L 3.00	ApL 1.53
W .97	ApD .28
D .63	ApX 1.28

DATE: Late antiquarian.

At the upper end, an incised animal mask with slight relief contours, facing upward. From the curled upper lip of the mask, thick spirals defined by double lines curl outward toward the upper corners of the slide. The eyes are strongly slanted and provided with small, round, incised pupils. The surface below is ornamented with five vertical rows of twelve and eleven and one-half circular, rounded knob grains alternately, offset vertically to form diagonals. The pattern was laid out by a reticulation of deeply incised parallel lines in three directions and the grains were shaped from the polygonal surface sections resulting from the intersection of the lines. The grains are not uniformly shaped and the pattern lines have not been entirely ground away from the surface between the grains. Incised grooves along the sides and across the lower end separate the decorated surface from narrow, plain borders.

The upper plate is strongly arched, the upper end inclining inward to a point nearly parallel with the exterior surface of the lower aperture plate. The end hooks are somewhat abbreviated.

Unpublished.

### CG.63

MATERIAL: Jade, yellowish brown with flecks of light surface decomposition; heavy iron-oxide incrustations on exterior of lower aperture plate and in upper bay. The

upper plate is broken .63 below the lower aperture wall; the broken edge has been ground and polished. Slight evidence of wear at the interior upper left aperture corner.

COLLECTION: Mr. and Mrs. W. Trousdale, Washington, D.C.

MEASUREMENTS:

	ApL 1.00
W .98	ApD .19
D .41	ApX 1.17
Depth of upper plate over aperture .13; depth of lower aperture plate .09; slight vertical taper so that the maximum width of the lower aperture plate is .94.	

DATE: Late Western Han.

The surface of the upper plate is decorated with six parallel vertical rows of small rounded knob grains with crudely incised lines between the grains forming a diagonal step pattern. Plain inward sloping borders are separated from the decorated surface area by a concave incised line. The knob grains do not rise above the level of the borders. The decorated surface of the slide exhibits considerable wear so that the grains are scarcely visible except in raking light.

The upper plate is very slightly arched. The perceptible back-slope of the undercut forward edge is characteristic of the finest Han period scabbard slides. The forward hook terminates at a level equal to that of the inner surface of the lower aperture plate and, therefore, probably rested against the scabbard wall.

Unpublished.

### CG.64. . . . . Plate 13c

MATERIAL: Jade, translucent grayish green.

COLLECTION: Mr. and Mrs. W. Trousdale, Washington, D.C.

MEASUREMENTS:

L 4.41	ApL 1.31
W 1.08	ApD .27
D .63	ApX 1.73
Depth of upper plate over aperture .20; depth of lower aperture plate .16; slight vertical taper possibly accidental, width of lower aperture plate 1.06.	

DATE: Late antiquarian.

The surface of the upper plate is decorated with five vertical rows of alternately 19 and 20 rounded knob grains offset vertically to form diagonals. The surface surrounding the irregularly formed grains is flat and plain. The grains are set within raised inward-sloping borders set off by a concave incised line. The grains do not rise above the height of the border. The workmanship is perfunctory, the proportions of the piece lack the refinement of authentic slides. The lower aperture plate is almost as thick as the upper. The inward curve at the lower end of the upper plate is weak, and no

proper forward projecting hook is formed. The upper end is rounded. Both the upper and lower ends of the upper plate curve inward to a point equal to the level of the interior surface of the lower aperture plate.

Unpublished.

**CG.65** ..... Figure 8, Plate 6c

**MATERIAL:** Jade, surface wholly decolored to a creamy tan. Iron-oxide stains on exterior of lower aperture plate. Slight evidence of wear at upper left interior corner of aperture.

**COLLECTION:** Dr. Paul Singer, Summit, New Jersey.

**MEASUREMENTS:**

L 1.81	ApL 1.06
W .88	ApD .25
D .52	ApX 1.34
Depth of upper plate over center of aperture .16; depth of lower aperture plate .09.	

**DATE:** Early Western Han.

At the upper end, an incised animal mask facing upward. The striated eyebrows of the mask are upswept from the head and curve downward along the edges of the slide. Joining the two brows at the center is a downward-pointing volute lightly engraved and slightly off center in order to pass to the right of a small knob grain placed on the undefined central vertical axis. Below the mask, the plain surface of the slide is ornamented with seven vertical rows of small, widely spaced knob grains offset vertically to form diagonals. The individual rows contain, alternately, three and four tiny and rather irregularly formed grains. The surface is otherwise plain, with narrow ridge borders at the sides and lower end separated by an incised groove from the decor surface. The grains rise in relief above the level of the border ridges which are level with the decor surface.

The upper plate extends only .10 above the upper aperture wall, the upper surface curving abruptly inward to meet the lower in a slightly inward-projecting wedge. At the lower end, the upper plate curves inward, terminating with a forward-projecting squared ridge. In spite of the decor of knob grains which point to a Han date, the slide might belong to the closing years of the Chou, or to the Ch'in dynasty. The well-articulated lower hook, however, points to a Western Han date.

Unpublished.

**CG.66** ..... Plate 6e

**MATERIAL:** Glass, brown, the surface decomposed with a thin white film covering most surfaces. Slight evidence of wear at upper left interior aperture corner.

**COLLECTION:** Dr. Paul Singer, Summit, New Jersey.

**MEASUREMENTS:**

L 2.97	ApL .88
--------	---------

W .69	ApD .16
D .31	ApX 1.28

**DATE:** Early Eastern Han.

The surface of the upper plate is ornamented with four parallel vertical rows of twenty evenly spaced small, circular, rounded knob grains. The surface between the grains is flat and recessed between narrow, plain, rounded side borders. The ends are unbordered. The grains do not rise above the level of the side borders. The upper plate is nearly flat, terminating at the upper end in a round, thick, undercut hook-ridge. At the lower end, the upper plate is turned inward through two obtuse angles to terminate perpendicular to the upper plate. The resultant inward-projecting ridge is not undercut to form a hook, but is cut off flatly on the inner side to form a line perpendicular to the upper plate.

Unpublished.

**CG.67** ..... Plate 8a

**MATERIAL:** Ivory, or bone, now buff-colored.

**COLLECTION:** Dr. Paul Singer, Summit, New Jersey.

**MEASUREMENTS:**

L 3.25	ApL 1.13
W .91	ApD .23
D .52	ApX 1.56
Depth of upper plate over center of aperture .17; depth of lower aperture plate .09.	

**DATE:** Mid Western Han.

At the upper end an animal mask facing upward, partly in relief and partly incised. The upswept eyebrows are in low relief and are not, as is customary, marked with striations. Two incised lines are drawn downward from near the eyebrows and join at the undefined central vertical axis. Below the mask, the surface of the upper plate is decorated with four parallel vertical rows of fifteen evenly spaced, circular, rounded knob grains. At each side are sharp ridge borders which slope inward to a groove separating the borders from the decor surface which is level with the borders; the relief grains, therefore, rise above the level of the side borders. Near the lower end, an incised border joins the two side grooves.

The profile of this slide is similar to that of **CV.36**. The sides do not taper, so that the width of the lower aperture plate is equal to that of the upper. The upper plate terminates above in a beautifully carved, only slightly undercut hook, but the forward edge is not back-sloped as it is on the more powerfully conceived **CV.36**. The lower end of the upper plate turns inward with a regular curve to form the lower hook, defined by a narrow wedge projecting forward, or upward. The end hooks terminate at a depth equal to the extended line of the inner surface of the lower aperture plate so that they were supported by contact with the scabbard wall.

Unpublished.

CG.68

MATERIAL: Jade, white with green tinge.  
 COLLECTION: Dr. Arthur M. Sackler, New York; formerly Mr. and Mrs. Desmond Gure, London.

MEASUREMENTS:

L 3.38

DATE: Probably late antiquarian.

The surface of the upper plate is decorated with four parallel vertical rows of nineteen rounded knob grains evenly spaced on a flat plain background.

Unpublished.

CG.69

MATERIAL: Jade, "clear yellow."  
 COLLECTION: The Honorable Hugh Scott, Washington, D.C.

MEASUREMENTS:

L 3.63

DATE: Late antiquarian.

The surface of the upper plate is ornamented with four parallel vertical rows of circular rounded knob grains of at least twenty-two grains per row. The otherwise plain, flat surface of the slide is defined by broad, plain side borders. Both upper and lower ends appear to be rounded, the plates to be of relatively equal thickness. The workmanship and general design of the piece are weak and poor.

REFERENCE: Scott, *Golden Age of Chinese Art* (1967), pl. XXXIV, A, slightly oblique top/profile photo; p. 157, "jade girdle hook, decorated with conventionalized cowrie shell."

CG.70.....Plate 8c

MATERIAL: Jade, dull mottled green and brown, with iron corrosion and cloth impressions marking the surfaces at several spots.

COLLECTION: Royal Ontario Museum, Toronto; no accession number.

MEASUREMENTS:

L 4.34	ApL 1.44
W .58	ApD .19*
D .50*	ApX 1.88

DATE: Early Eastern Han.

This extraordinary scabbard slide is still set in the wall of a scabbard containing the corroded remains of an iron rapier. This fragmentary ensemble, originally 20.25, is now broken into two parts, that holding the slide being 13.88. The sword is fitted with a small, shouldered bronze guard now split by the swollen corrosion product of the

tang, now 2.19 long. The scabbard appears to have been made of wood, lined on the inside with a fine-weave textile. The wooden walls are hardly more than .06 in thickness. Cloth impregnated with lacquer was applied to the exterior of the scabbard. The slide may originally have been secured in its socket by lacquer and bound round (through the aperture) with a cloth band, decomposed fragments of which adhere still to the aperture plate and walls. The construction of the well-preserved socket is of special interest. The extraordinarily narrow slide is set in the center of the scabbard wall which is 1.13 wide above the slide. In section the scabbard is lozenge-shaped, the median ridge having been cut away in the socket area. From the edges of the scabbard parallel with the socket, the scabbard wall is raised at a sharper angle so that it meets the slide aperture at the level of the interior surface of the lower aperture plate. The socket, therefore, is partly internal, partly external (Figure 97).

The surface of the upper plate is ornamented with a reticulation of parallel grooves laid in three directions and forming, by their intersection, polygonal grains, some few of which have been slightly worked into rounded shapes in very low relief. The upper end curves inward, the forward edge not back-sloped, but terminating with an undercut hook ridge. The upper plate is very slightly arched and curves inward at the lower end more than ninety degrees and is undercut to form a forward-projecting sharp ridge. The inward-projecting ends do not rest against the scabbard wall. The proportions of this slide, its extraordinary narrowness in relation to its length, are unique among authentic specimens, and this aspect, together with the profile, point to a time rather late in the development of this object.

Unpublished.

CG.71

MATERIAL: Jade, originally brown; surface wholly decolored to creamy white; iron-oxide stains on lower aperture plate.

COLLECTION: Royal Ontario Museum, Toronto; NB 2159.

MEASUREMENTS:

L 2.59 (of remaining fragment)	ApL 1.31
W 1.02	ApD .22
D .30	ApX 1.80
Original length of this scabbard slide may be calculated to approximately 4.16.	

DATE: Early Eastern Han.

The upper plate was broken in antiquity just below the lower aperture wall; the polished edge now projects .06 beyond the lower aperture wall. That this break occurred in the Han dynasty is suggested by the unusual evidence of belt wear on the aperture walls. The slide was apparently inverted on the scabbard wall after the break,

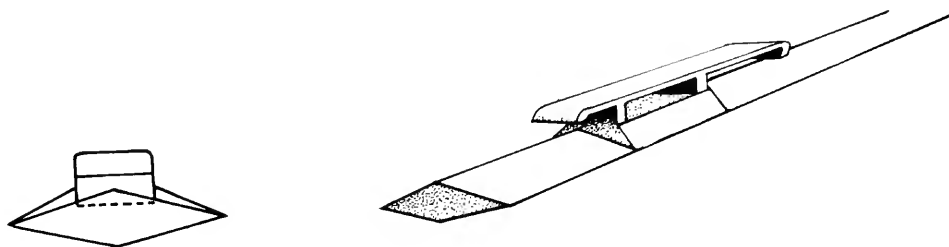


FIGURE 97.—CG.70 as mounted on its scabbard.

the short broken edge serving as the upper end. This position may be determined from the fact that the lower right interior corner of the aperture is deeply worn, with correspondingly less wear at the upper left interior corner. This wear pattern is opposite to the normal one and clearly indicates that the slide was worn in an inverted position.

The surface of the upper plate is ornamented with closely set horizontal rows (twelve remaining) of three, three and one-half, or four, circular knob grains. The surface is much worn, the grains being visible chiefly because of an incised spiral on each. Accepting the point of constriction as the beginning of the spiral, all are drawn in a clockwise (or right-hand) manner, unlike Late Eastern Chou compositions which generally include both clockwise and counterclockwise spirals. Flat, plain side borders are separated from the decorated surface by a deep incision.

The upper end (which served as the lower here) is prolonged in the manner of *CV.8*, a trait of later authentic slides of the end of Western and early Eastern Han. It is terminated with a rounded, undercut hook. The proportion of the aperture and the archaic decor suggest this slide belongs to Eastern Han.

Unpublished.

#### CG.72

**MATERIAL:** Jade, cream-colored with reddish brown spots.

**COLLECTION:** Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

**MEASUREMENTS:**

L 3.19  
W 1.00  
D .50

**DATE:** Western Han.

The surface of the upper plate is ornamented with five parallel rows of eighteen comma-shaped grains carved in relief above a flat ground bordered along each side and end by an incised groove. The densely packed spirals appear to open in a uniform clockwise fashion, though

no evidence of the use of symmetrizing patterns is apparent. The density of the ornament, its ordering to parallel rows, and the softly molded character of the individual spirals indicate the Western Han continuation of an essentially Late Eastern Chou motive.

The profile has not been published or described.

**REFERENCE:** Hansford, *Jade* (1969), p. 88, B52, poor photo of top; ascribed to Late Eastern Chou.

#### CG.73

**MATERIAL:** Jade, grayish green with darker areas at the upper end.

**COLLECTION:** Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

**MEASUREMENTS:**

L 3.31  
W 1.00  
D .50

**DATE:** Western Han.

The surface of the upper plate is ornamented with six parallel vertical rows of twenty-one small rounded grains joined by arched incised lines forming a step pattern. The background surface is plain, showing no visible traces of the intersecting grid lines by which extremely regular patterns of this sort were achieved. The side borders appear to be concave, the ends of the decor panel closed by an incised line drawn between the borders.

The profile has not been published or described.

**REFERENCE:** Hansford, *Jade* (1969), p. 88, B53, photo of top; ascribed to Late Eastern Chou.

#### CG.74

**MATERIAL:** Jade, grayish yellow.

**COLLECTION:** Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

**MEASUREMENTS:**

L 2.88  
W .75  
D .63

**DATE:** Western Han.

The surface of the upper plate is ornamented with a dense pattern of knob grains arranged in at least twenty-five horizontal rows, offset horizontally to form diagonals, alternate rows containing five and six grains each. The grains, seemingly slightly irregular in form, are defined by the intersection of three sets of parallel lines laid horizontally and diagonally on the surface. The appearance of partial grains at the side borders, and the regularity of the pattern, indicate the use of a symmetrizing pattern.

The profile has not been published or described.

REFERENCE: Hansford, *Jade* (1969), p. 89, B55, poor photo of top; ascribed to Late Eastern Chou.

#### CG.75

MATERIAL: Jade, light gray with small areas of decomposed mineral.

COLLECTION: Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

##### MEASUREMENTS:

L 3.38  
W 1.00  
D .63

DATE: Late antiquarian.

The surface of the upper plate is ornamented at its upper end with a schematically squared, stylized animal mask facing upward and seemingly in low, flat relief. Below the mask, the surface is covered with five rows of broad rounded grains offset vertically. The grains are somewhat irregular in form and positioning and are set off by an incised line around the perimeter suggesting the use of a tubular drill in placing the grains rather than a preliminary hatching of intersecting lines. At each side is a narrow plain border marked by an incised line. The mask at the upper end is contained within these borders. A part of the relief effect imparted to each grain is achieved by the incised perimeter line cutting below the surrounding plain surface area.

The profile has not been published or described.

REFERENCE: Hansford, *Jade* (1969) p. 89, B56, photo of top; ascribed to Late Eastern Chou.

#### CG.76

MATERIAL: Jade, light green with reddish brown surfaces, possibly artificially altered.

COLLECTION: Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

##### MEASUREMENTS:

L 3.69 (incomplete)  
W 1.38  
D .63

DATE: Late antiquarian (recent).

The surface of the upper plate is ornamented with five rows of comma-shaped grains offset vertically. The spirals are crudely incised on low relief mounds and are irregular in size and form, though all are drawn from the vortex outward counterclockwise. The author notes the exceptional size of the piece, estimating that originally its length may have been about 5.50. The size, surface alteration and crudeness of the workmanship indicate a late imitative piece.

The profile has not been published or described.

REFERENCE: Hansford, *Jade* (1969), p. 89, B57, photo of top; ascribed to Late Eastern Chou.

### Hydra Class

CH.1 . . . . . Figures 3 and 6

MATERIAL: Stone (jade?).

PROVENANCE: Ch'ang-sha,<sup>d</sup> Hunan<sup>e</sup> Province.

##### MEASUREMENTS:

L 2.94*	ApL .97*
D .88*	ApD .28*
	ApX .94*

DATE: Fourth to third century B.C.

A very poor, small-scale profile photograph only of this piece has been published. The irregular configuration of the upper surface suggests it is probably ornamented with the figure of a hydra carved in relief, but not in openwork. The profile of the slide is extraordinary. There is no clear indication that the surface decor is applied to, but above, a basic upper plate; upper plate and decor are united in a comparatively thick plate. At the forward end this thick plate curves inward, is slightly back-sloped, but terminated in a blunt, inward-projecting ridge without the formation of a hook. It extends inward to a depth equal to the lower interior of the aperture and hence probably rested on the scabbard wall when the lower aperture plate was fitted into its socket in the scabbard wall. The lower end is straight, the relief of the surface decor creating the impression that it turns upward at a right angle. The corners of the aperture are slightly rounded, the lower aperture plate thick. Irregularities in plate and wall thicknesses and in individual straight lines suggest that the piece may be somewhat crudely carved.

The slide was presumably found in association with the bronze sword in a well-preserved, black-lacquered wooden scabbard published with it. The sword has a double-edged, ribbed, tongued blade, with solid, two-ribbed hilt, with disk pommel and guard, all cast in one piece with the blade. The sword is 16.25 long (overall). Total length of sword and scabbard ensemble, 18.50 (Haskins, p. 52). The side of the scabbard shown in the published photos has no rectangular socket for the insertion of the lower aperture plate of the slide.



A third object evidently is to be associated with the sword, scabbard, and slide: a golden hook supposedly in the form of an elephant's head and trunk. Haskins (p. 52), following a Chinese author (*China Pictorial*, August, 1953), reports that it served as a suspension device for the sword, but *Ch'u wen-wu* describes it as *tai-kou* 帶鉤 girdle-hook, which is a more logical identification. Hansford, "Visit to An-yang" (1948-1949), pl. V, a, illustrates a similar object of bronze which he purchased in the An-yang vicinity and describes it (p. 18) as an archaic type belt hook. The possibility that such hooks, which appear to lack the knob on the underside normally found on belt hooks, might have served as a part of the attachment of the quiver to the belt has yet to be investigated.

## REFERENCES:

*Ch'u wen-wu* (1954) pl. XXXVIII, 74, profile photo of slide; on the same pl., photo of bronze sword and detail of lower part of scabbard.

Haskins, "Recent Excavations in China" (1956), p. 53, fig. 12, photo of sword in scabbard and of gold hook.

## CH.2 .....Figure 4

MATERIAL: Stone (jade?).

PROVENANCE: Ch'ang-sha,<sup>d</sup> Hunan<sup>e</sup> Province.

MEASUREMENTS:

L 2.72\*

W .83\*

DATE: Fourth to third centuries B.C.

The upper surface is ornamented with an archaic, but strongly modeled, vigorous hydra form, oriented upward, in high, but not undercut, relief. Narrow, incised vertical side borders are interrupted by the contours of the animal which reach to the edges of the upper plate. Round eyes, bored out, and perhaps once inlaid with small stones or paste, are set on top of a flat, ovaloid head which is not provided with a horn. The smaller curved segment of the bifurcated tail is marked with parallel striations, the longer segment by twist lines. The profile has not been published.

The slide was found in association with a "bronze-hilted iron sword" preserved in its entire length of 34.96 inches (cf. *CP.1*). The unribbed grip seems to be of the hollow type, and is furnished with a disk pommel. Presumably the double-edged iron blade is tanged and the bronze hilt cast onto the iron tang. The hilt appears to be quite badly corroded. Apparently, no scabbard parts remained. Fitted over a flat, horizontal metal ridge at the place where the blade attaches to the hilt was a jade guard decorated on the inner side with a stylized, simplified animal mask partly in low relief and partly incised, and utilizing two surface planes. On the outer side is a split hydra figure in high, round relief, the head and

foreparts to the right, hind parts at left, creating the illusion that the animal is curled around the back of the guard.

The slide is depicted resting on the sword blade, presumably as found, or as restored in relation to its find position. It lies approximately one-fourth of the distance down from pommel to tip. The ordinary position is nearer to two-fifths of the distance down from pommel. The relatively high position of the slide here may have been required by the greater weight of the bronze hilt.

REFERENCE: *Ch'u wen-wu* (1954), pl. XXXIX, 75:2, photo of top of slide; pl. XXXIX, 75:1, photo of full sword; pl. XXXIX, 75:3 and 4, photo details of hilt and jade guard, obverse and reverse.

## CH.3

MATERIAL: Jade.

PROVENANCE: Ch'ang-sha,<sup>d</sup> Hunan<sup>e</sup> Province; excavated 1959.

MEASUREMENTS:

L 4.06

W .95

D .87

DATE: Late Western Han.

The unmodulated surface of the upper plate is ornamented with two hydra figures in high, partially undercut, relief. At the upper end, a smaller curled hydra figure oriented downward. Below, a larger hydra in an extended S-curve, with bifurcated tail, oriented upward. No horn is attached to the head of either animal. Along the sides are narrow vertical borders, probably defined by incised lines, interrupted at intervals by the contours of the animals which reach to the edges of the upper plate. The larger animal is vigorously, organically conceived, and a refined sense of rhythmic animal movement is achieved through the sinuous curves of the body. This slide, and a few others like it, seem to mark the apex in the functional and artistic development of this class. They are the models for numerous late antiquarian pieces and forgeries of this class.

The slide was found in association with a long, narrow, double-edged, tanged bronze rapier with a total preserved length of 38.66. With the now lost grip and pommel (probably disk, pegged into the wooden grip encasing the tang), the sword in its scabbard as it hung at the bearer's side must have been at least 41 or 42 inches in length. This sword is similar to that found with slide *CV.8* which, though assuredly of practically the same date, is of iron.

The slide is depicted resting on the sword blade, presumably as found, or as restored in relation to its find position. It lies approximately three-eighths of the distance down from tang end to blade tip. Presumably, with

scabbard, grip, and pommel intact, its position was about two-fifths of the total length down from pommel to chape, which is the most generally encountered ratio.

The sword is provided with a jade guard imitating a standard bronze Han dynasty type, sloping to a point over the central rib of the sword blade, and with a low saddle above flanked by two raised, slightly rounded, shoulders projecting beyond the edges of the blade on either side. The guard is plain on the inner side, decorated with a hydra in high relief on the outer side.

The burial is considered to date from the period of the Han Interregnum of Wang Mang<sup>u</sup> (r. A.D. 9-23), though presumably the contents belong in part, at least, to the later decades of Western Han.

REFERENCE: Hu-nan sheng, "Ch'ang-sha Wu-li-p'ai ku mu tsang" (1960), p. 24, fig. 12, oblique top/profile photo of slide/ p. 45, fig. 37, photo of slide in position on sword blade; p. 45, figs. 40 and 41, obverse and reverse photos of guard; text, p. 45 (sword), p. 46 (slide).

CH.4 ..... Figure 16

MATERIAL: Jade; possibly chipped in several places.

PROVENANCE: Shao-hsing 紹興, Chekiang<sup>p</sup> Province; excavated 1956.

MEASUREMENTS:

L 2.25\*

DATE: Eastern Han, late first to early second century after Christ.

Only crude, reduced scale profile and top drawings of this scabbard slide have been published. The upper plate is ornamented with a single hydra figure in high relief, oriented upward. The relief is not cut free from the surface of the plate at any point. The profile is atypical for the period. The plates are of a relatively even thickness; only the upper plate is somewhat thicker than the rest. At either end the upper plate inclines slightly, terminating without the formation of either a forward or rear inward-projecting edge, or of involuted end hook ridges. The ends of the upper plate would not have rested on the scabbard wall (cf. *CP.2*).

The slide was found in association with a single-edged, ring-pommel bronze sword (206:8). The tip of the blade is missing; the overall length of the remaining section is 31.10. The slide is depicted resting on the sword blade, presumably as found, or as restored in relation to its find position. It lies just above the midpoint between the pommel and break in the blade, from which position it may be presumed that the sword was originally approximately three feet in length. The grip area is separated from the blade by a bronze guard somewhat thinner than usual with raised shoulders to either side of a central saddle. Attached to the lower side of the guard is a serrated bronze collar providing additional gripping surface

for the guard on the sword as single-edged blades rarely have shoulders, such as those on tanged, double-edged blades, upon which to secure the guard. A jade guard of the usual form, therefore, cannot be easily attached to single-edged swords which at most have a slight shoulder at the sharpened side. The present sword appears to have such a slight shoulder. The guard is decorated on both sides with stylized monster masks, hence this sword varies from the usual tradition of similar ornamentation adorning the various elements of furniture belonging to a single sword. It may well be that the slide was not manufactured for the specific sword with which it was later employed.

REFERENCE: "Che-chiang Shao-hsing Tung-Han mu" (1957), pl. III, 3, photo of sword with slide in position (photo blurred); p. 8, fig. 1, plan of tomb showing find position of sword; p. 9, fig. 2, drawings of top and profile of slide, obverse and reverse of guard, sword with slide lying on blade, in find position(?); pl. IV, 1 and 2, obverse and reverse photos of guard.

CH.5 ..... Plate 8d

MATERIAL: Jade, grayish brown with decolored areas on the lower aperture plate and at the lower end of the upper plate. Slight evidence of wear at upper left interior corner of aperture.

PROVENANCE: Chin-ts'un,<sup>g</sup> about thirteen miles north-east of Lo-yang,<sup>h</sup> Honan<sup>i</sup> Province.

COLLECTION: Royal Ontario Museum, Toronto; 933.23.115.

MEASUREMENTS:

L 2.22	ApL 1.13
W 1.00	ApD .25
D .75	ApX 1.53

DATE: Late Eastern Chou.

The surface of the upper plate is ornamented with the figure of an animal in an S-configuration, extended upward but with the head facing downward and oriented toward the right side. The animal, depicted in profile (cf. *CH.81*), is at once simply and vigorously carved, summarily and somewhat naively proportioned. The carving is quite rough, but boldly and deftly expressed. Foreparts haunch and tail have been carved with slightly rounded volumes, while other parts of the animal, the hind legs for example, are flat and silhouetelike. A thick, short, horn, curved up at the end, projects back from the center of the head. There are no perceptible borders on the plain uneven background surface and the animal fills the entire upper surface; indeed, it appears somewhat constrained to fit within the space. It is not the usual type of hydra found on scabbard slides, but is closely related to the freer and more sophisticated fantastic animal forms sometimes carved in openwork on

the rims of Late Eastern Chou perforated disks of jade, a superb example of which has also come from the Chin-ts'un tombs (Umehara, *Rakuyō Kinson kobo shūei* [1937], pl. XCI). Especially similar are the open mouths, the double-hooked lower jaws, and the attitude of constrained ferocity.

The upper plate projects straight beyond the aperture walls, the longer extension below. There are no inward projections at either end. Unique among all scabbard slides I have examined is the aperture which is not fully as wide as the upper plate, but is cut back .09 on either side. In addition, the aperture walls have a pronounced vertical taper. The outer, normally vertical edges of the lower aperture plate are not squared, but slant-cut through two forty-five degree planes. The anomalies in the form of the aperture may be the result of early repairs to chipped surfaces.

There seems no cogent reason to doubt the provenance of this piece, though it was not recovered from the tombs at Chin-ts'un under controlled conditions and was only reported to have come from one of these. There is no record of the slide having been found in association with a sword.

REFERENCES:

- White, "Archaic Chinese Jade" (1934a), p. 372, fig. 4, photo of top.
- White, *Tombs of Old Lo-yang* (1934b), p. 137 f., and pl. CXL, 339, b, photo of top.
- Dohrenwend, *Chinese Jades* (1971), p. 80, photo of top.

CH.6 ..... Figure 11, Plate 10a

MATERIAL: Jade.

PROVENANCE: Tomb 212 of Sekigan-ri<sup>1</sup> [Sōgam-ni], Lo-lang<sup>k</sup> district, Korea.

COLLECTION: National Museum, Seoul, Korea.

MEASUREMENTS:

L 4.00*	ApL 1.50*
W .89*	ApD .20*
D .50* (basic)	ApX 1.88*
D .84* (with relief)	

Depth of upper plate over aperture .20\*. The slide narrows toward the lower end, from its maximum width at the upper aperture wall, to .84\* at the lower end.

DATE: Late Western Han.

The plain upper surface is ornamented with two hydra figures in high, partially undercut relief. Contrary to the usual arrangement, the smaller hydra occupies the lower position on the slide, with its head facing upward (cf. CH.16). The larger hydra, in an extended S-curve, is oriented upward, with the neck curving downward and the head facing toward the left side. There seems to be no horn emanating from the head. The body of the larger hydra, with single stem tail, is tubular in appearance, though actually quite flatly contoured on top, and more

heavily patterned with carved and incised ornamentation than is usual. There are no perceptible borders.

The upper plate is slightly arched, terminating at the forward end in a deeply involuted hook-ridge. The lower end turns inward abruptly with a forward-projecting angular wedge on the underside. The hooks reach inward to a depth equal to that of the lower interior of the aperture and hence probably rested against the scabbard wall. The aperture is partially clogged with earth and decomposed scabbard fragments.

The slide was presumably found in its original position on the side of a thin, lacquered wood scabbard, the upper part well preserved, containing a double-edged, tanged iron sword with thin jade (?) guard and a knob pommel of the type which in cross-section resembles the standard chape ornament. The grip of the sword is wound with a heavy, braided cord.

The sword in its scabbard appears to be approximately 40 inches in length, the suspension balance point of the slide approximately three-sevenths of the distance down from pommel to tip.

(See also CV.10 from this tomb)

REFERENCES:

- Umehara, *Shina kogyoku zuroku* (1955), pl. CV, top, profile and top photos of slide; pl. CV, left, slide in position on scabbard.
- Na Chih-liang, "Yü ch'i t'ung-shih" (1964), pl. LXXIV, 1 (sword) and 4 (slide); (after Umehara).

CH.7

MATERIAL: Jade; small fragment missing from lower left end.

PROVENANCE: Lo-lang,<sup>k</sup> Korea.

MEASUREMENTS:

L 3.15
W .98

DATE: Late Western Han.

The plain upper surface is ornamented with two hydra figures in high relief not cut free from the surface of the plate at any point. The smaller hydra occupies the upper portion of the slide; the larger hydra, in an extended S-curve and with bifurcated tail, occupies the lower portion of the slide, is oriented upward with its head turned toward the head of the smaller hydra. There are no horns emanating from the heads of the animals. Though strongly geometrized, the rounded, organic volumes of the animals have been executed with integrity and feeling for solid, meaningful forms. There are no perceptible borders. The profile has not been published.

The slide was found in association with a tanged, double-edged iron sword in a black-lacquered wooden scabbard. The lower end of the scabbard and blade have entirely decomposed; the overall length of the remaining

ensemble is 21.65. The sword is provided with a jade guard of the type with raised shoulders flanking a central saddle and is decorated on its outer surface with the full body of a hydra in high relief. The disk pommel socket of bronze lacks the jade disk it probably once held.

REFERENCE: Umehara, *Chōsen ko bunka sōkan* (1947-1948), 2, pl. XL, 76, photo of slide in position on scabbard (the slide appears to have been placed in an inverted position, presumably by the excavators, and hence probably does not represent the exact find position); text, p. 54 f.

CH.8 . . . . . Plate 9b

MATERIAL: Jade, gray-green; considerable surface decomposition; earth incrustations on surface; both ends have been chipped and reground.

COLLECTION: Chicago Natural History Museum, no. 116562.

MEASUREMENTS:

L 2.99  
W .83  
D .83

The above measurements are from the catalogue entry at the museum. Laufer, *Jade* (1912), p. 260, gives: L 2.87, W. 87. The upper plate tapers from its widest point just below the upper end to its narrowest at the lower end.

DATE: Western Han.

The plain upper surface is ornamented with two hydra figures carved in high relief, but probably not cut free of the surface at any point. The smaller hydra occupies the upper position, with its head facing downward. The larger hydra, in an extended S-curve, occupies the lower portion of the slide, with its head directed upward toward that of the smaller hydra. The animals are rather heavy in body, but rhythmically and organically conceived. The larger hydra has a curved, single stem tail. There is no horn attached to the head of either creature. Along the sides are narrow, vertical borders, probably defined by an incised line only, interrupted at intervals by the contours of the animals which reach to the edges of the upper plate.

The profile has not been published.

(Cf. CH.12)

REFERENCES:

Laufer, *Jade* (1912), pl. XXXIII, 3, color photo of top.  
Hobson, "Jade" (1913), fig. C, photo of top.  
Pope-Hennessy, *Early Chinese Jades* (1923), pl. XXXIII, 1, lower, photo of top.

CH.9

MATERIAL: Jade, yellowish with brown markings; partly decomposed.

PROVENANCE: Reputed to have come from Shou-

hsien,<sup>1</sup> Anhui Province.

MEASUREMENTS:

L 2.05  
W 1.00

DATE: Perhaps late antiquarian, but possibly end of Chou or early Western Han.

The published top photograph of this slide is inadequate for study. The upper surface appears to be ornamented with the body of a single hydra with single-stem (?) tail, in an S-curve and oriented upward. The neck curves downward from the upper end, the head facing the left side. Possibly there are additional elements of decor at the upper end. The relief is low and flat. Narrow vertical side borders are defined by incised lines. The published notes on this piece contain the following observation: "Vague low relief markings on the back, apparently indicating some design not completed." No published excavated scabbard slide, or slide of reasonably convincing authenticity, is ornamented on the underside. If ornamentation does indeed exist on the underside of this slide, the probability is that the slide is a later antiquarian imitation of an earlier form.

The animal form itself, and style of carving, are similar to CH.11 and CH.15.

REFERENCE: University of Pennsylvania, University Museum, *Archaic Chinese Jades* (1940), pl. XIV, 275, small photo of top; p. 53, no. 275.

CH.10 (?) . . . . . Figure 6

MATERIAL: Jade, grayish green, white, and reddish brown. (Possibly the reddish brown coloring is iron-oxide stain.)

COLLECTION: O. Karlbeck, Stockholm.

MEASUREMENTS:

L 1.97

DATE: Late Eastern Chou.

On the basis of the published profile photograph, it is impossible to be certain that this slide belongs to the CH class. Visible are three consecutive ranks of an apparently similar ornamentation, each in two relief-steps above a raised ground which may contain decor elements connecting the above elements into a single composition.

The profile is closely related to those of CG.1 and CG.19. The large, deep aperture is enclosed by plates and walls of rather greater than usual thickness in relation to the size of the piece. The thick upper plate is of an unusual form. Just below the forward edge, a lateral cut divides the upper plate into two layers. Presumably this cut broadens to form a ledge toward the lower end so that the upper layer of the upper plate is transformed at the low end of the slide into part of the surface relief ornamentation. The upper plate projects only slightly

above the aperture, terminating in a blunt, rounded curve without the formation of an upper bay or hook-ridge. Below the aperture, the upper plate, considerably reduced in thickness by the lateral division of the plate described above, is curved slightly inward, the upper surface sloping down to meet the under at a rounded angle. At the forward end, the aperture projects into the area of the upper plate; below, the aperture top is parallel with the underside of the upper plate.

The profile and decor (which is probably of an extraordinary, if not unique, nature) are wholly within the possibility and known characteristics of Late Eastern Chou scabbard slides. On the basis of the photograph, I see no reason to consider the piece a fragment as it has been described by Karlbeck.

REFERENCE: Karlbeck, "Selected Objects from Ancient Shou-Chou" (1955), p. 126 and pl. LXI, 14, photo of profile.

**CH.11** . . . . . Plate 9a

MATERIAL: Jade, milky white, translucent, turning to bluish gray at one end; areas of surface decomposition.

PROVENANCE: Said to have come from Ch'ang-sha,<sup>d</sup> Hunan<sup>e</sup> Province.

COLLECTION: Dr. Paul Singer, Summit, New Jersey.

MEASUREMENTS:

L 3.69	ApL 1.28
W 1.13	ApD .22
D .59	ApX 1.75

The upper plate tapers slightly, from a maximum width just below the upper end, to a minimum at the lower end. Depth of upper plate over aperture .23; depth of lower aperture plate .13.

DATE: Early Western Han.

The surface of the upper plate is ornamented with the body of a single hydra with bifurcated tail, in an extended S-curve, oriented upward, the head turned toward the left. The figure, entirely contained within a recessed area between raised side borders and somewhat lower end borders, is carved in low, beveled relief. On top of the head is a small incised circle. A horn in very low relief extends downward from the back of the head along the right side. Claws and fur on hind legs are indicated by incised lines. The relatively heavy-bodied animal is organically conceived with extreme tension and grace in the fluid curves of the body.

In profile, the slide appears somewhat clumsily formed. The upper end is rounded, terminating on the underside in a blunt knob formed by a squared cut separating upper aperture wall from the upper terminal. At the lower end, the upper plate thickens and curves inward at nearly right angles, terminating bluntly. The carving of the basic slide, angular and somewhat rough and unpolished, suggests imitative work. Only the graceful

curve of the upper plate is equivalent to that on the finest early Western Han pieces. A southern provenance is supported by such factors, as well as by the length and decor of the piece.

(Cf. CH.9, CH.15)

REFERENCE: University of Michigan, Ann Arbor, *Early Chinese Jade* (1953), no. 119, photo of top.

**CH.12**

MATERIAL: Jade, gray; earth incrustations on surface; the forward edge has been chipped and reground.

COLLECTION: Chicago Natural History Museum, no. 116563.

MEASUREMENTS:

L 2.91
W .87
D .83

The above measurements are from the catalog entry at the museum. Laufer, *Jade* (1912), p. 260, gives: L 2.87, W .87. The upper plate tapers from its widest point at the upper end to its narrowest at the lower end.

DATE: Western Han.

The ornamentation of this slide is nearly identical to that of CH.8. The bodies of the animals, however, are here more slender, more studiously graceful, suggesting a more conventionalized representation. The tail of the larger hydra here divides into two stems curving in opposite directions.

The profile has not been published.

REFERENCES:

Laufer, *Jade* (1912), pl. XXXIII, 2, color photo of top.  
Hobson, "Jade" (1913), fig. B, photo of top.  
Pope-Hennessy, *Early Chinese Jades* (1923), pl. XXXIII, 1, upper, photo of top.

**CH.13** . . . . . Figure 11

MATERIAL: Glass, white translucent; surfaces heavily corroded.

COLLECTION: British Museum, 1938.5-24.295.

MEASUREMENTS:

L 2.50	ApL 1.09
W .75	ApD .31
D .56	ApX 1.44

Depth of upper plate over aperture .13. Height of relief above border .03. The sides slope inward toward the base so that the width of the lower aperture plate is .64.

DATE: Western Han.

The surface of the upper plate is ornamented with a highly simplified and conventionalized hydra in an extended S-curve, oriented upward, and cast in low, modulated relief. The rounded contours of the animal are quite indistinct owing to the heavy surface decomposition. The interior areas of the shoulders and upper

body are concave. The curved tail has a single stem only. The molded relief of the hydra rises slightly above plain, narrow, sharp relief borders, now badly chipped, on either side and across the lower end.

The thin upper plate is slightly arched. The forward edge is very slightly back-sloped, terminating in a low, angular ridge on the underside, not involuted but projecting straight inward. The lower edge of the upper plate, somewhat more sharply back-sloped, terminates in a similar ridge. These ridges terminate well above the lower interior of the aperture and thus were not in contact with the scabbard wall. Both forward and rear aperture walls slope outward from the lower aperture plate; this slope is more pronounced in the upper aperture wall. The upper plate forms a regular rectangle of equal length and width throughout.

Unpublished.

#### CH.14.....Plate 9d

**MATERIAL:** Jade, pale green with buff-colored areas of decomposition on upper surface; iron-oxide stains on exterior of lower aperture plate and on lower hook.

**COLLECTION:** Fogg Art Museum, Harvard University, Cambridge, Massachusetts. 43.50.376; Grenville L. Winthrop Bequest.

##### MEASUREMENTS:

L 4.66	ApL 1.66
W .94	ApD .25 to .27
D .95 (basic)	ApL 1.94*
D 1.03 (with relief)	
Depth of upper plate over aperture .20 to .22.	

**DATE:** Late first or early second century after Christ.

The surface of the upper plate is ornamented with a composition of a large and small hydra executed in high, sculptural relief, and undercut from the surface of the plate at several points. The smaller hydra figure is situated at the upper end of the slide, oriented downward toward the larger hydra, but facing off the left side of the slide. The forequarters only are articulated in animal form, the hind part of the figure being dissolved into plastic curls. Below, a long, sinuous hydra, with bifurcated tail, contorted in an extended S-curve. The longer branch of the tail, reaching to the lower end of the slide, is patterned with a series of incised lines suggesting a twisting motion. The contours of the body are tensely and organically conceived, the head beautifully sculpted. There is no horn emanating from the back of the head.

The surface of the upper plate about the figures is plain and unmodulated; along the sides are incised lines marking narrow, plain borders. These are interrupted in several places by the bodies of both animals which extend to the edge of the upper plate, but do not project beyond it.

The upper plate is slightly arched. At the upper end, it curves inward, with a slight back-slope to the forward edge, and terminates in a hook ridge.

Umehara publishes the slide in association with a fragmentary double-edged, tanged iron sword, fitted with a jade guard 2.44\* wide having raised, rounded shoulders flanking a central lower saddle. It is carved on one side with a hydra in high relief very close in style to those on the slide. Umehara does not state whether sword and slide are known, or reputed, to have been found together. The slide is not presently visibly associated with an iron sword or jade guard in the Fogg Art Mureum.

##### REFERENCES:

Sirén, *Kinas Konst* (1942), 1, p. 249, fig. 164, slightly oblique top/profile photograph; ascribed to Han.

Umehara, *Shina kogyoku zuroku* (1955), pl. CVI, lower left, photo of top.

Fogg Art Mureum, *Grenville L. Winthrop* (1969), p. 28, no. 34, photo of top.

#### CH.15

**MATERIAL:** Jade, originally green, but now almost wholly decolored and partly decomposed.

**COLLECTION:** His Majesty King Gustaf VI Adolf, Stockholm.

##### MEASUREMENTS:

L 2.01
W .67

**DATE:** Western Han, probably late second-century B.C.

The plain surface of the upper plate appears to be ornamented with the figure of a single hydra, oriented upward (?), but with the neck curved back, the head resting on the body and facing directly the right side of the scabbard slide. The animal is described as "biting its own back." The animal is executed in low, somewhat flat, though beveled, relief, only slightly higher than that of CH.II. There are no visible borders, and the animal, conceived in exceptionally broad, flat, curvilinear segments, reaches to the edges on either side. The broad, flat, curved, bladelike segments of the tail rather resemble those of an animal tail on a perforated jade disk from Lo-lang,<sup>k</sup> tomb 9 of Sekigan-ri<sup>j</sup> (Sekino, *Rakuro-gun jidai no iseki* [1925], 1, pl. LXIV), an object which may with fair certainty be dated closer to the later part of the Western Han. More regular and perfunctory than the animal on this slide, it may be that the slide is to be dated closer to the middle of this period, though the available photograph of the slide does not allow a more precise estimate.

The aperture is broken and there is perhaps, according to the published description, another part of the slide missing. The profile has not been published.

(Cf. CH.9, CH.11)

REFERENCE: Karlbeck, "Selected Objects from Ancient Shou-Chou (1955), pl. LXI, 13, photo of top; text, p. 126.

#### CH.16

MATERIAL: Nephrite, light green, with large areas of brown "skin"; some evidence of decomposition on the surface.

COLLECTION: Charles Gabriel Seligman, London.

MEASUREMENTS:

L 2.52  
W .81\*

DATE: Late first to early second century after Christ (?).

The surface of the upper plate is ornamented with a composition of a large and small hydra carved in moderately low relief. The smaller hydra figure is apparently situated at the lower end of the slide (cf. CH.6), though this is unverifiable from the published photograph. The bodies of the hydras are oriented in opposing directions, and the heads are turned about to face each other from opposite ends of the slide. The surface of the slide is treated as water and the bodies of the hydras appear to emerge from, and submerge into, the surface, creating small parallel, or concentric, ripples or eddies where they break the surface. There are no lateral or end borders.

Compositions of this type are unattested among reliably authentic pieces, but the arrangement of the elements here, the technique of carving and the greater attention to the representation of the water than on late antiquarian pieces, together with signs of what appear to be genuine physical age, suggest that this piece may be an authentic work of Eastern Han date. The profile of the slide has not been published and in the absence of full details the date assigned to this piece must be considered as tentative.

(Cf. CH.17)

REFERENCE: Hansford, *Seligman Collection* (1957), pl. LXI, B.33, photo of top; text, p. 112.

#### CH.17

MATERIAL: Jade, cream-colored (decolored); heavy iron corrosion concealing contours of under side.

COLLECTION: William Rockhill Nelson Gallery of Art, Kansas City.

MEASUREMENTS: The measurements given in B and C are incorrect; the photograph in F is not natural size as indicated, but exceeding this; photographs and rubbings in A and E are not natural size; D reports the length at 6.25 which is grossly inaccurate; the photograph in D is considerably enlarged.

L 2.97  
W 1.00 (basic)  
W 128 (with relief extension)

ApL 1.16  
ApD .25

D .50

Depth of upper plate over aperture .14.

DATE: Early Eastern Han.

The surface of the upper plate is ornamented with the bodies of two hydra figures in a complex arrangement, covering the entire surface of the slide and extending in openwork beyond the right side. The larger hydra sprawls in an extended S-curve over the full length of the slide, from trifurcated tail near the lower end to head carved in the round and extending off the right side of the slide near its upper end. The central part of the body is unseen, represented as being below the surface of the slide which appears to be treated as a body of water, small eddies indicated by incised concentric lines about the body where it enters into and emerges from the surface. The legs, paws, and claws have been rendered with unusual attention to detail. From the breast of the larger hydra, a long curved tuft of fur projects toward the upper end of the slide, the fur represented by parallel striae. The sculptured head is unusually large, with large bulging eyes and a long, convoluted head horn in two continuous sections curling downward along and beyond the right edge of the slide. On top of the head, to either side of the base of the horn, is a small round socket; these may once have held inlays of precious stone. The smaller hydra emerges from the surface of the slide near the lower end. The forepart only of its body is represented and as it emerges it twists sharply upward, extending off the right side of the slide, its muzzle reaching the end of the larger hydra's horn. The smaller hydra is provided with a small curved head horn, marked into segments by curved incised lines. The large eyes are set more to the top of the head than usual.

The surface of the slide surrounding the figures is plain (except for the ripple marks where the hydra bodies emerge). There are no borders; the hydra figures extend to the edges on three sides and project in openwork beyond the right side. The figures are carved in high relief, partly in full round, with considerable sculpted and incised detail. Curved, incised lines on the tail of the larger hydra suggest a twisting motion. The carving is vigorous and expressive, but the patterning complicated. In contrast to the rich and dense baroque character of the upper surface which tends to negate the structural form of the slide, the profile is sensitively, almost delicately, carved. Its form and proportions clearly closely resemble those of a late Western Han date.

REFERENCES:

A. Huang Chün, *Heng-chai ts'ang chien ku yü t'u* (1935), II, 31:a, photo process reproduction of top in mirror reverse image (i.e., relief extension at left).

B. London, Royal Academy of Arts, International Exhibition of Chinese Art, *Catalogue* (n.d.), pl. LIX, 617, photo of top; p. 45, no. 617.

C. London, Royal Academy of Arts, *The Chinese Exhibition: a Commemorative Catalogue* (1936), p. 25, no. 617, not illustrated.

D. Salmony, *Carved Jade of Ancient China* (1938), pl. LXVI, 5, photo of top.

E. Huang Chün, *Ku yü t'u lu* (1939), III, 22:a, right, photo process reproduction of top; III, 22:b, left, rubbing of profile.

F. Umehara, *Shina kogyoku zuroku* (1955), pl. CVI, lower right, photo of top.

#### CH.18

**MATERIAL:** Jade, translucent gray, with slight surface decomposition; forward edge broken at right side; small piece broken off lower aperture plate.

**COLLECTION:** Mr. and Mrs. Frederick M. Mayer, New York.

**MEASUREMENTS:**

L 3.25	ApL 1.56
W .70 (basic)	ApD .25
W 1.19 (with relief extension)	ApX 1.78
D .50	

Depth of upper plate over aperture .16; depth of lower aperture plate .09. Slight evidence of wear at interior upper left corner of aperture.

**DATE:** Western Han.

The surface of the upper plate is ornamented with the body of a single hydra depicted in profile (cf. **CH.5**, **CH.81**) and oriented upward, contorted in an extended S-curve. The figure is carved in low, only slightly rounded relief, with incised curvilinear ornamentation on the body. The hind feet and one forefoot rest upon the left side, interrupting the incised border which frames the plain background surface on both sides and across the top, except where interrupted by elements of the hydra figure which extend to or beyond the edges of the slide. The head, horn, haunch, and tail of the animal project in flat openwork beyond the right side of the slide to a distance equal to nearly half the width of the upper plate, and to a lesser distance beyond the lower end of the plate. The head horn is especially luxuriant, one branch curving back to rest upon the haunch and terminating in two stems curling in opposite directions; a second branch of the horn is drawn horizontally across the upper plate, passing over the body of the animal and curving downward along the left side of the slide (cf. small openwork bronze plaque, Prague, Národní Galerie, *Zvířecí styl*—I [1968] no. 77). At the upper end, placed in the center of the plate, is an elongated C opening toward the upper end, with a line emanating from the left hook of the C and meeting the upper border at right angles. The general character of the hydra figure is flamboyant and geometrically mannered, without perceptible organic feeling.

The upper hook curves inward in a rounded, regular way, without any back-slope in the forward edge. The upper plate terminates abruptly at the lower end, without the formation of an inward projecting hook or wedge.

**REFERENCES:**

West Palm Beach, Norton Gallery of Art, *Exhibition of Chinese Archaic Jades* (1950), pl. LVIII, 6, photo of top.

New York, Chinese Art Society of America, *The Art of Eastern Chou* (1962), p. 27, no. 72, not illustrated.

#### CH.19

**MATERIAL:** Jade, white (?); surface partly decomposed and somewhat worn.

**COLLECTION:** King-kwei (Chin-kuei<sup>r</sup>), i.e., J. D. Chen, Hong-Kong.

**MEASUREMENTS:**

L 4.13
W .83
D .98

**DATE:** Late antiquarian.

The surface of the upper plate is ornamented with two hydra figures: at the upper end, a small hydra facing downward toward a larger hydra, with bifurcated tail, in an extended S-curve, with sculptural and incised indications of musculature and body ornamentation. There is no evidence of a head horn. The figure of the larger hydra is carved in high relief, undercut in several places, and the head is raised in full round above the surface of the slide. The carving appears somewhat gross and conventional. Lateral borders are indicated by incised grooves, interrupted in places by the hydra figures which extend to the edges but do not project beyond.

The upper plate and lower and upper aperture walls are exceptionally thick. The forward end curves inward and is undercut to form a hook ridge. The lower end curves inward, thickening slightly, with forward-projecting hook-ridge on the inner side. The upper plate is slightly arched.

**REFERENCES:**

Ch'en Jen-t'ao *Chin-kuei lun ku ch'u chi* (1952), p. 43, fig. 39, photo of top; p. 43, fig. 40, photo of profile.

Köbe, Hakutsuru Bijutsukan, *Chügoku kogyoku-ten* (1954), [p. 7], left center, top, and profile photos.

#### CH.20

**MATERIAL:** Jade, translucent gray-white with reddish brown (iron oxide?) markings.

**COLLECTION:** C. T. Loo, Inc., New York.

**MEASUREMENTS:**

L 4.56
W .81
D .81





(refs. D, E, and H).

REFERENCES:

A. Wu Ta-ch'eng, *Ku yü t'u k'ao* (1889), II, 114: a, right, top/profile drawing; identified as girdle clasp. (See note with CP.6.)

B. Laufer, *Jade* (1912), p. 258, fig. 162, top/profile drawing, after Wu Ta-ch'eng; identified as girdle-clasp.

C. Omura, *Shina bijutsu-shi chōso-hen* (1915–1920) Atlas, pl. VIII, 3, top/profile drawing, after Wu Ta-ch'eng; identified as girdle-clasp.

D. Rostovtsev, "Une trouvaille de l'époque gréco-sarmate de Kerch" (1923), p. 135, fig. 22, reduced scale top/profile drawing, after Wu Ta-ch'eng; identified as sword guard.

E. Tallgren, *L'Orient et l'Occident dans l'âge finno-ougrien* (1924), p. 23, fig. 11, no. 2, reduced scale top/profile drawing, after Wu Ta-ch'eng via Rostovtsev (D); identified as sword guard.

F. Obermaier, "Südrussland" (1928–1929), pl. XL-D, f, top/profile drawing, after Wu Ta-ch'eng; designated as having come from Kerch.

G. Ginters, *Das Schwert der Skythen und Sarmaten* (1928), p. 71, pl. XXIX, a, top/profile drawing, after Wu Ta-Ch'eng; designated as belonging to the Berthier-Delagarde (Bert'e-Delagard) Collection (see SR.1) and as having come from Kerch.

H. Rostovtsev, "Le porte-épée des iraniens" (1930), p. 339, fig. 258, 2, reduced top/profile drawing, after Wu Ta-ch'eng via Tallgren (E); designated as having come from the Perm region.

J. Goette, *Jade Lore* (1936), p. 270, fig. 7, acknowledged to be after Wu Ta-ch'eng.

K. Maenchen-Helfen, "Zur Geschichte der Lackkunst" (1967b), fig. 16, right, top/profile drawing, based on Wu Ta-ch'eng; described as having come from Kerch.

L. Egami, *Yūrashia kodai hoppō bunka* (1948), pl. XXIX, 5, lower, reduced scale top/profile drawing, based on Wu Ta-ch'eng; described as having come from Kerch.

M. Komai, *Chūgoku kokyō no kenkyū* (1953), p. 168, fig. 34, reduced scale top/profile drawing based on Wu Ta-ch'eng; correctly identified as from China.

N. Maenchen-Helfen, "Crenelated Mane and Scabbard Slide" [1957], not illustrated; p. 93, described (following Ebert in ref. F) as having come from Kerch.

#### CH.24

MATERIAL: Jade, white.

MEASUREMENTS:

L 3.22*	ApL 1.19*
W .69*	ApX 1.53*

As drawn, the upper plate is widest near the lower end; near the upper end the width is .63.\*

The slide is known only from a published drawing.

The surface of the upper plate is ornamented with two hydra figures, presumably in high relief. The smaller hydra at the upper end circumscribes a U-curve, with the head facing downward. Below, the larger hydra with single-stem tail, oriented upward in an S-curve, faces the smaller hydra. The smaller hydra has a horn attached to the center back of its head and possibly a smaller horn similarly placed is indicated on the larger hydra. No side borders are indicated. The curved forward edge terminates in an inward-projecting ridge perpendicular to the line of the upper plate. At the lower end, the upper plate inclines inward slightly and, as drawn, thickens before terminating bluntly.

REFERENCES:

Wu Ta-ch'eng, *Ku yü t'u k'ao* (1889), II, 114:a, left top/profile drawing; identified as girdle-clasp. (See note with CP.6.)

Omura, *Shina bijutsu-shi chōso-hen* (1915–1920), Atlas, pl. VIII, 4, top/profile drawing, after Wu Ta-ch'eng.

Maenchen-Helfen, "Zur Geschichte der Lackkunst" (1937b) fig. 16, left, top/profile drawing, after Wu Ta-ch'eng.

#### CH.25

MATERIAL: Jade, decolored, whitish.

COLLECTION: Metropolitan Museum of Art, New York, 13.40.175.

MEASUREMENTS:

L 2.75	ApL 1.00
W 1.19	ApD .19
D .44	
Depth of upper plate over aperture .16.	

The surface of the upper plate is ornamented with two hydra figures: at the upper end, a small hydra with head facing downward; below, a larger hydra facing upward, with long, curving, sinewy body once projecting in openwork beyond the right side of the slide, but now broken flush with the side. The upper plate is slightly arched and curves inward at either end to form back-curved hook-ridges.

Unpublished.

#### CH.26

MATERIAL: Jade, pale green with brown markings.

COLLECTION: Dr. Arthur M. Sackler, New York; formerly Mr. and Mrs. Desmond Gure, London.

MEASUREMENTS:

L 2.88
W .94

DATE: Eastern Han.

The surface of the upper plate is ornamented with the figure of a single hydra in high, rounded relief, cut free

from the surface of the plate at several points. The animal, in an extended S-curve, is oriented upward, the head turned to face downward. From the back of the head a prominent crest extends upward, dividing into two sections curving outward toward the two upper corners. The tail is likewise divided into two stems, a shorter one curving toward the left side and a longer one curving over the lower portion of the upper plate. The body is long and thin, its musculature rendered by deep sculptured grooves. Incised grooves, interrupted at points by the body of the hydra which extends to, but does not project beyond, the sides of the upper plate, define side and end borders on the otherwise plain, unmodulated surface surrounding the figure. The decor on the surface is quite worn.

## REFERENCES:

Stockholm, *Celedon-Jade* (1963), p. 23, no. 34, not illustrated.

Gure, "Jade Exhibition at Stockholm" (1964), pl. II, 1, photo of top; text, p. 123, ascribed to Han dynasty.

## CH.27

**MATERIAL:** Jade, translucent pale greenish white; possible traces of bronze oxide on underside as well as possible traces of carbonized silk.

**COLLECTION:** Mr. Chauncy Hamlin, Buffalo; in Buffalo Museum of Science, Buffalo, New York.

## MEASUREMENTS:

L 3.15	ApL 1.38
W .43 (maximum)	
W .06 (at lower end)	

**DATE:** Sung dynasty, or later.

This extraordinary scabbard slide could never have served the purpose for which its basic design indicates it was intended. With a maximum width of less than half an inch, and an undetermined depth of more than twice the maximum width, it is unlikely that it could have been maintained in an upright position on the scabbard wall under the lateral stress a belt passing through the aperture would have exerted.

The upper plate is not of the customary rectangular form, but tapers sharply toward the lower end, terminating in a blunt point. The surface of the upper plate is ornamented with an elaborate, complex hydra form executed in rounded, high relief, undercut and raised considerably above the surface in many places. The height of the relief is almost equal to the depth of the basic slide. The surface of the upper plate is not flat, but at the left side in the sector directly over the aperture is depressed owing to the irregular shape of the raw stone from which the slide was carved. The hydra form slopes sharply away from this depressed area. The body of the hydra does not project beyond either end or side of the

slide, but details of its body are incised on the sides of the upper plate, a characteristic unique to this piece.

The thick upper plate is strongly arched and terminates at the upper end with a thin, inward-curving hooked ridge disproportionately small for the thickness of the upper plate and appears here as a somewhat feeble imitation of the more strongly, or elegantly, articulated hooks. At the lower end, the upper plate thickens as it curves inward in a regular, rounded arc, and is cut off in a line parallel to the upper plate so that in profile a flat knob, rather than forward-projecting hook-ridge, is formed. Owing to the extreme narrowness of the lower end, however, this terminal has more the aspect of a blade than a ridge. The depth of the basic slide is greater at the lower than at the upper aperture wall so that the whole forward section of the slide appears somewhat depressed. This is a characteristic of several of the later imitation, or antiquarian, scabbard slides. The lower aperture plate dips slightly inward toward the upper plate at its upper end.

The slide has few characteristics of the authentic specimens. The reported traces of bronze oxide and carbonized silk should be scientifically verified, though their presence need not necessarily be taken as a proof of genuine antiquity.

## REFERENCES:

University of Michigan, Ann Arbor, *Early Chinese Jades* (1953), no. 118, photo of profile.

Karlbeck, "Selected Objects from Ancient Shou-chou" (1955), pl. LXI, 12, photo of profile; text, p. 126.

University of Pennsylvania, University Museum, *Chinese Jade* (1962), no. 47, not illustrated.

## CH.28

**MATERIAL:** Jade, translucent brown.

**COLLECTION:** Osvald Sirén, Stockholm.

## MEASUREMENTS:

L 3.35

Described as ornamented with a hydra in relief.

**REFERENCE:** Sirén, *Documents d'art chinois* (1925), p. 68, no. 508, not illustrated; identified as a sword guard and ascribed to the Sung dynasty.

## CH.29

**MATERIAL:** Jade, brown.

**COLLECTION:** Osvald Sirén, Stockholm.

## MEASUREMENTS:

L 3.07

Described as ornamented with a hydra in relief.

**REFERENCE:** Sirén, *Documents d'art chinois* (1925), p. 68, no. 509, not illustrated; identified as a sword guard and ascribed to the Sung dynasty.

## CH.30

MATERIAL: Jade, gray with brown stains.  
 COLLECTION: Osvald Sirén, Stockholm.  
 MEASUREMENTS:

L 2.95

Described as ornamented with a hydra in relief.

REFERENCE: Sirén, *Documents d'art chinois* (1925), p. 68, no. 510, not illustrated; identified as a sword guard and ascribed to the Ch'ing dynasty.

## CH.31

MATERIAL: Jade, gray with brown stains.  
 COLLECTION: Osvald Sirén, Stockholm.  
 MEASUREMENTS:

L 3.86

Described as ornamented with a hydra in relief.

REFERENCE: Sirén, *Documents d'art chinois* (1925), p. 68, no. 511, not illustrated; identified as a sword guard and ascribed to the Ch'ing dynasty.

## CH.32

MATERIAL: Jade, gray.  
 COLLECTION: Osvald Sirén, Stockholm.  
 MEASUREMENTS:

L 3.35

Described as ornamented with a hydra in relief.

REFERENCE: Sirén, *Documents d'art chinois* (1925), p. 68, no. 512, not illustrated; identified as a sword guard and ascribed to the Ch'ing dynasty.

## CH.33

MATERIAL: Jade, gray with brown (iron oxide?) stains on underside.  
 COLLECTION: Osvald Sirén, Stockholm.  
 MEASUREMENTS:

L 3.15

Described as ornamented with a hydra in relief.

REFERENCE: Sirén, *Documents d'art chinois* (1925), p. 68, no. 513, not illustrated; identified as a sword guard and ascribed to the Ch'ing dynasty.

## CH.34

MATERIAL: Jade, gray.  
 COLLECTION: Osvald Sirén, Stockholm.  
 MEASUREMENTS:

L 2.60

Described as ornamented with a hydra in relief and as being very worn.

REFERENCE: Sirén, *Documents d'art chinois* (1925), p. 68, no. 514, not illustrated; identified as a sword guard and ascribed to the Sung dynasty, or later.

## CH.35

MATERIAL: Jade, white, mottled.  
 COLLECTION: Sunglin (Dr. Herbert Müller), Peking.  
 MEASUREMENTS:

L 3.38

Described as "decorated with engraved animal design (unicorn?)" [hydra?].

REFERENCE: *Sunglin Collection* (1939), p. 44, no. H-919, not illustrated; described as "later work."

## CH.36

MATERIAL: Jade, translucent greenish gray with rich cream-colored surface decomposition.  
 COLLECTION: Mr. Ernest Erickson, New York.  
 MEASUREMENTS:

L 4.56

W .88 (A) .94 (B)

D 1.25

DATE: Eastern Han.

The surface of the upper plate is ornamented with three hydra figures carved nearly in full round, being cut free of the surface in many places. At the upper end, a small hydra with head facing downward. Below, a larger hydra with bifurcated tail, in an extended S-curve, oriented upward with head turned toward the upper left corner. Near the lower end is a second small hydra partly "submerged" below the surface as though in water, the foreparts rising above the surface and the head facing downward, biting the tail of the larger hydra. Horns are not evident on any of the figures. The carving and configuration of the creatures has an extravagant, flamboyant luxuriance not wholly in keeping with what appears to be a heavier, clumsier treatment of the basic form of the slide itself. Along the sides are narrow, plain, vertical borders defined by an incised groove, between which the hydra figures are contained. From the oblique top/profile photograph, it can be noted that the upper plate is arched slightly and that both upper and lower ends curve inward, the upper end terminating in a sharp, involuted hook-ridge, the lower in a forward-projecting wedge. There appears to be a slight back-slope to the forward edge.

A jade sword guard, also ornamented with hydra, is presumed to have belonged to the same sword as the slide.

REFERENCES:

A. West Palm Beach, Norton Gallery of Art, *Exhibition of Chinese Archaic Jades* (1950), pl. LVIII, 7, top/profile photo; pl. LVIII, 5, photo of outer side of jade sword

guard presumed to be associated with slide.

B. Salmony, *Chinese Jade through the Wei Dynasty* (1963), pl. XVI, 5, oblique top/profile photo; ascribed to late Eastern Chou. For Height, read W; for Width, read D.

## CH.37

MATERIAL: Jade.

COLLECTION: J. A. Goette (?).

DATE: Late antiquarian.

The surface of the upper plate is ornamented with a baroque hydra-like animal in moderately high relief, oriented upward but with head turned to face downward. The body is covered with a ripple pattern. Seemingly worn. Photograph inadequate.

REFERENCE: Goette, *Jade Lore* (1936), p. 245, lower left, photo of top.

## CH.38

MATERIAL: Jade, gray with brown spots.

COLLECTION: Chicago Natural History Museum, no. 183214; formerly A. W. Bahr.

MEASUREMENTS:

L 2.17

W .59

D .98

Described in museum records as ornamented with a hydra in low relief. Four perforations in the piece are also noted, suggesting its use as a pendant at one time. Ascribed to the Han dynasty.

Unpublished.

## CH.39

MATERIAL: Jade, brown.

COLLECTION: Chicago Natural History Museum, no. 183215; formerly A. W. Bahr.

MEASUREMENTS:

L 2.44

D .24 (of remaining fragment)

Described in museum records as ornamented with "two hydras facing each other," i.e., probably a smaller hydra at the upper end, a larger below, oriented upward. The aperture is described as "broken off." Ascribed to the Han dynasty.

Unpublished.

## CH.40

MATERIAL: Jade, gray and brown.

COLLECTION: Chicago Natural History Museum, no. 183219; formerly A. W. Bahr.

MEASUREMENTS:

L 2.17

W .94

Described in museum records as ornamented with a "lizard-shaped dragon," suggesting the probability of an elongated hydra form. Ascribed to the Han dynasty.

Unpublished.

## CH.41

MATERIAL: Carnelian agate.

COLLECTION: Morgan Whitney Collection, Isaac Delgado Museum of Art, New Orleans.

MEASUREMENTS:

L 3.50

Described as ornamented with a large and small hydra in deep relief. Tentatively ascribed to the seventeenth century.

REFERENCE: New Orleans, Isaac Delgado Museum of Art, *Morgan Whitney Collection of Chinese Jades* (1914), p. 40, no. 44, not illustrated; identified as a "girdle buckle."

## CH.42

MATERIAL: Jade, translucent green with brown stains.

COLLECTION: Osvald Sirén, Stockholm.

MEASUREMENTS:

L 4.72

DATE: Probably not earlier than the Sung dynasty.

Entirely confined within narrow, slightly raised, plain borders, the surface of the upper plate is ornamented with a single elongated hydra oriented upward. The animal, extravagantly conceived with long, bifurcated tail and curved, projecting back appendage (wing?), is carved in very low relief. The forepart especially is quite inorganic and clumsily rendered, suggesting that the desire to elaborate as design and to fill space superceded any concern for naturalistic qualities in rendering. The head is exceptionally broad and flat, the eyes thin, slanted, and drawn out toward the sides of the head. A single curved and striated horn projects from the center back of the head to the right border.

The profile of the slide has not been published.

REFERENCE: Sirén, *Documents d'art chinois* (1925), pl. XXXVIII, 505, photo of top; identified as a sword guard.

## CH.43

MATERIAL: Jade, black.

COLLECTION: W. P. Yetts, London.

MEASUREMENTS:

L 3.35

DATE: Late antiquarian.

The surface of the upper plate is ornamented with the figure of a single hydra with bifurcated tail, in high relief, in an extended, reversed S-curve, the head near the upper

end, facing downward. The body is extremely stylized, with a consequent segmentation of the body and loss of organic qualities. The haunches are broad, the trunk a slender plastic arc which does not flow into the lower part of the body smoothly, but abuts the broad haunches. The legs are long and spindly. The curvilinear stylization of the body parts is accentuated by long, complementary, incised lines indicating musculature. The surface of the upper plate is plain and unmodulated, with a lustrous, smooth, polished appearance. Narrow, plain side borders are defined by incised grooves closed at both ends by similar incised grooves.

REFERENCE: Yetts, "A Chinese Scabbard-Jade" (1926), pl. D, photo of top.

#### CH.44

MATERIAL: Jade, heavy overall surface decomposition; iron-oxide stains on underside.

COLLECTION: C. T. Loo, Inc., New York.

MEASUREMENTS:

L 3.94  
W .75  
D .56

DATE: Early Eastern Han.

The surface of the upper plate is ornamented with two hydra figures carved in full round relief, probably not undercut at any point. At the upper end, a small hydra extending in relief beyond the forward edge and turned to face downward. Below, a larger hydra in an extended S-curve, with bifurcated tail, oriented upward. Its long, sinewy, graceful body is articulated with both sculptured and incised detail. There appears to be no head horn. The longer stem of the tail is marked with curved incised lines suggesting a twisting motion. Along the sides, borders are defined by incised grooves; these are interrupted in places by the bodies of the hydras which extend to, but do not exceed, the side edges of the upper plate. The surface of the upper plate is otherwise plain.

The profile indicates a sturdy piece, with thick, slightly arched upper plate and thick upper and lower aperture walls. The forward edge, which may be slightly back-sloped, terminates in an undercut hook-ridge. At the lower end the upper plate curves inward, terminating in a forward-projecting wedge on the inner side.

The slide is associated with a moderately broad and long, flat, tang, double-edged iron sword, but the provenance of the pieces is not indicated and their relationship to each other remains conjectural. The flat, ribless blade tapers slightly toward the point where it constricts suddenly. The tang also is rather broad and flat. The length of the sword is unknown, but it is preserved in its entirety. The sword is provided with a jade guard (2.50 wide) on one side of which is carved a hydra

figure in high relief roughly comparable in style to those on the slide. The guard is shallow and broad, flat along the lower side, and on the upper side a central low saddle is flanked by two broad, flat-topped shoulders rounded at the corners. A circular jade pommel inlay (diam. 1.75) is also reported to belong to this sword, but the concave metal mount for this disk is apparently missing.

REFERENCES:

New York, Arden Gallery, *Three Thousand Years of Chinese Jade* (1939), no. 188, illustrated, oblique top/profile photo; ascribed to Late Eastern Chou.

West Palm Beach, Norton Gallery, *Exhibition of Chinese Archaic Jades* (1950), pl. LIX, 3, photo of top; pl. LIX, 10, photo of sword and jade guard; ascribed to Eastern Chou.

#### CH.45. . . . . Plate 14a

MATERIAL: Jade, completely decolorized, the stone partly altered by decomposition; light cream-colored; badly cracked and broken into two pieces, now carefully mended.

COLLECTION: British Museum, London, 1945.10-17.117; O. Raphael Bequest.

MEASUREMENTS:

L 4.25	ApL 1.44
W 1.17	ApD .09
D .26	ApX 1.75
Depth of upper plate over aperture .11, over lower bay .125; depth of lower aperture plate .06.	

DATE: Possibly Sung, but certainly antiquarian.

The surface of the upper plate is ornamented with two hydra figures in low relief; they are raised above a flat, plain surface to a height no greater than that of the narrow, plain relief borders along the sides and across each end. Both of the hydra figures are rather more ornate in form than usual. The smaller hydra is placed at the lower end, its body curled nearly into a circle, the head facing upward and the long, bifurcated tail interlocked with the also bifurcated tail of the larger hydra represented in an extended backward S-curve, with head near the upper end and turned to face downward toward the smaller hydra. Both hydra figures are provided with small, largely incised, head horns, and the bodies of both are ornamented with a number of curvilinear relief appendages, possibly representing wings.

The upper plate is flat, rounded at the upper end with involuted, rounded knob-ridge underneath, and at the lower end curved inward, terminating in an acute angle with a forward-projecting wedge of greater length and thickness than usual. Both ends of the slide project inward to a depth greater than that of the aperture so that when the slide is placed on a flat surface it rests on its ends, the lower aperture plate suspended .02 above the surface (cf.

**CH.60).** The aperture penetrates .015 into the upper plate.

In the center of the lower bay, there is a small, rounded square hook-knob, undercut at the upper side and projecting inward to a depth equal to the outer surface of the lower aperture plate (cf. **CV.73**, **CG.49**, C.6). The outer (i.e., inward-facing) side is ornamented with the figure of a froglike creature with webbed feet and webbing between the limbs and body. It is largely incised, but there is slight surface modeling. A creature of the same sort, carved in the round, is published in Kōbe, Hakutsuru Bijutsukan, *Chūgoku kogyoku ten* (1954), p. 6, upper right.

The slide could not have been attached to a scabbard in the normal fashion and the aperture must be considered as too shallow for the passage of a belt. The hook-knob in the lower bay indicates that the proper function of this type of object was not understood at the time of its manufacture and suggests that such objects were believed to be belt hooks and thus furnished with hooks appropriate to belt hooks, but not part of the authentic scabbard slide.

REFERENCE: Yetts, "A Chinese Scabbard-Jade" (1926), pl. B, top, profile and bottom photos.

#### CH.46

MATERIAL: Jade, green with brown veins.

COLLECTION: Metropolitan Museum of Art, New York, 13.40.176.

MEASUREMENTS:

L 3.06	ApL 1.16
W .88	ApD .22
D .47	
Depth of upper plate over aperture .17.	

The surface of the upper plate is ornamented with the body of a hydra in moderately high relief. The animal is oriented upward, but the head turns to face toward the lower end. Slightly arched upper plate with inward-projecting, back-curved hook-ridges above and below.

REFERENCE: (Possibly Rostovtsev, "Le porte-épée des Iraniens" [1930], fig. 268, oblique top/profile photo.)

#### CH.47

MATERIAL: Jade, white with black patches.

COLLECTION: Metropolitan Museum of Art, New York, 13.40-178.

MEASUREMENTS:

L 4.59	ApL 1.88
W 1.28	ApD .25
D .58 (basic)	
D .84 (with relief)	
Depth of upper plate over aperture .19.	

DATE: Late antiquarian.

The surface of the upper plate is ornamented with the body of a single hydra in high relief. The animal is oriented upward, but the head is turned to face toward the lower end. The proportions of this piece, especially L, W and ApL, indicate late work in imitation of an earlier functional form.

Unpublished.

#### CH.48

MATERIAL: Jade, milky white with flecks of brown.

COLLECTION: Fogg Art Museum, Harvard University, Cambridge, Massachusetts, 43.50.374; Grenville L. Winthrop Bequest.

MEASUREMENTS:

L 4.84 (basic)	5.00 (with relief extension)	ApL 1.81
W 1.00 (basic)	1.50 (with relief extension)	ApD .30
D .73		
Depth of upper plate over aperture .28.		

DATE: Late antiquarian.

The surface of the exceptionally long and narrow upper plate is ornamented with multiple hydra forms in high relief, cut free from the surface in many places. The sinewy animal forms project beyond the upper and lower ends and a serpent-like hydra projects in openwork .50 beyond the right side of the slide.

The upper plate is slightly arched, rounded at the forward edge, with an involuted hook-ridge on the under side, and is curved inward at the lower end, with a forward-projecting wedge on the inner side.

Unpublished.

#### CH.49

MATERIAL: Jade, light to dark brown with lighter gray areas.

COLLECTION: Musée Guimet, Paris, MG 18424.

MEASUREMENTS:

L 2.94	ApL 1.19
W .69	ApD .22
D .34*	ApX 1.44

DATE: Late antiquarian.

The surface of the plain, unbordered upper plate is ornamented with two stylized, almost abstract, hydra figures in low, rounded relief, the smaller hydra at the upper end with head facing downward, the larger below, oriented downward, but with head turned to face upward toward the smaller figure at the upper end.

The plates and walls are heavy and very crudely and unevenly cut. The forward edge is very sharply back-sloped, and a blunt hook-ridge is formed by two angular cuts separating a wedge from the upper bay. At the lower end, the upper plate curves inward, terminating bluntly without the formation of a forward-projecting wedge.

An exceptionally poor imitation.  
Unpublished (?).

#### CH.50

MATERIAL: Jade, light and dark gray.  
COLLECTION: Musée Guimet, Paris, MG 18422.  
MEASUREMENTS:

L 4.06	ApL 1.31
W .94	ApD .19
D .47	ApX 1.56

DATE: Late antiquarian.

The surface of the upper plate is ornamented with two hydra figures in low, rounded relief. At the upper end, a smaller hydra; below, a larger hydra oriented upward with head facing the smaller animal. The surface of the slide is treated as a body of water with ripples both incised and in relief. The central portion of the larger hydra is submerged in the surface of the slide, as though undulating through the water.

The slide is very poorly formed and carved. The plates are heavy and irregular in thickness, or depth. The upper plate is not slightly arched in the normal fashion, but rises toward the lower end so that the slide is of greater depth at the lower than at the upper end (cf. **CG.47**). The forward edge curves inward and is slightly back-sloped, but is terminated on the inner side by a straight cut so that no involuted hook-ridge is formed. The lower end of the upper plate inclines inward at an angle and is terminated bluntly with only a slight suggestion of a forward-projecting wedge on the inner side.

Unpublished.

#### CH.51

MATERIAL: Jade, the upper decorated surface black, the underside pale green.

COLLECTION: Musée Guimet, Paris, MG 18427.

MEASUREMENTS:

L 3.81	ApL 1.53
W .91	ApD .16
D .53	ApX 1.91

DATE: Late antiquarian.

The surface of the upper plate is decorated with a fanciful design which includes abstracted hydra elements in low relief. The lower left-hand portion of the upper plate is deeply recessed; not as a result of damage, but owing to the original shape of the stone from which the slide was cut. The decor subsides into this area without specific change in pattern other than a slight lessening of the height of the relief. The slide is extremely crudely fashioned, the upper plate exceptionally thick, the upper end terminating in a bulbous inward-protruding ridge. From a maximum depth at the upper end, the upper

plate slopes inward in a pronounced arc, terminating at the lower end in an acute angle, parallel to the outer side of the lower aperture plate.

Unpublished.

#### CH.52

MATERIAL: Jade, light milky green with rough veins and patches of brown.

COLLECTION: Charles Gabriel Seligman, London; formerly K. C. Wong.

MEASUREMENTS:

L 4.25

DATE: Late antiquarian.

The surface of the upper plate is ornamented with two hydra figures in high, rounded relief. At the forward end, a small hydra figure; below, a larger hydra with bifurcated tail, in an extended S-curve. The aperture is short and deep in relation to the length of the slide, the lower bay being disproportionately extended. The forward end curves inward in a regular arc, terminating in a rounded, involuted ridge. The inward curve of the lower end lacks the usual precise form, and the plate terminates with a rounded, rather than squared, forward-projecting wedge. The edges of the upper plate, aperture walls, and lower aperture plate are rounded and polished. The gangling, graceless, disunified appearance of the slide and lack of precision in attention to details of basic form, are even more striking when compared to profiles of reliably authentic slides (e.g., *CV.8*, *CV.22*) where every element of the form contributes to the overall unity and integrity of design.

REFERENCES:

Antiquus, "Sui and Ancient Chinese Swords" (1928), fig. 2, lower, photo of top.

Wong, "Ancient Jades" 14 (1), 1931, pl. preceding p. 7, top left, photo of top.

*Wong Collection of Ancient Chinese Jades* [1937], pl. IX, 178, oblique top/profile photo.

Hansford, "Exhibition of Chinese Jades" (1947-1948), p. 53, no. 35, not illustrated; ascribed to Warring States period.

Hansford, *Seligman Collection* (1957), pl. LXI, B. 32, photo of profile; text, p. 112, s.v. B.32; ascribed to the Han dynasty.

#### CH.53

MATERIAL: Jade, light green with brownish surface areas.

COLLECTION: Charles Gabriel Seligman, London.

MEASUREMENTS:

L 3.66 (A)	3.74 (B)
W 1.06*	



DATE: Late antiquarian.

The surface of the upper plate is ornamented with two hydra figures in high rounded relief. At the lower end, a smaller hydra oriented downward but with head partially turned around. The smaller hydra, with single stem tail, is much more fully developed than usual, having a full body and four legs represented, and is larger than those on reliably authentic slides. Its left hind paw rests on the principal stem of the tail of the larger hydra above, represented in an extended backward S-curve. This animal, grossly formed with imprecise contouring, is provided with a bifurcated tail and a head horn which divides into two stems near its end. The head is partly turned to face downward. The workmanship and design are of inferior quality. There are no side or end borders. The surface of the upper plate surrounding the hydra figures is plain and unmodulated.

REFERENCES:

A. Venice, *Mostra d'arte Cinese* (1954), p. 72, no. 223, photo of top; ascribed to the T'ang dynasty.

B. Hansford, *Seligman Collection* (1957), pl. LXI, B.31, photo of top; text, p. 112, s.v. B.31; ascribed to the Han dynasty.

CH.54

MATERIAL: Jade, grayish white with brown markings.

COLLECTION: Dr. Arthur M. Sackler, New York; formerly Mr. and Mrs. Desmond Gure, London.

MEASUREMENTS:

L 3.75  
W 1.06

DATE: End of Western Han.

The surface of the upper plate is ornamented with two hydra figures in high rounded relief, but not cut free of the surface at any point. At the lower end, a small hydra with unusually large and articulated head emerges from the surface of the slide, incised concentric arcs about the body indicating ripples or eddies where it emerges. The body is twisted in a three-quarter circle, the head facing upward and biting the tail of the larger hydra above. The larger hydra, with bifurcated tail and in an extended S-curve, is oriented upward and, contrary to the usual form, does not turn to look upon the smaller hydra but faces off the left side of the slide. It is provided with a moderately large head horn, curled at the end. The musculature of both hydras is rendered by both sculpted and incised details. The animals are tense, solidly organic creatures, the standard of workmanship high. The surface area surrounding the figures is plain and unmodulated. There are no borders. The figures extend to the edges of the slide, but do not project beyond.

REFERENCES:

Stockholm, *Celedon-Jade* (1963), p. 22, no. 31, not

illustrated; ascribed to third to second century B.C.

Gure, "Jade Exhibition at Stockholm" (1964), pl. I, 2, photo of top; text, p. 122; ascribed to third to second century B.C.

CH.55

MATERIAL: Jade.

MEASUREMENTS:

L 2.91* (B)	3.25* (A)	ApL 1.25*
W .89* (B)	.84* (A) — at top	ApD .33*
W .75* (B)	.75* (A) — at bottom	ApX 1.50*
W .94* (B)	.89* (A) — with relief extension	
D .61*	— basic, without relief	
Depth of upper plate over aperture		.19.*

DATE: Late antiquarian.

The surface of the upper plate is ornamented with two hydra figures. At the upper end, a small hydra turned to face a larger hydra figure below. The larger hydra, in an extended S-curve and with bifurcated tail, is oriented upward, its head turned to face the smaller animal at the upper end. The hydras are carved in high plastic relief, but appear not to be cut free of the surface at any point. They project in relief (but not openwork) slightly beyond the upper and lower ends and right side of the upper plate. The larger hydra is provided with a pronounced, curled head horn. The surface of the upper plate is plain and along the sides are narrow incised grooves defining plain borders, interrupted in places by the hydras.

The upper plate is slightly arched; it is relatively thick in proportion to the aperture walls and lower aperture plate. The aperture appears to intrude into the upper plate and appears also to be arched along its upper side. The forward edge is slightly back-sloped and ends in a well-proportioned hook-ridge. The lower end curves inward and is terminated with a blunt end with forward-projecting wedge, but is rather clumsily shaped.

REFERENCES:

A. Huang Chün, *Heng-chai ts'ang chien ku yü t'u* (1935), II, 31:b, reversed (relief extension at left rather than right) photo-process reproduction of top.

B. Huang Chün, *Ku yü t'u lu* (1939), III, 22:a, left, photo-process reproduction of top; III, 22:b, right, rubbing of profile.

CH.56

MATERIAL: Jade.

MEASUREMENTS:

L 4.59* (basic)	4.75* (with relief extension)	ApL 1.72*
W .91* (basic)	1.44* (with relief extension)	ApD .28*
D .69* (basic)	1.16* (with relief extension)	ApX 2.17*

DATE: Late antiquarian.

The upper plate is ornamented with an ornate and complex composition consisting of multiple hydra figures

carved in high relief, cut free of the surface in several places, projecting beyond the upper and lower ends and in openwork beyond the left (? see below) side. Small hydras appear at the lower and upper ends, and occupying the central part of the upper plate are two larger hydra figures (one mainly in openwork at the left side) with awkwardly proportioned bodies, pronounced head horns and curved projections from the body which may represent wings.

The profile suggests sturdy, but somewhat irregular and unrefined proportions. The upper plate curls inward at the upper end, perhaps with a slight back-slope at the forward edge and with prominent, deeply undercut hook-ridge. The lower end curves inward in a regular, rounded arc, terminating in a forward-projecting, sharp hook-ridge. The upper plate narrows sharply toward the lower end.

Extension of the surface decor in openwork beyond a side of the slide is reasonably rare. However, on all other examples where such occurs, and among these a few pieces of likely authenticity, the extension is beyond the right side. It is possible that the reproduction of the upper plate is here reversed; such an error has been noted in connection with another slide published by Huang Chün (CH.55).

REFERENCES:

Huang Chün, *Heng-chai ts'ang chien ku yü t'u* (1935), II, 30:a, photo-process reproduction of top; II, 30:b, photo-process reproduction of profile.

Huang Chün, *Ku yü t'u lu* (1939), III, 17:a, photo-process reproduction of top; III, 17, b, photo-process reproduction of profile.

CH.57

MATERIAL: Jade

COLLECTION: National Palace Museum, Taipei, Taiwan.

MEASUREMENTS:

L 4.06\*  
W 1.05\*

DATE: Late antiquarian.

The surface of the upper plate is ornamented with two hydra figures in high rounded relief. At the upper end, a smaller hydra, its head turned to face the larger hydra below, oriented upward in an extended S-curve and with bifurcated tail, the longest curled stem of which is marked with curved incised lines suggesting a twisting motion. The small hydra extends slightly beyond the upper end of the slide. The slide seems to have been carved in a sort of cameo technique; the larger hydra is carved from a vein of stone darker than the main body of the slide. This technique, while possibly known as early as Sung times, has been especially popular during the last three or four centuries. The surface of the slide surrounding

the figures is plain and unmodulated.

REFERENCES:

*Ku-kung*, no. 36, p. 10, lower right, photo of top.

*Ku-kung chou-k'an*, no. 18, p. 180, photo of top.

Na Chih-liang, *Yü ch'i t'ung-shih* (1964), pl. LXXII, 2, photo of top.

CH.58

MATERIAL: Jade.

DATE: Late antiquarian.

A profile photograph only of this slide has been published, but the low relief ornamentation visible above the surface of the upper plate is clearly that of a hydra. Plates and walls are exceptionally thick. The upper plate is level, terminating at the upper end in a small, bulbous inward protrusion. The lower end of the upper plate curves inward, terminating in a square-cut, forward-projecting wedge. The rectangular aperture is evidently extremely long. The workmanship is of the most hasty and poor quality.

REFERENCE: Hommel, "Chinese Sword Furniture" (1928), fig. 3, lower left, photo of profile; cited as a non-functional forgery, but for incorrect reasons—author believes the lower bay too small to accommodate the weapons belt which did not, however, pass through this portion of the slide.

CH.59

MATERIAL: Jade, light translucent stone.

DATE: Late antiquarian.

An extremely rough and crude piece. The surface of the upper plate is ornamented with a large and small hydra, partly "submerged" in the surface of the plate which is treated as a body of water. The body of the larger hydra, with bifurcated tail, is oriented upward, with head facing a smaller hydra which turns to look downward from the upper end. The animals are carved in relatively high relief, but the work is clumsy, gross, summary, or unfinished in appearance. Where the body of the larger hydra emerges from, or disappears into, the surface of the slide, small arcs in low relief simulate eddies. The corners of the upper plate are rounded. From the slightly oblique top photo, it appears that the underside of the slide is decorated with an openwork pattern of some sort that bridges the upper and lower bays, connecting the ends with the lower aperture plate (cf. CZ.5, CZ.7, CZ.8).

The profile has not been published.

REFERENCES:

Hommel, "Chinese Sword Furniture" (1928), fig. 5, right, photo of top.

Hommel, "Notes on Chinese Sword Furniture (1951), p. 144, second fig. from top, upper left, photo of top;

p. 144, bottom fig., second from left, photo of top (larger scale).

**CH.60** . . . . . Plate 13d

**MATERIAL:** Jade, gray translucent brown stains and clouds.

**COLLECTION:** Dr. Arthur M. Sackler, New York; No. J-264; formerly A. W. Bahr.

**MEASUREMENTS:**

L 5.66	ApL 2.13
W 1.56	ApD .38
D .78 (basic) 1.22 (with relief)	ApX 2.47
(The above measurements were made by the author. Nott gives the following variant measurements: L 6.10, D 1.18.)	

**DATE:** Late antiquarian.

The surface of the upper plate is ornamented with two hydra figures of about equal size carved in high rounded relief and partly undercut, set upon a ground of large, circular, rounded knob grains arranged in five vertical rows and offset vertically to form diagonals. Along the two sides are narrow, plain borders, interrupted in places by the bodies of the hydras which reach to the edges of the plate. The bodies of both hydras are oriented upward; the head of the upper hydra turns to look downward toward the head of the lower hydra. The hydras, with single-stem tails, have sleek, sinuous, plain, tubular, molded bodies, with the exception of small incised circles at the limb joints and partly modeled, partly incised, head features. They are utterly lacking in vitality and are dull, perfunctory creations. The knob grains, which rise above a flat surface, have deeply incised perimeters; some of the grains are hemispheric, others present relatively flat tops.

The upper plate is strongly arched, the ends curving inward to a depth greater than that of the aperture, thus indicating the impossibility of this piece having been designed for attachment to a scabbard wall (cf. **CH.45**). The forward end terminates in a rounded knob-ridge; the lower end terminates in an elliptical transverse ridge, cut off flat on the inner, or upper, side at an angle ninety degrees to the underside of the upper plate at this point. The upper aperture wall inclines slightly forward; the lower slightly downward. The aperture ends are rounded; the upper side follows the arched contour of the upper plate.

(See also **CH.69**, **CH.78**, slides of excessive length)

**REFERENCE:** Nott, *Chinese Jade throughout the Ages* (1936), pl. XXIII, upper, oblique top/profile photo.

**CH.61**

**MATERIAL:** Jade; gray translucent, the exterior surfaces largely decolorized; slight wear at upper left and

lower right aperture corners; iron-oxide stains on aperture exterior and interior and in upper and lower bays.

**COLLECTION:** Dr. Arthur M. Sackler, New York; No. J-1029.

**MEASUREMENTS:**

L 3.22	ApL 1.09
W .89	ApD .25
D .56 (basic)	ApX 1.44
D .94 (with relief)	

The sides slope inward slightly so that the width of the lower plate is .84.

**DATE:** Late first to early second century after Christ.

The surface of the upper plate is ornamented with a larger hydra below, in an extended S-curve and with bifurcated tail, and a smaller hydra at the upper end. The body of the larger hydra, carved partly in the round and partly in high, round relief, is oriented upward, the head turned upward toward the head of the smaller hydra at the upper end facing downward. The larger hydra is clumsily executed with little body patterning, the hind legs crudely stylized and disproportionately large, the head very small and poorly carved. Along the sides are narrow, plain vertical borders defined by an incised line along each side and interrupted at intervals by the contours of the animals which reach to the edges of the upper plate.

The upper plate is relatively thick and strongly arched, curving inward at each end and terminating with arbitrarily formed hook ridges.

**REFERENCE:** Venice, *Mostra d'arte Cinese* (1954), p. 69, no. 208, slightly oblique top photo, revealing small area of side.

**CH.62**

**MATERIAL:** Jade, unctuous white with flecks of red-brown.

**COLLECTION:** Dr. Arthur M. Sackler, New York; formerly Mr. and Mrs. Desmond Gure, London.

**MEASUREMENTS:**

L 3.50

**DATE:** Late antiquarian.

The surface of the upper plate is ornamented with the figure of a single hydra in moderately high relief. The animal is oriented upward, but energetically contorted in an extended backward S-shape, the head facing downward. From the back of the head a long mane curves upward for two-fifths of the length of the slide, the hair indicated by striae. The severely contorted body is thin and poorly articulated, its proportions gross. From the lower end of the body, a long thin tail curves to the bottom edge where it branches into left and right spirals. Other large curvilinear appendages of unknown significance also swirl downward from the hind quarters of the

animal. The hydra's left foreleg, owing to the twist of the body, crosses over its midsection and rests at the right side; this, together with the unusual mane and the baroque treatment of the hind quarters, are unknown among reliably authentic scabbard slides. The surface surrounding the figure is plain.

The upper plate appears to be thick and strongly arched, terminating above and below with rounded, poorly articulated hook-ridges only vaguely imitative of the form of the more finely carved terminals. At both ends, the upper plate appears to curve inward to a depth equal to that of the outer surface of the lower aperture plate.

REFERENCES:

Venice, *Mostra d'arte Cinese* (1954), p. 69, no. 209, slightly oblique top/profile photo; ascribed to Han dynasty.

Stockholm, *Celedon-Jade* (1963), p. 23, no. 35, not illustrated; ascribed to Han dynasty.

CH.63

MATERIAL: Jade, gray, with white decomposed surface areas.

COLLECTION: P. de Tanner, Berlin (now dispersed).

DATE: Late antiquarian.

The surface of the upper plate is ornamented with two hydra figures of equal size in high relief and interlocked in S-configurations, one oriented upward with head turned to face downward, the other in symmetrically opposite position. The heads of both animal figures are elongated, with moose- or horse-like muzzles and large round-pupiled eyes. A thick horn, curled at the end, emanates from between the ears of each head. The carving, flamboyant and decorative, appears to be of indifferent quality.

The profile has not been published.

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV, no. 869, poor, reduced-scale photo of top; ascribed to Han dynasty. (See annotation in bibliography.)

CH.64

MATERIAL: Jade, gray and brown.

COLLECTION: P. de Tanner, Berlin (now dispersed).

DATE: Late antiquarian.

The surface of the upper plate is ornamented with a large and a small abbreviated hydra figure in moderately high relief on plain unbordered surface. The animals, thin and serpentine, are weakly conceived, atrophied in appearance, utilized as decorative motives without feeling for them as animate forms.

The profile has not been published.

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV, no. 1418, poor, reduced-scale photo of top; ascribed to

Han dynasty. (See annotation in bibliography.)

CH.65

MATERIAL: Jade, greenish brown, gray and red.

COLLECTION: P. de Tanner, Berlin (now dispersed).

DATE: Late antiquarian.

The surface of the upper plate is ornamented with a large and a small highly geometrized, weak and decorative hydra figure in high relief on a plain unbordered ground. The upper plate narrows sharply toward the lower end.

The profile has not been published.

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV, no. 909, poor, reduced-scale photo of top; ascribed to Han dynasty. (See annotation in bibliography.)

CH.66

MATERIAL: Jade, gray and brown.

COLLECTION: P. de Tanner, Berlin (now dispersed).

DATE: Late antiquarian.

The surface of the exceptionally narrow upper plate is ornamented with two comparatively small hydra figures, one at either end. The bodies are in configurations resembling the number "3" and the heads face each other across a flat, undecorated central zone. The underside is described as being decorated with a grain pattern.

The profile has not been published.

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV, no. 793, poor, reduced-scale photo of top; ascribed to Han dynasty. (See annotation in bibliography.)

CH.67

MATERIAL: Jade, white.

COLLECTION: British Museum, London, 1937. 4-16.38.

MEASUREMENTS:

L 3.13

W 1.00

D of relief .31

Depth of upper plate at center edge .19.

DATE: Sung, or later.

The aperture has been broken off and its joins with the underside of the upper plate ground and polished so that in profile it now resembles an arched bridge. On the forward edge there are two small bored holes for suspension of the slide vertically, indicating that it was worn at one time as a pendant, presumably after the breaking of the aperture. The surface of the upper plate is ornamented with the body of a single hydra in high relief, with bifurcated tail, oriented upward in an extended S-curve, on a plain unbordered ground. Bold in design rather than in execution, the rather heavy-bodied, full plastic contours of the animal are weakened

by arbitrary and perfunctorily realized stylizations of the ears, limb joints, and tail which detract from the organic nature of the creature and suggest a primary decorative concern. The head and massive humped neck are especially poorly executed.

The upper plate is slightly arched. The forward edge attempts unsuccessfully to imitate the graceful back-slope noted on some of the finest authentic examples (e.g., CV.22); the curve of the involuted hook-ridge is irregularly fashioned and the ridge is terminated in a blunt square cut. The lower end also has been carved in imitation of more powerfully drawn authentic examples which exhibit the forward-projecting wedge on the underside of the upper plate, but here the inward curve lacks the brittle tension of its models and seems weak, "limp," by comparison.

REFERENCE: Watson, *Handbook* (1963), pl. XXIV, b, photo of top; ascribed to first to second century after Christ.

#### CH.68

MATERIAL: Jade, white with brown patches; partly decomposed; a portion of the lower aperture plate broken away.

COLLECTION: British Museum, London, 1938. 5-24.389.

##### MEASUREMENTS:

L 1.97  
W .84  
D .38 (basic) .56 (with relief)

DATE: Late antiquarian.

The surface of the upper plate is treated as water in which a sinuous hydra figure is cavorting, with parts of its body partly or wholly submerged, parts rising above the ground in high relief. The upper plate is slightly arched, the forward edge rounded, not undercut to form an involuted hook-ridge, but sliced off bluntly to form an upper wall to the upper bay. The forward aperture wall inclines forward, but the lower wall is perpendicular to the upper plate. At the lower end, the upper plate curves inward at right angles without thickening and is terminated bluntly without the formation of a forward-projecting ridge. The shape of the piece is coarse and unrefined, the carving without feeling.

Unpublished.

#### CH.69

MATERIAL: Jade, opaque gray-green with brown veins.

COLLECTION: British Museum, London, 1936.4-16.39.

##### MEASUREMENTS:

L 6.72  
W 1.56  
D .66 (basic) .88 (with relief)

DATE: Late antiquarian.

Except for scabbard slides of purely imaginary design (see Ca-Cm), this is the largest scabbard slide discovered (cf. CH.60, CH.78). It is much too large and heavy to have served the intended function of this type of object and is to be considered as a modern, ornamental work based loosely on the form of the authentic slide, but without evident cognizance of its correct proportions or function. The surface of the upper plate is ornamented with two hydra figures, a smaller one at the upper end, a larger below, oriented upward, both animals in high relief but at no point in full round. The forward edge is rounded, with an involuted hook-ridge. The lower end is carved in the same manner except it extends inward to a greater depth and also terminates in a hook-ridge. The workmanship is of perfunctory, indifferent quality.

Unpublished.

#### CH.70

MATERIAL: Jade, white.

##### MEASUREMENTS:

L 3.48*	ApL .91*
W .91*	ApD .09*
D .28*	ApX 1.19*
Depth of upper plate over aperture .09.*	

The plain, unbordered upper surface is decorated with a large and small hydra, the smaller near the upper end with head facing downward, the larger below, in an S-curve, oriented upward with head facing that of the smaller hydra. Neither animal is provided with a head horn. In a curious contortion, one of the lower legs of the larger hydra crosses over its bifurcated tail (cf. CH.72), the two stems of which end in scalloped flower-like designs. The slight outward-bowing of the end evident on some slides is here exaggerated. Crudely drawn, inward-projecting hooks are indicated at each end.

Design possibly based on an authentic Han dynasty slide.

(Cf. CV.74, CV.75, CV.76, CH.71, CH.72, CH.73; cf. also Ca-Cm)

REFERENCE: *Ku yü t'u* (1752), Chapt. 2, p. 9:a, top/profile drawing, scale uncertain (see CV.74 for text commentary).

#### CH.71

MATERIAL: Jade, yellow with reddish stains (iron oxide?).

##### MEASUREMENTS:

L 3.80*	ApL 1.03*
W 1.06*	ApD .13*
D .38*	ApX 1.38*
Depth of upper plate over aperture .13.*	

The plain, unbordered upper surface is decorated with

the bodies of two animals. At the lower end, a small animal (hydra?) with curled, scalloped tail, its head twisted up and back to face the larger animal occupying the surface above it which is oriented upward, but with its head turned to face downward. The larger animal has markings suggestive of tiger stripes on one flank and a long flowing mane. The tail has one principal stem, and a smaller, curled, flowerlike protrusion to one side just below the base. The drawing seems to indicate that the aperture does not occupy the full breadth of the underside of the upper plate. The end hooks are poorly drawn and of unlikely form.

The description of the stone suggests that the drawing might originally have been based on an authentic piece. The present drawing, however, suggests an imaginary, or at best late antiquarian, conception.

(Cf. CV.74, CV.75, CV.76, CH.70, CH.72, CH.73; cf. also Ca-Cm)

REFERENCE: *Ku yü t'u* (1752), Chapt. 2, p. 10:a, top/profile drawing, scale uncertain (see CV.74 for text commentary).

#### CH.72

MATERIAL: Jade, mottled (?).

MEASUREMENTS:

L 3.72*	ApL .81*
W .98*	ApD .09*
D .25*	ApX 1.19*
Depth of upper plate over aperture .08.*	

The plain unbordered upper surface is decorated with a large and small hydra, the smaller near the top with head facing downward, the larger below, oriented upward with head facing that of the smaller hydra. Neither animal is provided with a head horn. The larger hydra is depicted in profile and has a tail divided into three stems ending in hooks. In a curious contortion similar to that of CH.70, one of the lower legs crosses over the tail. The drawing seems to indicate that the aperture does not span the full breadth of the underside of the upper plate. The sketch lines of the profile are incomplete, but inward-projecting ridges are indicated at both ends. The drawing suggests an imaginary conception, or late antiquarian model.

(Cf. CV.74, CV.75, CV.76, CH.70, CH.71, CH.73; cf. also Ca-Cm)

REFERENCE: *Ku yü t'u* (1752), Chapt. 2, p. 12:a, top/profile drawing, scale uncertain (see CV.74 for text commentary).

#### CH.73

MATERIAL: Jade.

MEASUREMENTS:

L 3.88*	ApL 1.28*
W .75*	ApD .11*

D .25\*

Depth of upper plate over aperture .06.\*

ApX 1.50\*

The plain unbordered upper surface is decorated with a sketchily drawn fantastic hydra-like creature oriented upward, with single stem tail and possibly a horn or ruff of hair about the neck. Prominent, identical involuted hook-wedges are indicated at either end. The walls of the aperture slope outward and are rounded where they meet the lower aperture plate. The drawing suggests an imaginary conception, or late antiquarian model.

(Cf. CV.74, CV.75, CV.76, CH.70, CH.71, CH.72; cf. also Ca-Cm)

REFERENCE: *Ku yü t'u* (1752), Chapt. 2, p. 13:a, top/profile drawing, scale uncertain (see CV.74 for text commentary).

#### CH.74

MATERIAL: Jade, bluish white with russet stains; areas of slight surface decomposition.

COLLECTION: Kimpei Takeuchi, London.

MEASUREMENTS:

L 5.24

An oblique top/profile drawing only of this slide has been published. The surface of the upper plate is ornamented with two hydra figures presumably in high relief. The smaller figure at the top turns to face the larger hydra figure below, oriented upward in an extended S-curve. The larger hydra has a single-stem tail marked with incised twist lines. Neither animal is provided with a head horn. Along the sides are narrow, plain vertical borders, probably defined by an incised line only, interrupted at intervals by the contours of the animals which reach to the edges of the upper plate. Inward-curving ridges are indicated at each end but the form of these is not clear. The aperture is extremely small and set close to the upper end. If the drawing be reasonably accurate, it is difficult to accept this piece as authentic.

REFERENCE: Hobson, "Jade" (1913), p. 108, fig. 1, oblique top/profile drawing; identified by Kimpei as a "sword hook."

#### CH.75

MATERIAL: Nephrite (by X-ray diffraction); specific gravity 2.922; lustrous black and brown with slight yellowish gray areas.

COLLECTION: Freer Gallery of Art, Washington, D.C., 14.68.

MEASUREMENTS:

L 2.19 (basic)	2.44 (with relief)	ApL 1.19
W .84 (basic)	1.03 (with relief)	ApD .31
D .47 (basic)	.91 (with relief)	ApX 1.59
Depth of upper plate over aperture .09. The upper plate is widest at the upper end, narrowing toward the lower end		

to .75. The sides slope inward so that the mean width of the lower aperture plate is .75.

DATE: Ch'ing dynasty.

The surface of the upper plate is richly carved with animals and wave or cloud patterns in high relief with incised ornamentation. At the upper end a hydra emerges from clouds, or waves. The neck and head, finely modeled in full round, rise above the surface and extend beyond the forward edge. At the lower end a similar animal is represented, but with curved beak instead of feline muzzle, its hind parts concealed by waves or clouds in high relief surging over them. The neck and head of this animal extend beyond the left side of the slide in openwork. Near the top, cloud or wave formations project from the left side (projection to the right being normal). The upper plate is not wholly distinct from the decor, but is integrated into the carving so that its level is irregular. The carving of the decor is refined and of superb quality; curiously, the body of the slide is less well carved, with tool and cutting marks remaining and some visible surface irregularities.

The upper plate line is virtually flat. The forward edge curves inward, projecting inward in a straight line (not back-sloped) for a short distance before terminating in an involuted hook. Just below the aperture, the upper plate terminates abruptly without curving inward. This does not appear to be the result of breakage, but to be in accord with the original intention of creating an ornamental object the form of which is loosely derived from that of an ancient utilitarian object.

Unpublished.

#### CH.76

MATERIAL: Jade.

DATE: Late antiquarian.

Known only from a small and poorly printed photograph. The surface of the upper plate is decorated with a motive derived from the older conventional hydra ornamentation and consists of a hydra-like animal form carved in moderately high relief above a ground entirely filled with stylized wave or cloud patterns in low relief.

REFERENCE: Chang Mo-chün, *Chung-kuo ku yü* (n.d.), 10th pl. fol. p. 18, right, poor, reduced-scale photo of top.

#### CH.77

MATERIAL: Jade, pale green with dark brown markings.

COLLECTION: Dr. Arthur M. Sackler, New York; formerly Mr. and Mrs. Desmond Gure, London.

MEASUREMENTS:

L 3.25

DATE: Probably late antiquarian.

The surface of the upper plate is carved with figures of

a large and small hydra, in high, rounded relief.  
Unpublished.

#### CH.78

MATERIAL: Jade, brown.

COLLECTION: Chicago Natural History Museum, no. 183213.

MEASUREMENTS:

L 5.98

W .83

D .98

DATE: Late antiquarian.

The surface of the upper plate is described as being decorated with two hydra figures carved in high, undercut relief. The proportions of the piece preclude authenticity. (Cf. CH.60 and CH.69, specimens with similar proportions.)

Unpublished.

#### CH.79

MATERIAL: Jade, white; appears to be broken into five, or more, pieces.

PROVENANCE: Pai-mu-shan 柏木山, Liang-shan 梁山, Shantung 山東 Province.

MEASUREMENTS:

L 4.49

W .91

D .55 (including relief?)

DATE: Eastern Han, late first to early second century after Christ.

The rather large, stone-chambered tomb (p. 479, fig. 1, scaled plan) was opened in the spring of 1959. The tomb contained a single male skeleton. The burial furnishings were rather poor, and it seems likely that the tomb had been robbed. No weapons were found, only two small ring-pommel iron knives. The exact position in which the scabbard slide was found is not revealed in the published note on the discovery.

The published photograph of the slide is indistinct, precluding detailed description. The piece is exceptionally long in relation to its width. The surface of the upper plate is ornamented with two hydra figures in high relief. At the upper end, a small hydra in a tight extended S-curve, oriented downward and facing toward the right. Below, a larger hydra figure with bifurcated tail in an extended S-curve, oriented upward and facing the head of the smaller figure. The body is thin, elongated, seemingly more geometrically than organically conceived. No head horn is visible on either animal. Along the sides, thin grooves define borders on the plain surface and are interrupted at several points by the figures which extend to, but do not project beyond, the edges.

REFERENCE: Su Wen-chin, "Shang-tung Liang-shan Pai-mu-shan" (1964), p. 480, fig. 5, photo of top.

### CH.80

MATERIAL: Jade, pale green with brown flecks.

COLLECTION: Dr. Arthur M. Sackler, New York; formerly, Mr. and Mrs. Desmond Gure, London.

MEASUREMENTS:

L 4.38

W 1.19

Measurements given in *Celedon-Jade* (1963) are L 4.31,

W 1.09.

DATE: Late antiquarian.

The upper plate is ornamented with two hydra figures covering the principal part of the surface of the slide, a larger hydra figure with bifurcated tail, in an extended S-curve, oriented upward but with head turned downward to face a small hydra figure at the lower end, facing upward and biting one of the branches of the larger hydra's tail. The figure of the larger hydra is carved in high rounded relief, cut free from the surface of the slide at several points. The body is strongly geometrically stylized in a series of sweeping lines and curves, with broad haunches and thin legs. The contours are rounded and sculptural with little incised detail. The two branches of the tail, contrary to the usual form, divide near the end, one branch forming a tight, closed spiral of two complete concentric circles. There are no visible head horns. The surface of the upper plate is plain, except for an incised groove along each side defining borders within which the hydra figures are contained.

The upper plate is slightly arched, and the forward end appears to be rounded, undercut to form a rather blunt hook-ridge. The lower end curves inward, thickening slightly, but there seems to be no forward-projecting wedge on the inner side. All corners and edges of the slide are rounded and are in harmony with the softly contoured hydra figures; a characteristic not encountered on unquestionably authentic slides, which are generally more sharply defined in profile and in the execution of the hydra figures.

REFERENCES:

Salmony, *Chinese Jade through the Wei Dynasty* (1963), pl. XXX, 1, oblique top/profile photo, ascribed to the Han dynasty.

Stockholm, *Celedon-Jade* (1963), p. 23, no. 32, not illustrated; ascribed to the Han dynasty.

### CH.81

MATERIAL: Jade.

PROVENANCE: Southern suburb of Ch'ang-sha,<sup>d</sup> Hunan<sup>e</sup> Province; excavated 1964.

MEASUREMENTS:

L 3.15

W 1.30

DATE: Western Han.

Both in decor and form, this scabbard slide is distinct from the normal Chinese variety. The exceptionally broad upper plate is not rectangular; triangular segments are cut off the upper right and lower right corners. Judging from the small and poor published rubbing and photograph of the upper plate, these irregularities would seem part of the original design and not the result of breakage as the subject matter which quite fully covers the existing surface area appears to be complete. The surface of the upper plate is ornamented with a sinuous fabulous quadruped carved in high rounded relief and depicted from the side, and basically oriented to the straight left side rather than a vertical schema (cf. **CH.5**, **CH.18**). The hind quarters of the animal are more distinctly feline in character than those of the hydra figures normally present on slides of this class, and they are upturned in a manner reminiscent of animal combat scenes on bronze plaques from Ordos and Siberia. Curling about the body of the animal is a long serpent and the backturned head of the feline-like animal holds a segment of the serpent's body between its jaws. The plain animals have rather inorganic tubular bodies.

The profile also introduces a form not otherwise attested among excavated or reliably authentic slides. The aperture, instead of being positioned closer to the upper end, is set equidistant between the upper and lower ends, and thus suggests comparison with such a presumably imaginary slide as CG.53. The upper plate is flat and straight, turning inward at either end at right angles and terminating in blunt, inward-projecting ridges equal, or slightly exceeding, in thickness the upper plate. Whether the aperture extends across the full width of the slide, or stops short of the section along the right side marked by the cut triangles, is not known.

The tomb in which the slide was found produced no objects suggestive of a more precise date. No sword was found, but the burial contained a large number of jade artifacts, mostly known shapes but in extraordinary, simplified and stylized forms, exhibiting the same general carving techniques and style as the slide.

(See CP.8 from the same tomb)

REFERENCE: Chang Hsin-ju, "Ch'ang-sha Sha-Tzu-t'ang" (1956), pl. III, 1, slightly oblique top/profile photo; p. 117, fig. 2, 5, small rubbings of top and profile; text, p. 117; p. 116, fig. 1, plan of tomb showing find position of slide.

### CH.82

MATERIAL: Jade, opaque gray.

COLLECTION: Museu Luis de Camões, Macao.

DATE: Late antiquarian.



The outer surface is ornamented with the figure of a single hydra with bifurcated tail. The body of the animal, executed in moderately high relief, forms an extended S, with the head at the upper end facing upward. The surface area surrounding the figure is plain. The workmanship is poor; the proportions suggest late and clumsy work only remotely reflecting attention to a conventionalized form.

Unpublished.

#### CH.83

MATERIAL: Jade, greenish white.

COLLECTION: Dr. Arthur M. Sackler, New York; formerly Mr. and Mrs. Desmond Gure, London.

MEASUREMENTS:

L 4.13

DATE: Probably late antiquarian.

The surface of the upper plate is described as being carved with felines (hydras) sporting in and out of a watercourse.

Unpublished.

#### CH.84

MATERIAL: Jade, pale gray green with brown markings.

COLLECTION: Dr. Arthur M. Sackler, New York; formerly Mr. and Mrs. Desmond Gure, London.

MEASUREMENTS:

L 4.13

W .88

Date: Late antiquarian.

The surface of the upper plate is ornamented with a large and small hydra raised in high relief and rather squarishly cut.

REFERENCE: Stockholm, *Celedon-Jade* (1963), p. 23, no. 33, not illustrated; ascribed to Han dynasty.

#### CH.85

MATERIAL: Jade, light green with brown markings.

COLLECTION: Dr. Arthur M. Sackler, New York; formerly Mr. and Mrs. Desmond Gure, London.

MEASUREMENTS:

L 3.25

The surface of the upper plate is ornamented with a large and small hydra carved in relief.

Unpublished.

#### CH.86

MATERIAL: Jade, white with brown veins, fissures, and pitted surface areas.

COLLECTION: Museo Nazionale Orientale, Rome;

Fiacchi-Gisondi Collection.

DATE: Late antiquarian.

The surface of the upper plate is ornamented with an elongated hydra figure in an extended backward S-curve, carved in high rounded relief. The figure is notable for its ungainly proportions and inferior execution; the workmanship on the body of the slide itself is equally poor. The upper plate terminates above with an inward-projecting rounded protuberance, and below with a similar form slightly undercut to suggest a forward slope.

REFERENCE: Luzzatto-Bilitz, *Antique Jade* (1969), p. 40, pl. 17, color top/profile photo; slide inverted; ascribed to Warring States period.

#### CH.87

MATERIAL: Jade, grayish white with clouds and diagonal veins of brown; right underside of lower hook broken.

COLLECTION: Klaus D. Baron and Baroness von Oertzen, Johannesburg, Republic of South Africa.

MEASUREMENTS:

L 3.38

W 1.00

D .94

DATE: Late antiquarian.

The surface of the upper plate is ornamented with two hydra figures, a smaller one at the upper end and a larger below, in an extended S-curve covering the major portion of the surface, and facing the head of the smaller hydra. Both animals are executed in high relief, but are not undercut at any point. The body contours and volume of the larger hydra, particularly in its upper portions, are stylized in a bilaterally symmetrical fashion. The longer stem of the larger animal's bifurcated tail curves across the lower end of the slide. The animals occupy the full surface area of the upper plate, but do not project beyond it. The unbordered surface of the slide surrounding the animals is plain and flat.

On the exterior of the lower aperture plate is a carving in low rounded relief of a bird. Both the upper and lower bays are marked with transverse incised lines in groups of three.

REFERENCE: Hansford, *Jade* (1969), p. 105, C30, photos of top and underside, ascribed to "post Han."

### Unclassifiable

#### C.1

MATERIAL: Jade, green, surfaces largely decomposed.

COLLECTION: A. F. Pillsbury, Minneapolis (now dispersed).

MEASUREMENTS:

L 3.44

Possibly identical to CV.32 or CG.16.

REFERENCE: *New York, Arden Gallery, Three Thousand Years of Chinese Jade* (1939), p. 40, no. 197, not illustrated; for "width," read "length;" ascribed to Late Eastern Chou.

C.2

MATERIAL: Jade, white with brown markings.  
COLLECTION: K. C. Wong (now dispersed).  
MEASUREMENTS:

L 2.25

REFERENCE: *Wong Collection of Ancient Chinese Jades* [1937], p. 13, no. 181, not illustrated.

C.3

MATERIAL: Jade, white.  
COLLECTION: K. C. Wong (now dispersed).  
MEASUREMENTS:

L 2.00

Profile similar to CV.37.

REFERENCES:

Antiquus, "Sui and Ancient Chinese Swords" (1928), fig. 2, top, photo of profile.

Wong, "Ancient Jades," 14 (1), pl. preceding p. 7, bottom left, photo of profile.

*Wong Collection of Ancient Chinese Jades* [1937], p. 13, no. 182, not illustrated.

C.4

MATERIAL: Jade, white, with brown markings.  
COLLECTION: K. C. Wong (now dispersed).  
MEASUREMENTS:

L 4.00

Unusually thin aperture walls. Arched upper plate ending at top in rounded, back-curving knob rather than well-defined hook. Undoubtedly a late antiquarian piece.

REFERENCES:

Wong, "Ancient Jades," 14 (1), pl. preceding p. 7, bottom right, photo of profile.

*Wong Collection of Ancient Chinese Jades* [1937], p. 13, no. 188, not illustrated.

C.5

MATERIAL: Jade.

An exceptionally crudely formed, poorly carved imitation of a scabbard slide, massive and ill-proportioned.

REFERENCE: Hommel, "Chinese Sword Furniture" (1928), fig. 3, top, photo of profile.

C.6

MATERIAL: Jade.

Poorly carved, poorly proportioned late imitation of a scabbard slide. Between the lower aperture wall and the lower end of the slide, a carved rectangular hook attached to the underside of the upper plate, its open end facing upward. The flat outer surface of this hook is decorated with a design of undescribed nature.

Cf. CV.73, CG.49, CH.45.

REFERENCE: Hommel, "Chinese Sword Furniture" (1928), fig. 3, lower center.

Atypical

CZ.1 . . . . . Figure 12

MATERIAL: Jade.

PROVENANCE: Canton region of Kwangtung<sup>o</sup> Province, South China; excavated 1955.

DATE: Early Western Han.

The surface of the upper plate is divided into two equal rectangular areas by a dissolved animal ornamentation crossing horizontally through the center of the slide and enclosing, above and below, fields of polygonal knob grains produced by a deeply cut reticulation. At several points fin-like excrescences from the dissolved animal border design curl inward into areas decorated with grain ornamentation. The upper plate is slightly arched and projects only a short ways straight forward of the aperture, thickening somewhat and terminating bluntly without the formation of a hook. At the lower end, slightly thinner than the upper, the upper plate curves inward at its extremity and is terminated bluntly without the formation of a hook.

The tomb from which the scabbard slide was recovered has been only briefly reported. Among the iron inventory was a sword and a knife (p. 23), but the probable association of slide with sword is not indicated. Also from the same tomb are two flat jade perforated disks ornamented with grain pattern similar to that found on the scabbard slide (figs. 15, 3 and 4).

(Cf. CZ.2, CZ.3)

REFERENCE: Kuang-chou shih, "San-nien-lai Kuang-chou shih" (1956), p. 29, fig. 15, 2, reduced-scale rubbings of profile and upper plate.

CZ.2

MATERIAL: Jade, light green translucent with some surface decoloration; iron-oxide stains on underside.

PROVENANCE: Believed to have come from Shou-hsien,<sup>1</sup> Anhui<sup>f</sup> Province.

COLLECTION: Dr. Arthur M. Sackler, New York; No. J-1025.

MEASUREMENTS:

L 3.00  
W 1.08

ApL 1.13  
ApD .27

D .53

ApX 1.50

The sides taper inward slightly so that the width of the lower plate is .98.

DATE: Early Western Han.

The upper surface only of this slide has been published, and on so small a scale that only the basic elements of the decor may be perceived. The published description notes the following: "The surface is divided into two cartouches filled with a small basketry pattern in relief, surrounded by an incised design of a phoenix contorted to make a border; details indicated by incised lines." The "basketry" pattern appears to be formed by fine grains of uncertain form interlocked by incised lines. The "phoenix" might better be described as a dissolved animal ornament utilized to form borders and to divide the surface of the slide horizontally into two approximately equal areas. The body of the animal form is executed in both convex and concave areas marked with rather crudely incised linear details. In type, the profile falls between CG.10 and CG.21 (Figure 8 here).

(Cf. CZ.1, CZ.3)

REFERENCE: University of Pennsylvania, University Museum, *Archaic Chinese Jades* (1940), p. 38, no. 164 and pl. IX, 164, photo of top; ascribed to Late Eastern Chou.

### CZ.3

MATERIAL: Jade, light green translucent with decoloration over most of the upper surface area; heavy iron-oxide stains and incrustations on underside of aperture, with flecks of stain elsewhere on bottom and sides.

PROVENANCE: Believed to have come from Shou-hsien,<sup>1</sup> Anhuif<sup>f</sup> Province.

COLLECTION: Dr. Arthur M. Sackler, New York; No. J-1026.

MEASUREMENTS:

L 2.91	ApL 1.03
W 1.02	ApD .22
D .45	ApX 1.59

The sides taper inward slightly so that the width of the lower plate is .94.

DATE: Early Western Han.

The upper surface only of this slide has been published, and on too small a scale to distinguish more than the basic elements of the decor. The published description for CZ.2 is repeated for CZ.3. The dissolved animal form here circumscribes an elongated S and is set upon a background identical to that of CZ.2, between borders visible on the vertical sides only. The dissolved animal form here is freer and more gracefully conceived than on the preceding slide. The standard of carving is above that of CZ.2. The animal form is contained within plain side borders which rise to a sharp edge ridge; on CZ.2 the animal forms the border. The profile is similar to CZ.2, but has better proportions.

A number of flat rectangular plaques, generally with serrated edges, with a similar decor system have been published: see, e.g., Wu Ta-ch'eng, *Ku yü t'u k'ao* (1889), II, 21:a; Huang Chün, *Ku yü t'u lu* (1939), III, 39. A similar ornamentation, but with a more organically conceived animal form (clearly bird-headed) is ascribed by Palmgren to the Middle Chou period: *Selected Chinese Antiquities* (1948), pl. XLVIII, and p. 92.

(Cf. CZ.1, CZ.2)

REFERENCE: University of Pennsylvania, University Museum, *Archaic Chinese Jades* (1940), p. 38, no. 168 and pl. IX, 168, photo of top; ascribed to Late Eastern Chou.

### CZ.4

MATERIAL: Jade, grayish green, milky white and buff.

PROVENANCE: Acquired at Shou-hsien,<sup>1</sup> Anhuif<sup>f</sup> Province.

COLLECTION: O. Karlbeck, Stockholm.

MEASUREMENTS:

L 3.90
W .83

DATE: Third- to second-century B.C.

At the upper end, an animal mask in profile, sparsely defined by an eye and curved lines terminating in tight spirals, and a single curved and striated horn. The body of the animal form, consisting chiefly of curved, upswept, blade-like wings, extends along the left side seemingly overlapping a ground of small, closely set, round knob locks in parallel vertical rows, some of which are interlocked in pairs by thin curved incised lines. Narrow plain borders are visible on the two sides and across the bottom. The hooked, blade-like wings curve toward the right across the background and one of these extends into the border on the right side. The profile has not been published.

Such combinations of grains and curved "wings" occur on another piece of indisputably late Chou jade carving, a plaque in the form of an animal in an extended S-curve with wings similar to those on CZ.4 lying across the body of the animal: Warner, "Far Eastern Art" (1950), pl. II, A. Such wings, sweeping upward at right angles from the body of the animal, are found also on a cast bronze ring with figures of hydras in relief, in the David-Weill Collection, Paris, ascribed to the late Chou period: *Umehara, Shina kodō seika* (1933-1935), pt. 3, vol. 1, pl. XXXVII.

REFERENCE: Karlbeck, "Selected Objects from Ancient Shou-Chou" (1955), p. 126 and pl. LXI, 5, photo of top.

### CZ.5

MATERIAL: Jade, gray with dark brown areas.

COLLECTION: Metropolitan Museum of Art, New York, 16.144.26.

## MEASUREMENTS:

L 3.31*	ApL .97 to 1.00
W .81	ApD .23 to .25
D .69 (basic) .81 (with relief)	
Depth of upper plate over aperture .31	

DATE: Late antiquarian.

The outer surface of the upper plate is decorated with fine, closely set, round knob grains. The piece is clumsy in proportions, the workmanship unrefined. Without alteration in the thickness of the upper plate, both ends curve inward at right angles, terminating in blunt ridges. Between each of the end hooks and the nearest aperture wall is a luxuriant hydra figure, carved in openwork and suspended in an arc across upper and lower bays. The heads of the hydras rest upon the respective end hooks, the tails lie in relief upon the exterior surface of the lower aperture plate.

This slide could not have been affixed to a scabbard in the normal manner as the underside relief carving exceeds in depth the lower aperture plate which normally is inserted into a socket on the side of the scabbard. It is evidently a late, purely ornamental work related in its basic design to what was known to be an archaic shape, the function of which could not have been accurately understood.

(Sf. CZ.7, CZ.8)  
Unpublished.

## CZ.6

MATERIAL: Jade, white, speckled and veined with black.

COLLECTION: Metropolitan Museum of Art, New York, 11.190.209.

## MEASUREMENTS:

L 4.31 (basic) 4.97 (with relief)	ApL 1.69
W 1.25 (basic) 1.70 (with relief)	ApD .19
D .56 (basic) 1.13 (with relief)	
Depth of upper plate over aperture .19.	

DATE: Late antiquarian.

Upon a scabbard slide of basically correct archaic form and proportions, numerous small, writhing, carefully carved hydra forms have been raised in high relief above the surface of the upper plate, projecting beyond the limits of the plate to either side and beyond each end.

Unpublished.

## CZ.7 .....Plate 10b

MATERIAL: Jade, white with russet markings.

COLLECTION: K. C. Wong (now dispersed).

## MEASUREMENTS:

L 3.75

DATE: Late antiquarian.

An exceptionally coarse and badly carved piece. The flat upper surface is ornamented with fine rounded, presumably knob, grains. Raised in relief above the exterior surface of the lower aperture plate and spanning the upper and lower bays in arcs to the stubby and ill-formed upper and lower end hook-ridges are contorted hydra figures, a smaller one at the upper end bridging the much contracted upper bay, a larger and elongated hydra bridging the lower bay, with its foreparts near the lower hook-ridge and its serpentine tail upon the lower aperture plate. The aperture has been only partly carved out. A late, ill-formed, and unappealing ornamental piece.

(Cf. CZ.5, CZ.8)

## REFERENCES:

Antiquus, "Sui and Ancient Chinese Swords" (1928), fig. 1, bottom (incorrectly designated top) and profile photos.

Wong, "Ancient Jades," 14 (1), pl. facing p. 6, top, photo of underside, and third from bottom, photo of profile.

Wong *Collection of Ancient Chinese Jades* [1937], p. 13, no. 183, not illustrated; upper surface incorrectly designated as lower and *vice versa*.

## CZ.8

MATERIAL: Jade, brownish.

COLLECTION: Chicago Natural History Museum, no. 116565.

## MEASUREMENTS:

L 3.07
W .91
D .87

DATE: Late antiquarian.

This piece is known to me only from the description furnished on the museum's catalog entry: "Girdle-clasp . . . terminating in dragon's head on one side, 4 fig. of hydra carved in relief on other side." The upper surface is probably decorated with an animal mask at the upper end, below which is probably a decor of the Geometric or Grain Class.

(Cf. CZ.5, CZ.7)

Unpublished.

## CZ.9

MATERIAL: Jade, gray with black specks.

COLLECTION: Chicago Natural History Museum, no. 116566.

## MEASUREMENTS:

L 3.39
W .71
D .91

DATE: Recent, apparently with no pretense of archaism.



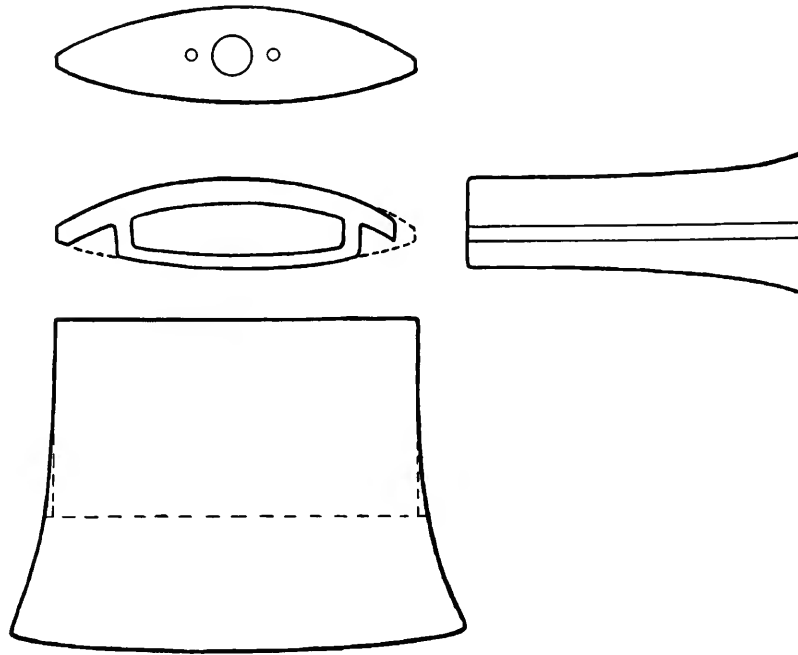


FIGURE 98.—Method of carving  
CZ.11 from a chape.

This scabbard slide was fashioned from the upper section of a chape which appears to have been a genuine article of late Chou or early Han age. Consequently, it is irregular in form, having a greater depth on one side than on the other, in conformity with the shape of the chape from which it was cut. The drawings above illustrate the section of the chape from which the slide was cut and the manner in which this section was fashioned to simulate a scabbard slide. It is impossible to be certain at what date this work was done, but the arch of the lower aperture plate which is that of the flatter side of the chape is sufficient to prevent secure, solid attachment of the object to the scabbard wall. Hence, a period later than that in which scabbard slides were employed is suggested, and it seems probable that the work may be recent, following the traditional practice in jade carving of making a new whole object from what may have been a damaged or broken older object of different form. The upper plate preserves a segment of the original decor of the chape, consisting of interlocked T's. Grooved vertical (re: the slide) borders were added in an attempt to suggest a complete, unified surface decor on the slide. However, the border along the edge where a section of the chape was cut off clearly passes through the original, earlier surface decor. The aperture was formed by enlarging the normal round socket found at the upper ends of chapes into which the peg used to secure the chape to the foot of the scabbard was inserted.

(See also CZ.12, CZ.19)  
Unpublished.

CZ.12 . . . . . Plate 10c

MATERIAL: Jade.

COLLECTION: Eguchi Jirō,<sup>m</sup> Ōsaka.

MEASUREMENTS:

L 2.25*	ApL .81*
W .84*	ApD .22*
D .45*	ApX 1.22*
Depth of upper plate over aperture .13.*	

Like the preceding scabbard slide, this piece was fashioned from the upper part of a jade chape ornament. The alteration has been less successful. Unlike the preceding slide where the forward edge was cut back from the edge of the chape in order to gain depth for the aperture and retain proper proportions, here the slide edges of the chape were accepted as the curved ends of the slide and in placing the aperture nearer to one end the lower aperture plate was interrupted by the curve of the chape wall so that it became malformed at one end in relation to the original form of the chape.

The upper surface retains the ornamentation of the section of the chape (upper part) from which it was cut. To envision the original decor clearly, the slide must be turned horizontal. Visible in the center is the whiskered snout of an animal mask with curvilinear elements to

either side which may represent stylized tusks. The carving technique is typical of late Chou and early Han chapes, with elements partly defined by incised lines and partly by alternating higher and lower, or sloped, surface levels and planes which impart to the design a slight plastic quality. Along the left vertical side, top and bottom, are the concave grooves which formed an inner border to the main decorated surface of the chape while along the right vertical side, where a section of the chape was cut off, is a deep narrow groove inside a thin plain border formed by grinding off the original surface ornamentation.

(See also **CZ.II**, **CZ.I9**.)

REFERENCE: Umehara, *Shina kogyoku zuroku* (1955), pl. CVII, 8, photos of top and profile.

**CZ.13**

MATERIAL: Jade.

MEASUREMENTS:

L 2.69*	ApL 1.16*
W .94* (at bottom)	
W .66* (at top)	
D 1.19*	ApD .44*
Depth of upper plate over aperture .56.*	

DATE: Han, or earlier.

It is uncertain that this object is a scabbard slide, though it has been described as *sui* 璲 in the last reference (below). Rubbings only of the piece have been published, so that a detailed description is not possible.

In form and decor, this object has no parallel among the scabbard slides here described. Narrowest at the upper end, it gradually broadens toward the lower end. It is decorated on the top, sides and ends. The upper surface of the upper plate is laterally arched, and its fusion with the sides is not marked by borders. The blunt upper and lower ends are decorated with incised volutes within an incised linear frame. The top and sides are ornamented in low relief with a pair of scaled birds holding in their claws small serpents. At the upper end is an animal mask facing upward, and to the left and right of the mask, on the sides, is a four-footed animal with its head turned back and jaws open. On the forward and rear aperture walls and along the sides of the lower aperture plate are incised curls and volutes, again within incised linear borders. There is a short extension of the deep upper plate forward of the aperture, which is in part carved from this plate, and a somewhat longer, straight and blunt-ended extension of the upper plate below the aperture.

REFERENCES:

Huang Chün, *Heng-chai ts'ang chien ku yü t'u* (1935), II, 29:a, rubbing of profile; II, 29:b, single rolled rubbing of both sides and across upper plate.

Huang Chün, *Ku yü t'u lu* (1939), III, 16:a, rubbings of

top and profile; III, 16:b, single rolled rubbing of both sides and across upper plate.

*Chung-kuo ku tai kung-i t'u-an* (1960), p. 310, single rolled rubbing of both sides and across upper plate; identified as *sui*.

CZ.14 ..... Plate 11a

MATERIAL: Jade, light greenish brown.

COLLECTION: D. Y. Wu, Tientsin (1938).

MEASUREMENTS:

L. 3.80

DATE: Eastern Han period, probably second century after Christ. Nearly identical in form to *E.2*, *E.35*, *S.1* and *S.2*.

The object is basically rectangular in cross-section and in profile, but with slightly curved surfaces and rounded ends. We may, by its obvious analogy to *S.1* carved in one piece with its scabbard, presume that the narrower end provided with a hook represents the lower end of the slide. The lower (narrower) end is rounded. Between the lower end and the enclosed rectangular aperture a notch has been cut into one side, deeply undercut toward the lower end, transforming this end into a hook. This notch is roughly comparable to the upper bay and undercut forward hook-ridge of Form I scabbard slides. Above this notch, in the center of the slide, is an enclosed rectangular aperture (with rounded ends) between upper and lower aperture plates of approximately equal thickness. Equidistant between the aperture and lower notch, a round hole approximately equal in diameter to the depth of the aperture is bored through from one side to the other; encircling the hole on each side is a small incised band of linear geometric decor. A similar hole is bored through the object at an equal distance above the aperture and yet another halfway between this hole and the upper end. At the lower end, the open side of the hook is bored through and on the outer face of the hook an incised stylized animal mask surrounds the hole. At the upper end, on the side into which a notch is cut, is yet another round hole; this hole apparently is a socket as it is neither bored through the piece nor does it intersect one of the other holes. Encircling the socket is a lightly and crudely incised animal form.

Alfred Salmony identified this object as a buckle, though admitting that "the shape differs considerably from the well-known hooks." Its close agreement in form to *E.2* from southern Denmark, an object which almost certainly is a scabbard slide, and to *S.1* and *S.2* from Syria, suggests that this piece also was intended for this use. The aperture and end hook especially relate it to the Form I scabbard slides. The holes might then have served for the passage of cords by means of which the slide was bound to the scabbard.

The relationship between *E.2*, *E.35*, *S.1*, *S.2* and *CZ.14*, nearly identical objects isolated within their respective cultures, is clearly resolved by *S.1* and *S.2*. Salmony's date of Late Eastern Chou for *CZ.14* must be abandoned in favor of an Eastern Han one for this piece. *S.1* and *S.2* provide also a locus for the origin and production of this scabbard slide variant and point to the respective routes by which slides of this form were diffused both toward the east and northwest.

## REFERENCES:

Salmony, *Carved of Jade of Ancient China* (1938), pl. LXI, 5, photos of profile and top.

Trousdale, "Possible Roman Jade" (1969), p. 58, fig. 1, photo of profile; p. 63, fig. 18, photo of profile; p. 63, fig. 19, photo of top, all after Salmony (1938).

## CZ.15

MATERIAL: Jade, ivory colored with brown areas; partially decomposed.

COLLECTION: Charles G. Seligman, England; formerly K. C. Wong.

## MEASUREMENTS:

L 3.50  
W 1.56\*

The object has been described as a scabbard slide (see below, Wong, 581), but probably is not. Hansford subsequently published it as a belt plaque, and this identification seems correct. The upper surface is ornamented with several animals in varying depths of relief. On the underside are "two square protuberances, hollowed and slotted for attachment."

## REFERENCES:

Wong, "Ancient Jades," 14 (1), pl. facing p. 6, second from top, photo of top, and second from bottom, photo of bottom.

*Wong Collection of Ancient Chinese Jades* [1937], p. 13, no. 184, not illustrated.

Hansford, *Seligman Collection* (1957), p. 112, and pl. LXI, B.35, photo of top, "style of Han period, but probably later."

## CZ.16

MATERIAL: Jade, milk-white.

COLLECTION: Formerly C. T. Loo, New York.

## MEASUREMENTS:

L 2.75  
D .75

DATE: Ascribed to Eastern Chou, but probably relatively modern.

No description of the decor of this piece is possible on the basis of the published notes. Evidently the surface is decorated with multiple animal forms including several

monster masks, serpent bodies and a bird's head. The slide has been given the basic form of a belt-hook with a rectangular, enclosed aperture on the center of the back.

REFERENCE: West Palm Beach, Norton Gallery of Art, *Exhibition of Chinese Archaic Jades* (1950), pl. LVII, 7, photo of profile.

## CZ.17

MATERIAL: Bronze and wrought iron.

DATE: Modern.

The scabbard slide is cast in the shape of a hydra, the body of the animal forming the upper plate, the fore and hind legs the aperture walls. The feet and tail are fastened to a thin wrought-iron plate which encircles, and serves to bind the slide to, a scabbard.

This piece is a curiosity only, suggesting, however, that in late periods the Chinese envisioned the archaic scabbard slide as being in the form of a hydra, a suggestion which may in part explain the relatively high percentage of antiquarian slides among the Hydra Class.

## REFERENCES:

Hommel, "Chinese Sword Furniture" (1928), fig. 6, photo of profile.

Hommel, "Notes on Chinese Sword Furniture" (1951), p. 144, upper, photo of profile.

## CZ.18 . . . . . Plate 11b

MATERIAL: Bronze, with overall thin green patina. Definite evidence of wear at upper left interior corner of aperture, with slight wear apparent at lower right corner.

COLLECTION: Dr. Paul Singer, Summit, New Jersey.

## MEASUREMENTS:

L 1.50	ApL .72
W .59	ApD .25
D .66	ApX .88
Depth of lower aperture plate .13.	

DATE: Mid Eastern Han.

The scabbard slide is cast in the shape of a cicada in nearly full round, with a plain rectangular aperture on the underside. The forefeet of the cicada are cast in relief on the upper aperture wall, the body of the cicada forming the upper aperture plate and extending beyond the aperture at the sides and lower end. A paramilitary novelty piece which must belong to the last decades of the scabbard slide's use in China. The evidence and nature of the wear to the aperture walls suggests certain authenticity for a piece which might otherwise be considered a late belt toggle (see CP.4).

Unpublished.

## CZ.19 . . . . . Plate 11c

MATERIAL: Jade, greenish brown with flecks of decolored mineral on the surface; slight evidence of wear at



the upper left interior corner of the aperture.

COLLECTION: Dr. Arthur M. Sackler, New York; no. J-609.

MEASUREMENTS:

L 1.94 (left side)	ApL .81
L 2.03 (right side)	ApD .22
W 1.02	ApX 1.16
D .50	

DATE: Western Han.

Like CZ.11 and CZ.12, this scabbard slide has been carved from a scabbard chape. The upper end of the chape was cut off in order to produce a scabbard slide of approximately normal Han width, but the trapezoidal form of the chape was not altered to produce a rectangle, as it was in the case of CZ.11, and this accounts for the scabbard slide being longer at its right than at its left side, the right side corresponding to the base of the original chape. The slide utilizes as its decor that which belonged to the original chape, a hydra figure in an S-curve, rendered in low, rounded relief. Part of the body of this animal was cut off when the upper side of the chape was cut off. The hydra, with a single stem tail and long, curved horn or mane, represents a fairly early type insofar as scabbard slides are concerned.

The profile of the slide is dictated by the original shape of the chape, but the carver has endeavored to make the slide conform to our Form I scabbard slide, with projected upper plate above and below the aperture. Rather strongly arched, the upper plate terminates abruptly a short distance above the aperture. The lower end, utilizing the edge of the original chape, is provided with a blunt inward-projecting ridge.

Part of the decoration original to the chape is visible on the outer surface of the lower aperture plate. This consists of a composition of complex interrelated incised straight and curved lines defining convex and concave surface areas. Part of this composition was ground off to provide a nearly flat surface to the lower aperture plate, but the original curve of the chape is still visible at the upper end of this plate.

Evidence of use as a scabbard slide suggests the early alteration of the chape to this form, perhaps as a result of some damage to the upper portion of the chape subsequently cut off.

(See also CZ.11, CZ.12.)

Unpublished.

### Imaginary Class

Ca-Cm

A group of twelve scabbard slide designs of Form I published in the *Ku yü t'u p'u*, chapter 59, pp. 1-11, and chapter 60, pp. 1-11. This celebrated work is supposedly a

catalog of the imperial collection of the first emperor of the Southern Sung period, Kao-tsung 高宗 (r. 1127-1162), compiled by Lung Ta-yüan 龍大淵, with the assistance of, among others, the renowned painters Liu Sung-nien 劉松年 (fl. ca. 1174-1224), Li T'ang 李唐 (ca. 1050-1130), Ma Yüan 馬遠 (ca. 1150-1230), and Hsia Kuei 夏珪 (fl. ca. 1190-1230). It consists of 100 chapters with illustrations of 700 objects and a preface by the compiler dated 1176, though Lung Ta-yüan died in 1168. Actually, the work was not published until 1779.

Several early Western commentators seem to have accepted the *Ku yü t'u p'u* as an authentic work of the Sung period (in spite of its preposterous roll of distinguished contributors whose lives span at least two centuries), while noting that the illustrations seemed rather to reflect Sung designs than those of the antiquity the illustrated objects purported to represent (e.g., S. Bushell, in [Bishop, H. R.] *Investigations and Studies in Jade* [1900], p. 311). Laufer, *Jade* (1912), pp. 8-12, discusses this source in some detail and, while accepting the authenticity of the work, concludes (p. 12) that "many of these designs are strongly influenced or even directly created by the pictorial style of the Sung artists, and . . . represent a more interesting contribution to the art of the Sung than to any former period." Pelliot ("Un nouveau périodique" [1923], p. 365) quite rightly recognized that the work was a forgery. It should be pointed out, however, that among the various types of jades illustrated in this catalog, little resemblance between the designs and actual artifacts of any period is to be found. The Ch'ing imperial library committee astutely chose to reject this work which is to be considered as a fabrication of the eighteenth century.

The twelve scabbard slides illustrated in the *Ku yü t'u p'u* of which top/profile and bottom drawings of each are presented, are of a single form: a long rectangle with the narrow ends rounded, with thin straight or slightly back-curved inward projections at each end and narrow apertures attached to the center of the underside and about one-fourth to one-half the width only of the upper plate. The upper plate surfaces of all are divided into decorated zones bilaterally symmetrical along both vertical and horizontal axes. Outward-facing stylized monster masks are placed at either end. The surface patterns fall into three fundamental categories: (1) geometric combinations of interlocked or opposed pairs of C's in combination with rounded grains, undulating and triangular incised lines, or vertical panels of a braid or double volute ornamentation (ch. 59, pp. 1, 3, 5, 9; ch. 60, pp. 1, 11 [Ca, Cb, Cc, Ce, Cg, Cm]); (2) panels of closely set rows of comma-spirals in regular orientation (ch. 59, pp. 7, 11 [Cd, Cf]); (3) dense angular meander patterns or concentric hexagons (ch. 60, pp. 3, 5, 7, 9 [Ch, Ci, Cj, Ck]). The outer surface of the lower aperture plate of

one of the slides (Cf) is ornamented with an overall design of small, irregularly formed triangles resembling axe-chip strokes in painting. Three of the slides taper slightly and regularly (Ca, Cb, Cd), but it is uncertain that such a tapering was intentional as with Ca the taper is to be noted on the top/profile drawing only.

All of the drawings are crudely executed and no suggestion of possible relief in the designs is indicated. The designs, both in the basic form of the objects and in the ornamentation, have only the most general reference to authentic or antiquarian scabbard slides. The measure-

ments given in the text accompanying each piece indicate proportions approximately double those of the normal slide (cf., however, CH.69).

Ca, Cb, Cd, Ch, Ci, Cm reproduced also in *Chung-kuo ku tai kung-i* (1960), pp. 318-323, where they are labeled simply "jade ornaments," with the notation that their period is uncertain.

Cf. CV.74, CV.75, CV.76, CG.53, CH.70, CH.71, CH.72, CH.73, for additional scabbard slides to a lesser degree suggestive of imaginary form and/or ornamentation.

## EUROPE

Note: The thirty-five scabbard slides from Europe included here by no means represent a corpus of slides from this region. They are selected examples only, intended to be representative of late mutations in Europe of the traditional Asiatic form of scabbard slide.

E.1 . . . . . Plate 14b

MATERIAL: Wood.

PROVENANCE: Peat bog at Nydam, Slesvig, Denmark.

COLLECTION: Nationalmuseet, Copenhagen.

MEASUREMENTS:

L 10.13\* . . . . . ApL 3.66\*

(Computed from published drawing reported as one-third natural size, but probably greater than that.)

DATE: A.D. 200-250.

A large, crudely cut, unornamented scabbard attachment which in form reflects a remote dependence upon the standard Form I scabbard slide of China, perhaps by way of one of the cruder imitations from western Asia or eastern Europe. The forward part, oval in cross-section, is terminated in a roughly rounded knob. Below the knob the slide on the two sides and bottom is cut in and a short zone suggestive of the upper bay on Form I slides is achieved. Possibly a small rectangular perforation is cut through from one side to the other at the lower limit of this zone, directly above a small ridge separating the upper from the lower portions of the slide. Below this ridge, the upper rounded side begins a gradual inward curve, accentuated toward the lower end where it curves inward to meet the flat base of the slide in an acute angle. Cut into the inner side of the slide is a long, shallow niche with sloped ends. Between the niche and the "upper bay" zone is a thick area corresponding to the upper aperture wall. Below the niche, there is no lower bay nor distinct lower aperture wall, but only a solid area similar in shape to the lower hook part of the Form I slides abutting directly on the niche.

The lower part of the slide is, then, a solid piece with a niche cut out of the central portion on the flat inward side. In the centers of the zones above and below this niche, and level with the deepest part of the niche, small round holes are bored through from one side to the other. These doubtless served for the passage of wires or cords by means of which the slide was bound to the scabbard wall. These features were required by the absence of a lower aperture plate over which the cords were normally passed for binding the slide to the scabbard. The open inner side of the aperture abutted directly against the scabbard wall. This produces a less satisfactory suspension device owing to the possibility of the weapons belt binding in the resulting crack between slide and scabbard wall at the upper end, a condition which cannot obtain on slides with enclosed apertures.

The slide formed part of a large deposit chiefly of military equipment in a late Iron Age lake, now a peat bog. The weapons and equipment did not accumulate accidentally in this lake, or in others like it where similar deposits have been found, nor were they deposited as a result of warriors having "fallen through the ice during a battle in winter" (Engelhardt, p. 25), but were ritual deposits. Over one hundred swords, chiefly of Roman type, were found in three boats which had been sunk in the lake. The weapons had been bent or broken to prevent their recovery for use. Among the finds were Roman coins, the last in date being A.D. 217 (Tylecote, *Metalurgy in Archaeology* [1962], p. 250).

### REFERENCES:

Engelhardt, *Denmark in the Early Iron Age* (1866), p. 67, fig. C, drawing of profile; described as an object of unknown use.

Splieth, "Ausgrabungen im Nydamer-Moor" (1894), not seen.

E.2 . . . . . Plates 14c and 15a

MATERIAL: Bone.

PROVENANCE: Peat bog at Vimose, Fyen, Denmark; excavated in the 1860s.

COLLECTION: Nationalmuseet, Copenhagen, no. 11182.

MEASUREMENTS:

L 2.95	ApL 1.40*
W .35 (maximum)	ApD .20*
D .47 (maximum)	

DATE: A.D. 200–250.

Nearly identical in form to CZ.14, *E.35*, *S.1* and *S.2*.

The preserved portion of the object is rectangular in cross-section, tapering regularly and slightly from its broader upper end (presumably) to the slightly narrower lower end. It is unornamented. The upper (broader) end is rounded. Between the lower end and the aperture a notch has been cut into one side, slightly undercut at the lower end and curving outward in an arch along the lower side. This notch is roughly comparable to the upper bay and undercut forward hook-ridge of Form I scabbard slides. Above this notch, in the center of the slide, is an enclosed rectangular aperture between upper and lower aperture plates of approximately equal thickness. Just above and below the aperture two round holes, in diameter nearly equal to the depth of the aperture, are cut through the slide from one side to the other. Cords or wires used to bind the slide to the scabbard were evidently passed through these holes. The upper end of the slide is slightly back-sloped, and just above the undercut corner of the squared upper end a line is cut across the surface of the slide producing a small rounded ridge. Small "burrs" project from each end, parallel to the side opposite the one in which the notch is cut. These are evidently the remains of flat tongues which extended upward and downward. This indicates that the side with the notch, so reminiscent of the upper bay on Form I slides, was not the side abutting the scabbard wall (as on Form I slides). The form of the notch, however, strongly suggests derivation from the upper bay of the Form I Chinese slides, perhaps by way of similar derivative forms from western Asia and eastern Europe. The addition of the extended tongue, to be noted on other slides from Europe (e.g., *E.7*), cannot be the reason for the double reversal of the slide; the tongue could as easily have been projected beyond either side.

Miss Elisabeth Munksgaard of the Nationalmuseet has kindly furnished additional information on this slide, in a letter to the author of May 16, 1961.

One end is broken, undoubtedly it has been shaped like a flat tongue provided with a bronze nail. The Vimose find is a sacrifice of weapons and military equipment dating from the Roman Iron Age (ca. 100–300 A.D.); it is not a closed find—apparently weapons have been sacrificed in the lake (now a peat bog) successively throughout several centuries. The find was excavated and published in the 1860's and the date of the various objects hinges exclusively on comparison with

similar objects from closed finds—especially graves—and concerning the objects of Roman or Provincial Roman origin also on similar objects found in frontier fortresses the date of which are known from Roman history.

The date of this particular object has been fairly certainly established on the basis of researches by O. Montelius, "Den nordiska jernålderns kronologi" (1896), pp. 268 ff.

REFERENCES:

Engelhardt, *Vimose-Fundet* (1869), pl. IX, fig. 79, not seen.

Janse, "Notes sur quelques épées anciennes" (1930), p. 81, fig. 5, no. 2, oblique top/profile drawing, after Engelhardt.

Tallgren, "Notes marginales" (1933), p. 237, fig. 3, oblique top/profile drawing.

Trousdale, "Possible Roman Jade" (1969), p. 62, fig. 16, photo of profile; text, p. 62.

*E.3* ..... Plate 15a

MATERIAL: Bone.

PROVENANCE: Peat bog at Vimose, Fyen, Denmark; excavated in the 1860s.

COLLECTION: Nationalmuseet, Copenhagen.

MEASUREMENTS:

L 4.25

DATE: A.D. 200–250.

The slide consists of an arched upper plate, broader at the upper end and tapering slightly and regularly toward the lower end. Two inward-projecting walls, sloped away from the upper plate on their outer surface, and on their inner sides rounded with a single flute at the innermost point, form the upper and lower aperture walls. A flat, squared wedge is projected above the upper aperture wall, tapering to an angular wedge at its upper extremity; there is a large tongue-shaped projection below the aperture, also thinning toward its extremity. There is no lower aperture plate; the lower tongue and upper squared wedge rested against the scabbard wall. Above and below the aperture, two round holes are bored laterally through the aperture walls from one side to the other of the slide; these served for the passage of cords or wire by which the slide was bound to the scabbard. A notch in the lower tongue was probably fitted around a metal nail which prevented the fixture from slipping on the scabbard wall, though to effectively achieve this, a similar nail at the upper end would be required. The sword belt passed through the aperture formed by the scabbard wall and the upper plate of the fixture. This form of slide is less satisfactory than those with enclosed aperture as it is possible for the belt to bind in the crack between slide and scabbard.

Unornamented.

## REFERENCES:

Engelhardt, *Vimose-Fundet* (1869), pl. IX, fig. 78, oblique top/profile drawing; not seen.

Janse, "Notes sur quelques épées anciennes" (1930), p. 81, fig. 5, no. 1, oblique top/profile drawing, after Engelhardt.

Tallgren, "Notes marginales" (1933), p. 237, fig. 3, left, oblique top/profile drawing, after Engelhardt (?).

*E.4* . . . . . Plate 15a

MATERIAL: Bone.

PROVENANCE: Peat bog at Vimose, Fyen, Denmark; excavated in the 1860s.

COLLECTION: Nationalmuseet, Copenhagen.

MEASUREMENTS:

L 4.75

DATE: A.D. 200–250.

Similar in form to *E.3* though somewhat narrower and with a longer, lower tongue which turns outward at its end. The slide was secured to the scabbard wall by silver rivets passed through holes in the upper wedge and lower tongue. The surface of the arched plate above the opening through which the belt passed is ornamented with rows of small incised circles along the edges, each circle with a dot in its middle. Similar circles appear on the sides surrounding the opening. The slide appears to be even in width throughout its length.

## REFERENCES:

Engelhardt, *Vimose-Fundet* (1869), pl. IX, fig. 80, oblique top/profile drawing; not seen.

Janse, "Notes sur quelques épées anciennes" (1930), p. 81, fig. 5, no. 3, oblique top/profile drawing, after Engelhardt.

*E.5* . . . . . Plate 15a

MATERIAL: Bone.

PROVENANCE: Peat bog at Vimose, Fyen, Denmark; excavated in the 1860s.

COLLECTION: Nationalmuseet, Copenhagen.

MEASUREMENTS:

L 5.44

DATE: A.D. 200–250.

Similar in form to *E.3* and *E.4*, but narrower than either. The slide tapers regularly from the upper end where it is broadest to the slightly narrower lower end. Both upper and lower tongues taper into sharp points. No means by which the slide may have been attached to the scabbard wall is evident; possibly it was attached in the fashion of *E.10*. Unornamented.

## REFERENCES:

Engelhardt, *Vimose-Fundet* (1869), pl. IX, fig. 81, oblique top/profile drawing; not seen.

Janse, "Notes sur quelques épées anciennes" (1930), p. 81, fig. 5, no. 4, oblique top/profile drawing, after Engelhardt.

Behmer, *Das zweischneidige Schwert* (1939) pl. III, 1, photo of top.

*E.6*

MATERIAL: Bronze.

PROVENANCE: Silchester, England.

MEASUREMENTS:

L 4.75\*

W .40\* (maximum)

DATE: Third century after Christ.

An extremely simplified slide of questionable efficiency, consisting of a single piece of bronze bent outward to create an aperture between the scabbard wall and the metal plate. At the upper end, a square plate with a large square perforation for a rivet. Below the square the sides contract, rise outward from the scabbard wall and quickly broaden again at the point highest from the scabbard wall. Proceeding downward, the plate becomes narrower toward the lower end, sloping inward gradually and regularly, terminating in a trefoil parallel with the squared area at the upper end and hence resting against the scabbard wall. At the lower end, no provision for attachment to the scabbard wall is evident. The aperture formed by this plate against the scabbard wall terminates in an acute angle at its upper end which must have tended to direct the sword belt into the crack between scabbard wall and metal plate, thus increasing the possibility of the belt binding between plate and scabbard.

At the same site a chape ornament made of bone, but virtually identical in form to the splayed rectangular Chinese jade chapes, was recovered (p. 89, fig. 11, 3).

REFERENCE: Boon, *Roman Silchester*, (1957), p. 89, fig. 11, 5, oblique top/profile photo; identified as "bronze scabbard-loop."

*E.7*

MATERIAL: Bronze.

PROVENANCE: Excavated in England.

COLLECTION: British Museum, London, 70.10–13.5.

DATE: Probably third century after Christ.

The slide consists of a single thin-bronze plate projected from the wall of the scabbard in a half-circle toward its center, with flaring tongue below and pointed tongue above, each secured by three bronze rivets to the wall of the bronze scabbard containing an iron sword. The aperture is situated approximately two-fifths of the distance down from the mouth of the scabbard toward the chape which terminates in two fanned points reminiscent of a

fish tail. The scabbard is one of a pair furnished with similar slides. Unornamented.

Unpublished (?).

*E.8* . . . . . Plate 15*b*

MATERIAL: Bone.

PROVENANCE: Peat bog at Nydam, Slesvig, Denmark.

COLLECTION: Nationalmuseet, Copenhagen.

MEASUREMENTS:

L 3.50\*

ApL 1.13\*

DATE: A.D. 200–250.

Similar in form to *E.3*, including small laterally bored holes above and below aperture notch for attachment. The upper (or outer) side, however, presents a continuous arched surface from upper to lower end. Along each side is an incised groove separating the plain surface of the plate from narrow rounded border ridges. This treatment of the surface is reminiscent of borders on jade scabbard slides from China.

REFERENCE: Engelhardt, *Denmark in the Early Iron Age* (1866), pl. VIII. Nydam, 32, oblique top/profile drawing.

*E.9*

MATERIAL: Bronze.

PROVENANCE: Peat bog at Nydam, Slesvig, Denmark.

COLLECTION: Nationalmuseet, Copenhagen.

MEASUREMENTS:

L 2.00\*

W .38\*

DATE: A.D. 200–250.

A simple, thin bronze plate with the ends bent inward at slightly less than right angles and with small flat areas at either end through which two rivets at either end served to attach the fixture. The rivets are still preserved. The surface is plain except for parallel indented lines about the edges of the upper plate section. Possibly a metal sheathing for a wooden scabbard slide (see *E.24* and *E.26*).

REFERENCE: Engelhardt, *Denmark in the Early Iron Age* (1866), pl. VIII. Nydam, 33, oblique top/profile drawing, one-half natural size.

*E.10* . . . . . Plate 15*c*

MATERIAL: Gold and iron, inlaid with red glass.

PROVENANCE: Merovingian tomb near Pouan, France.

DATE: Fifth or sixth century after Christ.

The slide consists basically of a gold rectangle with fluted sides and a slightly arched upper surface inlaid with two rows of flat red-glass pieces of irregular polygonal shape, six pieces in each row, bilaterally symmetri-

cally arranged to either side of a central vertical axis. The horizontal inlay walls are zig-zagged in a manner reminiscent of the garnet-inlaid gold slide *SR.8* from South Russia. A niche with sloped sides is cut into the underside of the rectangle; this niche served as the scabbard slide aperture when the slide was attached to the scabbard wall. The belt, therefore, passed between the scabbard wall and the underside of the slide. Above and below the rectangle are plain iron extensions, tapering to points, each about two-fifths as long as the central rectangle. These points were inserted under the leather wrapping of the wooden scabbard (p. 233 f.), thus securing the slide to the scabbard wall (cf. *E.11*). The similarity in form of this slide to *E.13* and *E.14* suggests that it is a single unit only of a form of compound scabbard slide developed in northern Europe at this time.

REFERENCES:

Lindenschmit, *Die Alterthümer der merovingischen Zeit* (1880), p. 80, fig. 7, C, drawings of top and profile; p. 234, fig. 156, repeat of the same drawings from p. 80; scale undesignated.

Trousdale, "Possible Roman Jade" (1969), p. 61, fig. 13, after Lindenschmit (1880), fig. 156.

*E.11* . . . . . Plate 15*c*

MATERIAL: Bronze, partly silvered, and iron, with two stone inlays.

PROVENANCE: Merovingian tomb near Erbenheim, Germany.

COLLECTION: Wiesbaden Museum, Wiesbaden.

DATE: Fifth or sixth century after Christ.

The central portion of the slide has the form of a bisected column, pinched in at the center, and with horizontal bands of silvering on the bronze surface. The flat underside is provided with a small niche, with sloped ends, which constitutes the aperture. The belt, therefore, passed between the scabbard wall and the slide. Above and below, the central section are rectangular bronze sockets exceeding the columnar central section in width, each inlaid with a rectangular red stone. The upper socket is somewhat larger than the lower. Above the upper socket and below the lower are plain iron extensions, tapering to points, each about one-quarter the length of the main body of the slide. These points were inserted under the leather wrapping of the wooden scabbard (p. 233 f.), thus securing the slide to the scabbard wall (cf. *E.10*). The similarity in form of this slide to *E.13* and *E.14* suggests that it is a single unit only of a form of compound scabbard slide developed in northern Europe at this time.

REFERENCES:

Lindenschmit, *Die Alterthümer der merovingischen Zeit* (1880), p. 234, fig. 157, drawings of top and profile; scale undesignated.

Trousdale, "Possible Roman Jade" (1969), p. 61, fig. 13, after Lindenschmit (1880), fig. 157.

*E.12* ..... Plate 15c

MATERIAL: Bronze, silver-plated, inlaid with red glass.

PROVENANCE: Merovingian tomb near Beauvais, France.

DATE: Fifth or sixth century after Christ.

The slide consists essentially of a bisected bronze "spindle" with horizontal fluting and with a small rectangular central zone. This central zone is raised and a niche with sloped walls is countersunk on the flat inner side; this niche served as the scabbard slide aperture when the slide was attached to the scabbard wall. The raised upper surface of this central rectangular zone is inlaid with three flat pieces of red glass. The horizontal walls of the inlays are irregular in line and are reminiscent of similar zigzagged inlay walls on a scabbard slide from South Russia (*SR.8*). The lower end of the "spindle" broadens into a spatulate shape and is inlaid with another flat piece of red glass. The upper end of the spindle terminates in a stylized head of a bird of prey, with drop-shaped eye inlaid with a piece of red glass and long arched beak curving upward and toward the left. The manner in which this scabbard slide was attached to the scabbard wall is not described. The similarity in form of this slide to *E.13* and *E.14*, suggests that it is a single unit only of a form of compound scabbard slide developed in northern Europe at this time. Possibly the present piece represents the left-hand element of the slide as the bird beak points off to the left; on the right-hand element a similar bird beak would then be faced toward the right.

REFERENCES:

Lindenschmit, *Die Alterthümer der merovingischen Zeit* (1880), p. 234, fig. 155, drawings of top and profile; scale undesignated.

Trousdale, "Possible Roman Jade" (1969), p. 61, fig. 13, after Lindenschmit (1880), fig. 155.

*E.13*

MATERIAL: Gold, inlaid with garnets, and iron.

PROVENANCE: Flonheim, Rheinhessen, Germany.

COLLECTION: Museum der Stadt Worms, Worms.

MEASUREMENTS:

L 2.50\*

DATE: Late fifth century after Christ.

This scabbard slide consists of two identical pieces set side by side and slightly apart from each other on the scabbard wall. This compound slide form is unknown in Asia. The basic unit of each section is a gold central rectangular section with sloping sides, truncated on top.

In the center bottom is a small niche with sloped upper and lower walls which served as the aperture between slide and scabbard wall, through which a narrow belt, cord, or chain was passed. Above and below, the gold central section iron points are extended. As in the case of *E.10* and *E.11*, these were probably inserted under the leather wrapping of the wooden scabbard and thus bound to the scabbard wall. The reconstruction of their position on a scabbard here, however, does not show them thus attached, but no other means of attachment is evident. The upper surface of the central section is inlaid with six flat garnets; in the center, a metal quatrafoil. The horizontal inlay walls are not straight, but curved, and thus are reminiscent of the garnet-inlaid gold scabbard slide from South Russia (*SR.8*).

REFERENCES:

Salin, *Die altgermanische Thierornamentik* (1904), p. 107, fig. 276, lower, drawing of top, scale undesignated; p. 107, fig. 275, drawn reconstruction of compound slide on scabbard possibly incorrect; scale 1:4.

Behmer, *Das zweischneidige Schwert* (1939), pl. VI, 4a, photo of full sword with compound slide in place on remains of scabbard, scale 1:5; pl. VI, 4b, detail of hilt and section of scabbard including compound slide, scale 1:2.

*E.14* ..... Plate 15d

MATERIAL: Gold, partly silver plated, and iron.

PROVENANCE: Sindelfingen, Württemberg, Germany.

COLLECTION: Altertümersammlung, Stuttgart.

MEASUREMENTS:

L 3.19\*

DATE: Late fifth or early sixth century after Christ.

This scabbard slide consists of two identical pieces set side by side and slightly apart from each other on the scabbard wall. This compound scabbard slide form is unknown in Asia. The basic unit of each section is a solid bisected cylinder of gold with four zones of silver-plated decor separated by simulated granulation lines. In the upper and lower zones, the silver lines are horizontal and parallel; in the two central zones, they are parallel wavy lines. Presumably, the flat underside of each unit is provided with a central niche serving as the aperture between slide and scabbard wall, through which a narrow belt, cord, or chain was passed. Above and below the gold half-cylinder, small iron points are extended. As in the case of *E.10* and *E.11*, these were probably inserted under the leather wrapping of the wooden scabbard and thus bound to the scabbard wall.

(See also *E.18*)

REFERENCES:

Salin, *Die altgermanische Thierornamentik* (1904), p. 107, fig. 274, drawn reconstruction of compound slide on

scabbard, possibly incorrect; scale undesignated.

Behmer, *Das zweischneidige Schwert* (1939), pl. IX, 1, photo of hilt and upper portion of decomposed scabbard with compound slide in place.

*E.15*

MATERIAL: Bronze.

PROVENANCE: Gültlingen, Württemberg, Germany.

COLLECTION: Altertümersammlung, Stuttgart.

MEASUREMENTS:

L 2.81\*

DATE: Mid-fifth century after Christ.

A compound scabbard slide similar to the preceding. It consists of a rectangular flat bronze plate fastened to the scabbard wall, with two parallel rectangular sections raised above the plate and forming two apertures through which a belt, cord, or chain was passed. Each element of the slide, rectangular in section, is perforated with seven round holes which probably once held colored inlays.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. VIII, 1a, photo of full sword with slide attached to remains of scabbard, scale 1:4; pl. VIII, 1b, detail photo of hilt and upper section of scabbard showing compound slide, scale 1:3.

*E.16*

MATERIAL: Silver, partly gilt, with garnet inlays.

PROVENANCE: Entringen, Württemberg, Germany.

COLLECTION: Urgeschichtliches Institut, Tübingen.

MEASUREMENTS:

L 2.63\*

DATE: Mid-fifth century after Christ.

Compound slide similar in form to *E.11* (pl. 15c) and *E.17*. The central zone of each unit, in section a half cylinder, is laterally ribbed and gilt; the rectangular inlay sockets above and below the central zone where the small aperture is located exceed the cylinder in width. Above and below the inlay sockets, the pointed silver tongues are longer than those of *E.11*.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. VIII, 2e, photo of compound slide resting on remains of scabbard wall, scale 2:3.

*E.17*

MATERIAL: Iron, partly silvered, with garnet inlays.

PROVENANCE: Alter-Gotterbarmweg, Klein-Basel, Switzerland.

COLLECTION: Historisches Museum, Basel.

MEASUREMENTS:

L 2.16\*

DATE: Mid-fifth century after Christ.

Compound slide similar in form to *E.11* (pl. 15c) and *E.16*. The central section of each unit, in cross-section a half cylinder, is laterally ribbed and silvered; the rectangular inlay sockets above and below the central zone are only slightly broader than the cylinder. The pointed iron tongues extending above and below the inlay sockets are broken in every case.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. VII, 3d, photo of top of the two elements of compound slide, scale 2:3.

*E.18*

MATERIAL: Gold, partly silver plated, and iron.

PROVENANCE: Gültlingen, Württemberg, Germany.

COLLECTION: Altertümersammlung, Stuttgart.

MEASUREMENTS:

L 3.19\*

DATE: Late fifth or early sixth century after Christ.

Compound slide, virtually identical to *E.14*. The iron-pointed projections above the half-cylinder unit are broken.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. IX, 2a, photo of full sword with compound slide in position on remains of scabbard, scale 1:4; pl. IX, 2b, detail photo of hilt and upper portion of scabbard with slide in position, scale 1:3.

*E.19*

MATERIAL: Iron, with gold inlay.

PROVENANCE: Klein-Hüningen, Klein-Basel, Switzerland.

COLLECTION: Historisches Museum, Basel.

MEASUREMENTS:

L 2.44\*

DATE: Early sixth century after Christ.

Compound slide similar in form to preceding examples. Each element of the slide consists of a half cylinder with a central cavity on the underside through which the narrow belt, cord, or chain was passed. The upper and lower ends of each half cylinder are marked by gilded lateral fluting. The central zones are marked by a reticulation of inlaid gold lines. The pointed projections above and below the half cylinders (by means of which the slide was bound to the scabbard wall) are badly decomposed.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. X, a, photo of full sword with compound slide in position on quite well-preserved wooden scabbard, scale 1:5; pl. X, c, detail photo of upper portion of scabbard with slide in position, scale 2:3.

*E.20* . . . . . Plate 16a

MATERIAL: Bronze.

PROVENANCE: Torsbjerg Mose, Denmark.

COLLECTION: Sleswig-Holsteinisches Museum vorge-schichtlicher Altertümer, Kiel.

MEASUREMENTS:

L 5.19  
W 2.41

DATE: A.D. 300–350.

The upper and lower ends are drawn out into long flat points. Near the center, each end piece broadens out to form a band at right angles to the vertical points. At each side of each band are two perforations where rivets attached the flat bronze plates to the wooden scabbard wall. Bridging a central open area about .66 across are three parallel bronze bands. The ends of these are bent inward at right angles and attached to the bronze plates on the scabbard wall; they thus form a rectangular aperture, the inner surface of which is the scabbard wall.

The upper and lower plates are ornamented with hammered border designs consisting of lines, dots, and crescents; in the center of each plate is a hammered flower with eight radiating petals.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. XVII, 1, photo of top, scale 1:1.

#### E.21

MATERIAL: Bronze.

PROVENANCE: Brostorp, Sweden.

COLLECTION: Statens Historiska Museum, Stockholm.

MEASUREMENTS:

L 3.09 (incomplete)  
W 1.31

DATE: A.D. 300–350.

Basically similar in form to *E.20*. The upper and lower scabbard wall plates are more slender; and where they spread out horizontally on the scabbard wall, a triangle in openwork is formed. The lateral arms of these plates have a single perforation for rivet attachment to the scabbard wall. The protracted extension of the upper plate is broken. The space between the two scabbard wall plates is bridged by three parallel bronze bands raised on sides set at right angles and attached to the scabbard wall plates. The aperture thus formed is rectangular and the scabbard wall serves as its inner side.

Unornamented.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. XVII, 2, photo of top, scale 1:1.

#### E.22

MATERIAL: Bronze.

PROVENANCE: Peat bog at Nydam, Sleswig, Denmark.

COLLECTION: Sleswig-Holsteinisches Museum vorge-schichtlicher Altertümer, Kiel.

MEASUREMENTS:

L 3.38  
W 2.53

DATE: Fourth century after Christ.

This simple scabbard slide consists of a thin bronze plate, the ends of which are bent inward at right angles to form the upper and lower aperture walls; a short lip extends upward and downward against the scabbard wall to provide a surface by means of which rivets were driven through the six perforations in each to attach the rectangular bronze loop to the scabbard wall. The inner side of the aperture is thus provided by the scabbard wall.

The outer surface is ornamented with hammered parallel lines along the vertical sides, and a similar set of five lines is drawn vertically through the center. At either end and to each side of the centrally placed lines are half circles opening outward and formed of four concentric hammered lines.

(See also *E.9* and *E.23*)

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. XVII, 3, photo of top, scale 2:3.

#### E.23

MATERIAL: Bronze.

PROVENANCE: Peat bog at Nydam, Sleswig, Denmark.

COLLECTION: Nationalmuseet, Copenhagen.

MEASUREMENTS:

L 3.09  
W 1.88

DATE: Fourth century after Christ.

Similar in form to *E.22*, but smaller. The flat tongues above and below the aperture have three perforations each for rivets which once held this slide to the scabbard wall. The upper surface is decorated with borders of hammered parallel lines along all sides; inside the borders across both the upper and lower ends are five small circles of equal size with a small dot in the center of each. The circles are irregularly spaced.

(See also *E.9* and *E.22*)

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. XVII, 4, photo of top, scale 2:3.

#### E.24 . . . . . Plate 16b

MATERIAL: Silver.

PROVENANCE: Tibble, Sweden.

COLLECTION: Statens Historiska Museum, Stockholm.

MEASUREMENTS:

L 6.00  
W .78 (aperture area)  
W 2.38 (at lower end)

DATE: A.D. 350–400.



The aperture area is formed of a thin sheet of silver fashioned similarly to *E.22* and *E.23*. Its outer surface is decorated with an elongated S-figure in raised dots hammered from the underside. To either side of the "S" is a flower or sun pattern. Below the aperture area are two long outward-curving, tail-like projections with perforations at the lower ends, and at the upper ends where they converge below the aperture. This is probably only the metallic sheath which covered a wooden slide such as *E.26*.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. XVII, 5d, photo of top, scale 2:3.

#### *E.25*

MATERIAL: Bronze.

PROVENANCE: Sætrang, Norway.

COLLECTION: Historisk Museum, Oslo.

MEASUREMENTS:

L 3.25

W 1.25 (incomplete)

DATE: A.D. 350–400.

Basically similar to *E.20* (Plate 16a here) and *E.30*, though more simply executed than these. The aperture is formed by a single plate spanning the opening between the upper and lower scabbard wall plates and seems to be of a single piece with these. In the center of each segment (upper and lower plates and aperture section) is a "sun" motive of concentric circles with short radiating lines.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. XVIII, 8b, photo of top, scale 1:1.

#### *E.26*. . . . . Plate 16c

MATERIAL: Wood.

PROVENANCE: Peat bog at Nydam, Sleswig, Denmark.

COLLECTION: Nationalmuseet, Copenhagen.

MEASUREMENTS:

L 2.38 (aperture area)

L 6.00

W .38 (at aperture)

W 2.19 (at lower end)

DATE: Late third or fourth century after Christ.

This scabbard slide, basically nearly identical in form to *E.24*, is carved in one piece with the wooden scabbard. The aperture area consists of a raised rectangle of wood on the scabbard wall with the aperture cut through near the center. The spreading tail-like projections from the lower end, which on *E.24* are metal strips attached to, and lying flat upon, the scabbard wall, are here reproduced as linear ornament on the scabbard, each projection being defined by a double line about its perimeter. It seems probable that the slide and its pendant projections were originally sheathed with metal pieces similar to those of *E.24*, the latter probably being only the plate which fitted

over a wooden slide form such as this.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. XX, 1a, photo of full scabbard, scale 1:5; pl. XX, 1b, detail photo of slide, scale 1:2.

#### *E.27*

MATERIAL: Bronze.

PROVENANCE: Peat bog at Nydam, Sleswig, Denmark.

COLLECTION: Sleswig-Holsteinisches Museum vorge-schichtlicher Altertümer, Kiel.

MEASUREMENTS:

L 6.25 (incomplete)

W 2.56

DATE: Mid-fourth century after Christ.

Basic form and construction similar to *E.30*. The protracted upward-projecting point is broken close to the point where the upper plate widens above the aperture area. The lateral arms of the upper and lower plates have single perforations at each end for rivets which attached the slide to the scabbard wall. The surfaces of the upper and lower plates and aperture section are ornamented with a series of circles formed by a central indentation surrounded by two concentric rings. A central vertical axis on the aperture plate is defined by a wedge-shaped ridge.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. XXI, 5, photo of top, scale 3:4.

#### *E.28*

MATERIAL: Bronze.

PROVENANCE: Peat bog at Nydam, Sleswig, Denmark.

COLLECTION: Nationalmuseet, Copenhagen.

MEASUREMENTS:

L 5.94

W 1.88

DATE: Mid-fourth century after Christ.

The lateral arms of the upper and lower plates have single perforations at each end for rivets which attached the slide to the scabbard wall. The aperture plate is marked with a series of parallel grooves and a row of dots along each vertical side and through the center vertically. The upward- and downward-projecting points are marked near their centers by two pairs of horizontal lines set close together.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. XXI, 6, photo of top, scale 2:3.

#### *E.29*

MATERIAL: Bronze.

PROVENANCE: Keho, Finland.

COLLECTION: Nationalmuseet, Helsinki.

## MEASUREMENTS:

L 3.75 (incomplete?)  
W 2.19

DATE: Mid-fourth century after Christ.

Basic form and construction similar to *E.28*. Both the upper and lower points may not be preserved to their original length. The lateral arms of the upper and lower plates have single perforations at each end for rivets which attached the slide to the scabbard wall. The aperture plate is marked by a shallow groove defining a central vertical axis, and the two halves thus formed are bordered all round by rows of shallow dots. Similar dots appear along the curved upper edges of the lateral projections of the upper scabbard wall plate.

REFERENCE: Behmer, *Das zweichneidige Schwert* (1939), pl. XXI, 7b, photo of top, scale 1:1.

*E.30*

MATERIAL: Bronze.

PROVENANCE: Peat bog at Nydam, Sleswig, Denmark.  
COLLECTION: Nationalmuseet, Copenhagen.

## MEASUREMENTS:

L 5.56 (incomplete)  
W 2.06

DATE: Mid-fourth century after Christ.

Basic form and construction similar to *E.28*. The upward-projecting point is broken. The lateral arms of the upper and lower plates terminate in stylized bird heads, the eyes perforated for receiving rivets by which the slide was attached to the scabbard wall. The raised aperture plate is marked by four vertical ridges dividing the surface into three approximately equal parts. Two pairs of horizontal parallel lines are drawn across the lower point just below the point at which it broadens to form the lateral arms which define the lower edge of the aperture.

REFERENCE: Behmer, *Das zweichneidige Schwert* (1939), pl. XXII, 1, photo of top, scale 2:3.

*E.31*

MATERIAL: Bronze.

PROVENANCE: Peat bog at Nydam, Sleswig, Denmark.  
COLLECTION: Sleswig-Holsteinisches Museum vorgeschichtlicher Altertümer, Kiel.

## MEASUREMENTS:

L 8.50  
W 2.34

DATE: Mid-fourth century after Christ.

Basic form and construction similar to *E.28* and *E.30*.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. XXII, 2, photo of top, scale 4:5.

*E.32*

MATERIAL: Bronze.

PROVENANCE: Peat bog at Kragehul, Denmark.

COLLECTION: Nationalmuseet, Copenhagen.

## MEASUREMENTS:

L 11.25  
W 1.88

DATE: Mid-fourth century after Christ.

Basic form and construction similar to *E.28*. The aperture plate is formed by a plain flat disk.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. XXII, 4, photo of top, scale 1:2.

*E.33*

MATERIAL: Bronze, with silver inlays.

PROVENANCE: Peat bog at Kragehul, Denmark.

COLLECTION: Nationalmuseet, Copenhagen.

## MEASUREMENTS:

L 10.94  
W 2.19

DATE: Mid-fourth century after Christ.

Basic form and construction similar to *E.28*. The aperture plate is formed by a plain flat disk with a quatrefoil design formed of lozenge-shaped silver inlays.

REFERENCE: Behmer, *Das zweischneidige Schwert* (1939), pl. XXII, 5, photo of top, scale 2:5.

*E.34* ..... Plate 17a

MATERIAL: Bronze.

PROVENANCE: Hallbjens-Bjerges, Gotland, Sweden.

COLLECTION: Statens Historiska Museum, Stockholm.

## MEASUREMENTS:

W 2.03

DATE: Mid-fourth century after Christ.

Basic form and construction similar to *E.30*. This slide was found still joined with the scabbard and hence the mode of employment may be seen. The edges of the scabbard are reinforced with concave metal bands enclosing the narrow wooden scabbard edges, and these are connected at the scabbard mouth with the metal ferrule. The lateral arms of the upper and lower scabbard slide plates extend to the edges of the scabbard and are riveted either to the metal edge bands or to the wood just inside these. The downward-projecting point is broken off, but the upper point is drawn out as a long band which is joined to the ferrule. It is not clear whether this upward-projecting point is attached to, or cast with, the ferrule. The square aperture plate forms a raised bridge between the upper and lower scabbard slide plates; the inner side of the aperture was thus provided by the scabbard wall.



## GANDHARA, WEST PAKISTAN

GP.1 .....Plate 17*d*

**MATERIAL:** Whitish, marble-like stone with reddish brown vein and red-brown stains (iron oxide?); beveling of forward aperture edges possible evidence of belt wear; broken slightly below the aperture, the lower end missing; corroded iron rivets above and below the aperture fitted into centrally drilled holes passing through the upper plate and forward and rear aperture walls to the underside, and similar rivets at the upper forward edge and inner forward edge, the direction and function of which are uncertain.

**PROVENANCE:** Sirkap (Taxila), Block F', spoil earth of uppermost occupation level (first two feet below surface) of building VII, VIII, IX, "on the south side of the plot, flanking Eighth Street"; excavated 1928.

**COLLECTION:** Taxila Museum .3941,  $\frac{SK}{28}$  1461 (thus at museum); Sk. '28—1,461 (thus in Marshall B); SK. 1461 (thus in Marshall A).

**MEASUREMENTS:**

L	of remaining fragment 3.06 ( $3\frac{1}{8}$ in A, p. 58; 3.12 in B, 2, p. 508.
W	at upper end 1.19
W	at break 1.13
D	.84
ApL	on side 1.38; interior ca. 1.13
ApD	.31
ApX	2.06

**DATE:** Last half of first century after Christ.

Undecorated. Unlike the Chinese scabbard slides which frequently are broadest at the central point of the aperture, this slide is broadest at the upper end, tapering slightly and regularly to the break below the aperture. The sides are straight. The plates and aperture walls of the piece are thick and massive. The exterior surfaces of the aperture walls slope outward from the lower aperture plate, away from the roughly rectangular aperture.

The forward end is carved in an awkward imitation of the Chinese slide with fully formed, strongly involuted hook ridge which does not generally appear on Chinese slides before the first century B.C. The forward edge is rounded in a broad, somewhat flattened arc, with a slight suggestion of back-slope at the inner portion of the arc. As the forward edge curves inward its width is reduced, and the blunt end ridge was not completely detached from the underside of the upper plate. At the center of each side of the forward end is a round hole bored approximately .31 into the slide. These holes presumably were to have been drilled to meet in the center, thus freeing the inward curve of the forward end from the solid mass to form a clear hook ridge. The rudimentary formation of the forward hook suggests that the tools

employed, or the skill of the stone cutter, were inadequate to accurately reproduce the Chinese model and that rather than risk breakage of the piece work was stopped.

The iron rivets fitted through the slide, evidently serving originally to attach the slide to the scabbard, are unique. The three corroded rivet ends on the top project about .09 above the surface, an expansion above their presumably flush position caused by the corroding. They protrude less on the underside. The two rivets immediately above and below the aperture are set at an angle, rising slightly as they pass through the interior of the slide from the surface of the upper plate (where they are lowest) to the exterior of the lower aperture plate.

The upper plate appears to have been of uneven thickness, the upper bay having been cut in to a greater depth than the lower. If the depth of the upper plate over the upper bay is taken to represent the depth of this plate, the aperture does not project into the upper plate. Above the lower bay (largely missing), however, the upper plate is considerably thicker and forms a line which would include about one half of the aperture within its depth.

The object was unidentified by Marshall. Marshall (B, 1, p. 182, and 2, p. 508) states that it was recovered from the spoil earth of Block F', i.e., it was found in sifting removed earth and hence is without more precise context than its general location within building VII, VIII, IX in Stratum I. Block F', between Seventh and Eighth Streets, and extending for 195 feet along Main Street (see Marshall B, 3, pl. X, plan of city), is the widest block to the west of Main Street at Sirkap, and lies about 400 feet north of Block J, on the east side of Main Street, where GP.2 was found. Marshall (B, 1, p. 181) gives the following description of Block F'.

In plan also it differs from the neighboring blocks in that it consists mainly of a series of large courts, with only a relatively small area reserved for living rooms. When I first excavated this block I inferred that it was divided into several moderate-sized houses, but I now have no doubt that, apart from the front line of shops [along Main Street], the remains are those of a single large mansion, the full extent of which towards the west has yet to be revealed.

The only finds from Block F', Stratum I, possibly pertinent to the scabbard slide are coins, found in five squares: 88.86', 93.78', 93.79', 93.80', 94.79'.

- 2 Vonones with Spalahores
- 24 Azes II
- 81 Gondophares (all copper, cf. Marshall B, 1, p. 211)
- 171 Kujula Kadphises
- 8 Kujula Kara Kadphises (cf. Marshall B, 1, p. 67 f., Vima Kadphises; Marshall, who believes Sirkap to have been conquered by Vima Kadphises, explains [B, 1, p. 212] the relatively small number of his coins, as opposed to the very

large number of Kujula Kadphises coins, by considering: (1) that Vima Kadphises continued to use the coinage of his father, and (2) that Vima Kadphises transferred the Kushan city to Sirsukh soon after the conquest.)

(See additional notes following **GP.2**.)

REFERENCES:

A. Marshall, "Excavations at Taxila" (1933), pl. XX, 4, photo of side; text, p. 58.

B. Marshall, *Taxila* (1951), 3, pl. CXLII, jj = no. 158, a, drawings of profile and bottom; 3, pl. CCIII, h = St. no. 158, a, oblique bottom/profile photo; text, 2, p. 508, no. 158, a, and 1, p. 182.

Salmony, *Chinese Jade* (1963), p. 121, not illustrated. Salmony is mistaken in believing that this slide was brought to Gandhara from China.

Trousdale, "Possible Roman Jade" (1969), p. 59, fig. 5, after Marshall (1933).

**GP.2**

**MATERIAL:** Pale green, marble-like stone; upper plate broken slightly above lower end of lower aperture wall, the lower portion of the slide missing.

**PROVENANCE:** Sirkap (Taxila), Block J, spoil earth of uppermost occupation level (first two feet below surface), from square 146.54'; excavated 1926, but not reported with the finds of this year (Marshall, "Taxila" [1930]).

**COLLECTION:** Taxila Museum 3940, SK.26.1120 (thus at museum); Sk. '26—1,120 (thus in Marshall).

MEASUREMENTS:

L 2.25	ApL 1.19
W 1.13 at upper end	ApD .31
W .91 at break	ApX 1.59
D .78	

**DATE:** Last half of first century after Christ.

Undecorated. The slide is broadest at the upper end, tapering rather sharply and regularly to the break. The sides are straight.

As with **GP.1**, the form of the slide suggests imitation of later Western Han scabbard slides, but the carving of **GP.2** is somewhat more rudimentary than that of **GP.1**. The forward edge is only partially rounded from the squared end of the rough block, but the inner portion of the forward end more effectively renders the back-slope of the Chinese model. A lateral hole drilled through the forward end, presumably to free the inward curve of the end from the solid mass to form a clear hook ridge, has not been met by an undercut from the upper bay so that a round inward-projecting wedge only was achieved. Careful imitation of the Chinese form may have been abandoned, for lack of adequate tools or skill on the part of the carver, in order to avoid the risk of breakage. The stone is softer than that generally used by the Chinese for the manufacture of scabbard slides.

The aperture, with rounded ends, penetrates only slightly into the upper plate. The upper and lower plates and aperture walls are proportionately thick and only somewhat less massive than those of **GP.1**.

The object was unidentified by Marshall. Recovered from the spoil earth of Stratum I, Block J, square 146.54'; the precise depth and context of the slide is not ascertainable.

Block J, bordering Main Street to the east (see Marshall, 3, pl. X, city plan), adjoins Block K where the royal palace is situated. Of Block J, Marshall (1, p. 171) says:

... the whole of Block J consists of small, closely packed dwellings, which, like those of the back of Block G, show very haphazard planning. One may conjecture that they were occupied by minor officials or attendants connected with the royal palace.

The only finds from Block J, Stratum I, possibly pertinent to the scabbard slide, are coins, found in square 143.53', some thirty feet from the square in which the slide was found.

21 Adzes II with Aśpavarma

91 Gondophares

(See additional notes below.)

REFERENCE: Marshall, *Taxila* (1951), 3, pl. CCIII, h = St. no. 158, b, oblique bottom/profile photo; text, 2, p. 508, no. 158, B.

*Sirkap Finds Relevant to Scabbard Slides GP.1 and GP.2*

I. Taxila Museum 3939,  $\frac{SK}{26}$  1120, unfinished sword guard of pale green marble-like stone; flat ends, top and bottom; sides swelling outward, the outward curve of one side being more pronounced. The interior has been hollowed out partially by carving, partially by drilling.

The five circular bore impressions, abandoned at varying penetration depths, indicate the manner in which the aperture was cut. The upper sides of the oval socket had already been smoothed.

The number of this object indicates that it was excavated in 1926, but it was not reported in either the preliminary nor the final publication of the excavations at Taxila. The discovery year, that of **GP.2** also, and the catalog number of the piece, which differs from that of **GP.2** by one digit only, suggest that the object belongs to Block J, Stratum I, and was closely associated with **GP.2**. This guard is not of the normal Chinese stone-guard type, but the impetus to manufacture it was probably derived from Chinese models. See also P.3 for a similar stone piece from the Perm region of east central Russia, and see also Figure 99 for a related form in bronze, reputedly from China.

II. Three iron swords were recovered at Sirkap, all from Stratum II, belonging exclusively to the first century after Christ (Marshall, *Taxila* [1951], 2, p. 544, and 3, pl. CLXIV, nos. 56–58). The blades are all tanged, double-

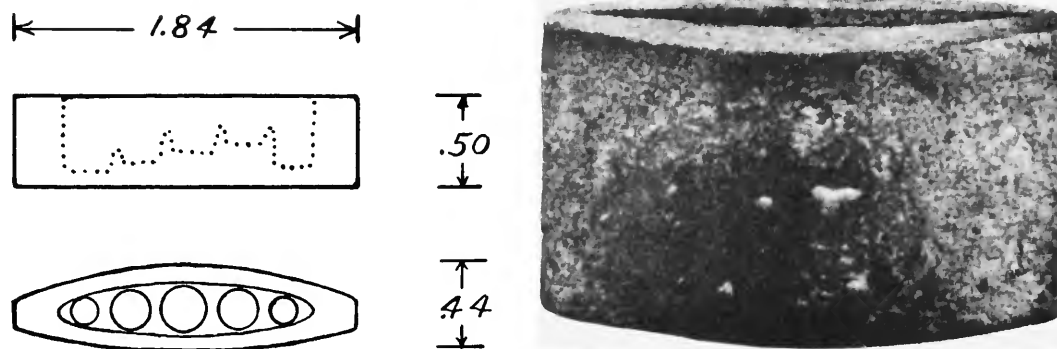


FIGURE 99.—Rectangular sword guards from Taxila and China. [After Janse (1930), plate XVII,7.]

edged, and relatively broad. No. 56 is 34.25 long; no. 58 is 21.00 long; no. 57 is broken, with length of remaining fragment 15.00 long. The swords are not comparable to Chinese Han dynasty types; Marshall quite rightly compares them to the Roman *spatha* (2, p. 544). All of the swords are furnished with separately cast bronze guards. Two of these, on nos. 57 and 58, are identical in form to types of Chinese bronze sword guards of the Han dynasty, with rounded shoulders and lateral projection beyond the blade (e.g., Figure 37 here). They are certainly to be considered imports. The guard associated with sword no. 56 is a simplified, angular imitation of the Chinese form.

Guards of the former type, extremely common on Chinese iron swords of Han age, are amply attested in regions outside China: see, e.g., Hamada, *P'i-tzu-wo* (1929), pl. LIV, 4 and fig. 37, 6, from southeast Manchuria; Harada and Komai, *Bokuyōjō* (1931), fig. 26, 5, from southeast Manchuria; Umehara and Fujita, *Chōsen kobunka sōkan* (1947–1948), 2, pl. XXXVIII, 65, from Lo-lang district, Korea. These examples are all from the Chinese border regions, however, where Chinese guards may more reasonably be expected to be found. The Taxila guards represent the westernmost extension of this type presently known.

## KOREA

### K.1

MATERIAL: Jade.

PROVENANCE: Lo-lang<sup>k</sup> district (?).

COLLECTION: National Museum, Seoul.

DATE: Han.

The surface of the upper plate is ornamented with the profile of a thick-bodied dragon form, partly in low relief, partly incised, with curled tail and projecting serrated spinal appendage. The surface of the body is ornamented with a single chain of interlocked C-spirals. The plate is unbordered. Across the forward end a deep groove has been cut and there is apparently an animal mask of some sort on the forward edge, only partly visible in the published photograph. The upper plate in profile is flat.

The upper end is involuted in a rounded, regular curve ending in a hook-ridge. At the lower end, the upper plate curves inward and is terminated in a blunt ridge with the suggestion of a rudimentary forward-projecting hook-ridge. The lower aperture plate and aperture walls are nearly equal in thickness to the upper plate.

The subject of its ornamentation, not represented among extant Chinese scabbard slides known to me, and the somewhat coarse workmanship and clumsy shape of the piece suggests it is an imitation of the Chinese form of scabbard slide produced locally outside China.

REFERENCE: Sirén, *Kinas Konst* (1942–1943), 1, p. 248, fig. 162.

## MONGOLIA

### M.1

MATERIAL: *Ma-nao* 瑪瑙 carnelian/agate; wavy, marble-like veining (incorrectly identified on pl. XL, 7 as jade).

PROVENANCE: Tomb 12 of a group excavated in the

late 1930s by Ono Katsutoshi, Hibino Takeo and Mizuno Seiichi, at Ho-hsi 河西, in Yang-kao hsien 陽高縣, Ku-ch'eng-pao fu 古城堡附, Shansi<sup>n</sup>-Suiyüan 綏遠 border region of Inner Mongolia, at ca. 113 degrees 50' long, E. by 40 degrees 30' lat. N.

DATE: Last half of first century B.C.

The upper surface of the scabbard slide is unornamented except for the natural patterning in the veining of the stone. The slightly arched upper plate is exceptionally thick, the aperture walls and lower aperture plate of sturdy construction. The piece was probably intended for use. The forward end curves inward, with a slight back-slope to the forward edge, and terminates in a well-formed undercut hook-ridge of sturdy proportions in keeping with the form of the slide. The lower end of the upper plate curves inward sharply (as on *CV.8*, for example), terminating in a broad, blunt ridge with a forward-projecting squared wedge. The end hooks lie slightly above the line of the inner side of the lower aperture plate so that the piece could be conveniently set into a socket on the scabbard wall.

The excavation of tomb 12 was directed by Mizuno Seiichi chiefly. It was in the form of a typical steppe kurgan, over thirty meters in diameter and "several meters" high (pl. XXIX, upper). The excavators express the opinion (p. 93) that it had been robbed in antiquity. The coffin was made of wood. Inside the coffin, the excavators found several lacquered utensils and a bronze stamp seal, partly legible, which they believe bears the name of the interred (p. 302 and pl. XLI, center). The coffin also contained two fragments of silk embroidery (pls. LVII, upper, LVIII, upper) of identical type to two fragments from Noin Ula Hsiung-nu 匈奴 graves (Trever, *Excavations in Northern Mongolia* [1932], pls. XVI, XXI, 2; Lubo-Lesnichenko, *Drevnie Kitaiskie tkani* [1961], pls. XII, 1, XXVI, 1, XXXI, XXXII; Rudenko, *Kul'tura Khunov* [1962a], pl. XLVII). The coffin also contained 1850 copper coins of the *wu-chu* 五銖 type, circular with square hole in the center (pl. XXXII, lower).

The sword to which the scabbard slide belonged may not have been preserved; it appears not to be mentioned in the text and is not illustrated. It was probably similar to the iron sword associated with scabbard slide *XM.5* found in the same tomb (see description under *XM.5*).

Tomb 17, similar in size and construction to tomb 12 (pl. XIII, upper), contained inside the coffin an iron sword 80 cm. in length, with well-preserved black-lacquered sheath (pl. XIX, lower) and wooden grip much decayed but originally covered with gold leaf. The sword was provided with a guard of carnelian and the author believes (p. 280) that it probably had a scabbard slide of the same stone. The tomb also contained two iron knives with ring pommels, coins, lacquered utensils, bronze "hill censers," a bronze *ko* 戈 dagger-axe (pl. XIX, upper), and a bronze ring-pommeled knife and belt hook (pl. XX). In both tombs 17 and 15, Chinese bronze mirrors with inscriptions were found. Mirrors of this type probably first appeared at the end of the second century B.C., were popular during the first century B.C., and seem to have

disappeared during the course of the first century after Christ (Bulling, *Mirrors of the Han Period* [1960], p. 26), through recent excavations of post-Han tombs in Szechuan suggest that in provincial areas typical Han inventories may have continued into the later third or early fourth century after Christ (Shen, "Szu-ch'uan Chao-hua" [1959], p. 119). The mirror from tomb 17 (pl. XXI) is similar to one in the collection of His Majesty Gustaf VI Adolf, King of Sweden (Bulling, op. cit., pl. XXI) and probably belongs to the mid first century B.C. The mirror from tomb 15 (pl. VIII) is similar to one recovered from the Han dynasty tomb at Ch'ang-sha<sup>d</sup> (*Ch'ang-sha fa-ch'ieh pao-kao* [1957], pl. LXVII, 3), a type which seems to have developed in the later part of the first century B.C. (See also Bulling, op. cit., p. 28 and pl. XXII.)

The mixed inventory of the tombs, containing Chinese import objects (textiles, bronze belt hook, dagger-axe, hill censers, lacquered utensils, coins) and objects of local manufacture imitating Chinese productions (the scabbard slide and other objects of jade, carnelian, and bone (pls. XXXVIII-XLI)), suggests a mixed population. The authors believe the tombs were those of a highly sinicized people, possibly almost assimilated into Chinese culture, but basically of Hsiung-nu stock (p. 332). The bodies were buried according to Chinese ritual (p. 337), with jade, or other stone, pieces sealing the orifices. The jade objects especially reflect local craftsmanship, endeavoring to imitate Chinese styles, but in decorating the surfaces with incised curvilinear patterns probably copied from the surfaces of Chinese lacquered vessels (pls. XXXVIII, XXXIX), the local artisans introduced a repertoire of motives not to be found on jade work of this period within China proper. The working of agate, though known in China, is more characteristic of northern stone work, not only in Inner Mongolia but in Manchuria as well (Harada, *Bokuyōjō* [1931], pls. LVI, 2, XVIII, 1 and 4, and fig. 24, 2). Beginning in the late Chou period, agate had a somewhat more restricted use in China.

The carnelian scabbard slide must certainly have been associated with a long iron sword similar to the one from tomb 17, or the one from tomb 12 with which *XM.5* was associated. There is yet no evidence to suggest that the Hsiung-nu developed or used a long sword (Kao, "Sword Worship in Hsiung-nu Religion" [1960]); their typical weapon was the knife. The scabbard slide is, beyond question, of local manufacture. Whether it belonged to a sinicized Hsiung-nu or to a Chinese provincial official, perhaps a bit barbarized, is a question which cannot be answered.

(Cl. *XM.5*, from the same tomb.)

REFERENCE: Ono and Hibino, *Mōkyō kōkoki* (1946), pl. XL, 7, profile and top photo.

## PERM DISTRICT OF THE USSR

NOTE: Rostovtsev, "Le porte-épée des iraniens" (1930), p. 339, according to information received from A. M. Tallgren, speaks of the possible existence of a fourth scabbard slide from the Perm district, in the Rummyantsev Museum, Moscow. J. Werner (*Archäologie des Attila-Reiches* [1956], Heft 38-A, p. 27) also speaks of four slides from the Perm region, again citing Tallgren. This is probably identical to P.1 which was later transferred to the Gosudarstvennyĭ Istoricheskiĭ muzeĭ, Moscow, so that the existence of three scabbard slides only from the Perm region may be presumed.

But cf. RX.1 and SR.4.

P.1 . . . . . Plate 17e

MATERIAL: Stone; the type has been variously identified and described, in order of publishing date, as chalcedony (A and C), "white Chinese marble" (B), jade (G), greenish nephrite (E). Kusheva-Grozevskaya (E, p. 160, n. 1) stresses that identification of the piece as chalcedony by Aspelin (A) is incorrect.

PROVENANCE: According to Kusheva-Grozevskaya (E, p. 160), the slide was a chance find on the lands of the Poshev factory on the Kama River in the former Perm guberniya. Rostovtsev (F, p. 339) reports its find spot as the village of Trandy, in the same region.

COLLECTION: Formerly Eshev (private) collection; received by the Rummyantsev Museum, Moscow, before 1877, and reported in this collection by A (1877) and by D (1926). Kusheva-Grozevskaya (E, p. 160) reports, in 1929, that it is in the Gosudarstvennyĭ Istoricheskiĭ muzeĭ, Moscow, and presumably it is there at present. Rostovtsev (F, p. 339, n. 3) is evidently wrong in placing it (1930) in a museum in Perm. The piece was seen in Moscow by Umehara (H) in the mid-1930s. The piece was reported to me (Moscow, 1960) as being in the museum at Vyatka in the Perm district, but probably is still in Moscow.

MEASUREMENTS: Published records of this scabbard slide do not agree on its measurements. I have indicated below the variants together with their source. The measurements marked \* are estimates calculated from the half-size illustration in A.

L	4.53 (F, p. 339); 3.55 (E, p. 160) 4.44*
W	1.18 (E, p. 160)
D	.79 (E, p. 160); .88*
ApL	.75 (E, p. 160); 1.00*
ApD	.35 (E, p. 160); .38*
ApX	1.56*

DATE: Third to fourth century after Christ.

Unornamented. The piece has been variously identified as a sword guard (C) and as a belt clasp (B). The thick

upper plate is straight. The forward end of the upper plate, extended above the aperture, curves inward in a broad, regular arc, terminating in a back-projecting, sharp hook-ridge of extraordinary prominence. At the lower end the upper surface of the upper plate inclines inward at an oblique angle, meeting the base of the slide at an acute angle. The under surface of the upper plate turns inward at right angles so that a lower end ridge of roughly triangular profile is formed. Both the upper and lower ends project inward to a depth level with the base of the lower aperture plate. The aperture itself is usually depicted as rectangular in shape, but nearly all of the drawings of this slide are based on one published by Aspelin (A, Plate 17e here). Kusheva-Grozevskaya (E), who probably personally examined the piece, has depicted the aperture with a curved upper end. Cf. similar aperture on SR.10. The aperture projects into the upper plate.

## REFERENCES:

A. Aspelin, *Antiquités du nord fino-ougrien*, 2 (1877), p. 149, no. 631, oblique bottom/profile drawing, half-size, inverted.

B. Moscow, Moskovskii Publichnyi i Rummyantsevskii muzeĭ, *Katalog* (1905), p. 44, no. 1220, not illustrated.

C. Tallgren, *L'Orient et l'Occident dans l'âge du fer finno-ougrien* (1924), p. 23, fig. 11, no. 4, oblique bottom/profile drawing, based on Aspelin (A), but not inverted.

D. Vignier, "Notes sur un livre récent" (1926), p. 116, not illustrated.

E. Kusheva-Grozevskaya, "Odin iz tipov Sarmatskogo mecha" (1929), pl. I, fig. 2, oblique top/profile drawing.

F. Rostovtsev, "Le porte-épée des iraniens" (1930), p. 339, fig. 258, no. 4, after Tallgren (C).

G. Tallgren, "Notes marginales" (1933), p. 237, fig. 4, second from top, after Tallgren (C).

H. Umehara, *Kodai hōppō-kei bumbutsu no kenkyū* (1938a), p. 59, fig. 21, 4, top, profile and bottom drawings.

J. Egami, *Yūrashia kodai hōppō bunka* (1948), pl. XXIX, 4 (lower left), top, profile and bottom drawings, after Umehara (H); immediately above these is another drawing of the same slide after Tallgren (C).

P.2 . . . . . Plate 18a

MATERIAL: Stone, identified as chalcedony by Aspelin (A), and Tallgren (B).

PROVENANCE: According to Rostovtsev (D, p. 339), a chance find near the Poluden River (a tributary of the Kama) in the Perm district, now Molotov district, RSFSR.

COLLECTION: Formerly S. A. Teploukhov at Ilinsk, province of Perm; reported to me (Moscow, 1960) as being in the museum at Vyatka in the Perm district;



probably it is presently in the Gosudarstvennyi Istoricheskii muzei, Moscow.

MEASUREMENTS: Measurements marked \* are calculated from the half-size drawing published by Aspelin (A).

L 4.72 (D, p. 339); 4.44*	ApL 1.00*
D 1.03*	ApD .19*
	ApX 1.30*

DATE: Third to fourth century after Christ.

Unornamented. The piece is similar in form to P.1, with the following exceptions. The forward edge is rounded, but the arc is flatter. The forward edge does not terminate in an involuted hook-ridge, but is brought up to meet the under surface of the upper plate at right angles. The upper plate is extremely thick, the upper and lower bays little more than rectangular notches in a solid piece. The rectangular aperture is almost completely within the area of the upper plate.

REFERENCES:

A. Aspelin, *Antiquités du nord fino-ougrien*, 2 (1877), p. 149, no. 630, oblique top/profile drawing, half-size, inverted.

B. Tallgren, *L'Orient et l'Occident dans l'âge du fer finno-ougrien* (1924), p. 23, fig. 11, no. 5, oblique top/profile drawing, based on Aspelin (A), but not inverted.

C. Kusheva-Grozevskaya, "Odin iz tipov Sarmatskogo mecha" (1929), p. 161, not illustrated.

D. Rostovtsev, "Le porte-épée des iraniens" (1930), p. 339, fig. 258, no. 5, oblique top/profile drawing, after Tallgren (B).

E. Tallgren, "Notes marginales" (1933), p. 237, fig. 4 (third from top), after Tallgren (B).

F. Egami, *Yūrashia kodai hoppō bunka* (1948), pl. XXIX, 4 (upper right), oblique top/profile drawing, after Tallgren (B).

P.3..... Plate 18b

MATERIAL: Stone; the type has been identified, in order of publishing date, as nephrite or whitish nephrite (A, C, D, E), chalcedony (B), jade (J).

PROVENANCE: Chance find at Beklemishevka field, between the Gorev and Poluden tributaries of the Kama River (A, pp. 50, 53) in the former province of Perm, now the Molotov district, RSFSR. Talitskaya (K, p. 120 f., s.v. no. 909) gives the coordinates of this place as 58 degrees 20' lat. N by 55 degrees 30' long. E, and presents a bibliography for finds made at this spot.

COLLECTION: Formerly S. A. Teploukhov; Rostovtsev (F, p. 339) indicates that the piece is in the museum at Perm; reported to me (Moscow, 1960) as being in the museum at Vyatka in the Perm region; possibly it is in the Gosudarstvennyi Istoricheskii muzei, Moscow.

MEASUREMENTS: Rostovtsev (F, p. 339) provides a

length measurement of 2.95 for a scabbard slide found at the village of Markhov, Perm. This is incorrect. The object is not a scabbard slide (see below). No measurements or scaled drawings of this piece have been published.

DATE: According to Talitskaya (K), the finds from Beklemishevka are to be dated between the fourth and ninth centuries. The scabbard slide must be near to the earlier limit.

Unornamented. The slide is almost identical in form to the preceding (P.2). The upper plate is extremely thick, but the upper and lower bays are somewhat more deeply cut and the rectangular aperture is only partially cut into the area of the upper plate. The walls of the bays are perhaps not quite perpendicular, though drawings vary somewhat in depicting the degree of slant.

Spitsyn published with the scabbard slide another object (A, pl. III, 17) of nephrite, a chance find from the village of Markhov (?) on the Lomovaton River (A, pp. 51, 54), a tributary of the Kama River, in the Perm region. He catalogs it as an object of unknown use. It is this object that Rostovtsev (F, p. 339) erroneously identified as a scabbard slide and for which he gave the measurement of 2.95, which, to judge from the lengths of P.1 and P.2, is surely too short for the scabbard slides of this region. This angularly cut, straight-sided object is a fragment only, perhaps constituting about one half or less of the original piece. The remaining portion resembles a flat, half-lozenge shape, with blunt, narrow end. In the center of the broken wider end is a portion of a circular or oval cut which was drilled through the object and probably served as a socket. I am inclined to believe that this object is a fragment of a stone sword guard, inspired by, but hardly accurately imitating, the Chinese sword guards of jade. The shape of the fragment suggests the guard was modeled after similar bronze, flat, lozenge-shaped guards belonging to earlier Samatian swords, but sometimes encountered on the late Samatian iron swords of the Volga-Ural steppe. The tang of the sword would have been passed through the socket in the stone, the latter secured against the butt of the blade by the overlay of wood around the tang above forming the grip of the sword.

A stone guard of somewhat different type, but doubtless also inspired by the Chinese examples, was found at Sirkap (Taxila): see note following GP.2.

REFERENCES:

A. Spitsyn, *Drevnosti Kamskoi chudi* (1902), pl. II, 1 oblique bottom/profile drawing, inverted; text, pp. 28, 50, 53.

B. Tallgren, *L'Orient et l'Occident dans l'âge du fer finno-ougrien* (1924), p. 23, fig. 11, no. 6, oblique bottom/profile drawing, based on Spitsyn (A), but not inverted.

C. Shmit, "Tuiskii vsadnik" (1925), p. 431, not illustrated.

D. Ginters, *Das Schwert der Skythen und Sarmaten* (1928), p. 69, pl. XXVIII, f, oblique bottom/profile drawing, inverted, based on Spitsyn (A).

E. Kusheva-Grozevskaya, "Odin iz tipov Sarmatskogo mecha" (1929), p. 161, not illustrated.

F. Rostovtsev, "Le porte-épée des iraniens" (1930), p. 339, fig. 258, no. 6, after Tallgren (B).

G. Janse, "Notes sur quelques épées anciennes" (1930), p. 80, fig. 4, no. 3, oblique bottom/profile drawing, inverted, based on Spitsyn (A).

H. Tallgren, "Notes marginales" (1933), p. 237, fig. 4,

bottom, after Tallgren (B).

J. Janse, "L'empire des steppes" (1935), pl. IV, 7, oblique bottom/profile drawing, inverted, based on Spitsyn (A).

K. Talitskaya, *Urala i Priural'ya* (1952), p. 120 f., s.v. no. 909, not illustrated.

L. Maenchen-Helfen, "Crenelated Mane and Scabbard Slide" [1957], p. 91, fig. 6, f, after Ginters (D).

M. Trousdale, "Possible Roman Jade" (1969), p. 59, fig. 6, after Spitsyn (A).

## USSR

(Unknown Provenance)

RX.1 (possibly identical to SR.4)

MATERIAL: Nephrite, greenish white.

COLLECTION: Gosudarstvennyĭ Istoricheskii museĭ Moscow, no. 31666, room B (V), case 6/2.

MEASUREMENTS:

L 3.82	ApL 1.14
W .98	ApD .32
D .59	

Chance find; provenance unknown. Unornamented. The upper plate is flat. The upper end curls inward to

form a hook. At the lower end, the upper plate slopes inward and down at an oblique angle, terminating at the lower end in an acute angle. The broad flat under-ridge at the lower end is provided with a forward projecting wedge creating a hook-ridge. The aperture does not penetrate into the upper plate, i.e., the outer or upper interior surface of the aperture forms a line parallel with the undersurface of the upper plate.

REFERENCE: Kusheva-Krozevskaya, "Odin iz tipov Sarmatskogo mecha" (1929), pl. I, fig. 1, oblique top/profile line drawing, inverted; text, p. 160.

## SYRIA

S.I. . . . . .Plates 18d and 19a-b

MATERIAL: Ivory, brown; no evidence of wear.

PROVENANCE: Khisfine, Syria, a cemetery of the Roman period to the south of Damascus, excavated May 1943.

COLLECTION: National Museum, Damascus; accession number 4279.

MEASUREMENTS:

L 3.94	ApL 1.57
W .55 (maximum)	

DATE: Roman period, second century after Christ.

Nearly identical in form to CZ.14, E.2, E.35, S.2.

The scabbard slide is carved in one piece with the ivory sword scabbard. The lateral borings above and below the aperture are thus not required for attachment, but may have served for the passage of lashing to provide additional strength. At the lower end, a gracefully proportioned hook curves outward and upward. The upper end is blunt. The slide tapers rather sharply and regularly from the upper end where it is broadest to the lower end terminating in the hook. The aperture is closed by the scabbard wall, and the upper and lower aperture walls

are convex. There is no applied ornamentation to its surfaces.

The slide belongs to a well-preserved ivory scabbard which contains a fragmentary, much decomposed, broad double-edged iron Roman *spatha* with ivory grip parts and pommel. The grip and separate ivory ferrule are stained gray-green, as though from contact with bronze oxidation, but these parts may preserve original applied staining or coloring. The ivory chape is in the shape of a flat projecting disk, fastened to the scabbard by a gold nail at its center. The preserved length of the sword and scabbard is 30.71. The position of the slide on the scabbard wall seems exceptionally low and must have been counterbalanced by the weight of the chape and heavy sword blade.

REFERENCES:

Damascus, National Museum (1951), p. 152, s.v. 37-Épée (No. 10.088), not illustrated.

Damascus, National Museum (1959), p. 93, s.v. 67, No. C. 4279, not illustrated.

Trousdale, "Possible Roman Jade" (1969), p. 36, fig. 17, upper, drawing of top and profile; text p. 63.

## S.2..... Plate 18c

MATERIAL: Ivory, brown; no evidence of wear.

PROVENANCE: Khisfne, Syria, a cemetery of the Roman period to the south of Damascus, excavated May 1943.

COLLECTION: National Museum, Damascus.

MEASUREMENTS:

L 4.53

DATE: Roman period, second century after Christ.

Nearly identical in form to CZ.14, E.2, E.35, S.1.

The scabbard slide is similar to S.1, with the following exceptions. The hook at the lower end (by analogy with S.1) is a less finely articulated rounded ridge, and the upper and lower aperture walls are more crudely formed, each showing clearly two concavities caused by the drill which was used to cut out the aperture. The slide is not carved in one piece with its scabbard, but forms a sepa-

rate attachment with enclosed aperture, the lower plate being considerably thinner than the upper. Short flat tongues project above and below the slide on the side which rested against the scabbard wall. These suggest the slide was attached to the scabbard wall in the manner of most examples from Europe (e.g., E.2, E.35): lashings bound round the scabbard passed over the tongues, or the tongues inserted under a leather or cloth scabbard cover. Additional support was probably provided by thongs or wire passed through the lateral borings above and below the aperture and tightly bound round the scabbard.

REFERENCES:

Damascus, National Museum (1951) p. 151, no. 31, not illustrated.

Trousdale, "Possible Roman Jade" (1969), p. 63, fig. 17, lower, photo of profile; text p. 63.

## SOUTH RUSSIA

## SR.1 ..... Plate 19c

MATERIAL: Jade, grayish white translucent, with cavities of decomposition on upper surface; entire under surface, but especially under plate of aperture, stained by iron corrosion.

PROVENANCE: According to Rostovtsev (A) and Dalton (B), the slide, together with other articles, chiefly jewelry, was acquired in Kerch and presumably came from a tomb in this area. The records of the British Museum, however, obtained from Mr. Alexandre Volgenioff, indicate that it was found in 1894, without context or associated artifacts, in the central Kuban region of the north Caucasus.

COLLECTION: Formerly General A. L. Bert'e-Delagard (Berthier-Delagarde), Paris; acquired 1923 by British Museum, Department of British and Medieval Antiquities, no. 1923.7-16.88.

MEASUREMENTS:

L 3.63

ApL 1.31

W 1.05

ApD .28

D .59

ApX 1.88

Depth of upper plate over aperture .19. The upper plate is widest over the center of the aperture, narrowing to 1.03 at the head and to 1.00 at the lower end. The sides slope inward slightly toward the base, so that the width of the lower aperture plate is 1.00.

DATE: Carved in China late second to end of first century B.C.; believed by Rostovtsev to have come from a South Russian tomb datable third to fourth centuries after Christ.

The Chinese origin of this scabbard slide is beyond doubt. Only somewhat larger in size, it is otherwise virtually identical in all respects to CV.24, and the description of the decor on that piece may serve to

describe this one.

The geometric decor of the upper surface is extremely worn and can be distinguished with considerable difficulty by turning the piece obliquely to the light. It is difficult to conceive how Umehara (D) was able to obtain such a clear image of the decor unless the photograph has been "touched-up." Unlike the scabbard slides from China which rarely reveal evidence of much wear, this slide was evidently used over a very long period of time before burial as the upper outer edges of the aperture are deeply rounded out from prolonged slippage along the leather belt which passed through the aperture. It is interesting to note that the upper left side of the aperture is considerably more worn than the upper right side; this is revealing of the fact that the sword was worn in an inclined position at the left side. This position places the principal weight of the sword on the belt at the point where it passes around the upper left edge of the aperture.

REFERENCES:

A. Rostovtsev, "Une trouvaille de l'époque gréco-sarmate de Kertch" (1923), p. 134, n. 2, not illustrated.

B. Dalton, "Sarmatian Ornaments from Kerch" (1924), p. 259, not illustrated.

C. Rostovtsev, "Le porte-épée des iraniens" (1930), p. 338, figs. 256 and 257, top and profile photos respectively; text, p. 339.

D. Umehara, *Kodai hoppō-kei bumbutsu no kenkyū* (1938a), pl. XX, 1, top and profile photos, not precisely to scale as indicated; p. 59, fig. 21, 1, top photo, with drawings of bottom and profile, irregular and poor; text, p. 63.

E. Egami, *Yūrashia kodai hoppō bunka* (1948), pl. XXIX, 5, photo of top, with drawings of bottom and

profile (after Umehara).

F. Trousdale, "Possible Roman Jade" (1969), p. 59, fig. 8, after Umehara (1938a) pl. XX, 1.

**SR.2** . . . . . Plate 20a-b

**MATERIAL:** Chalcedony(?), pure grayish white, opaque, with longitudinal fissures in lower bay extending through to upper surface, with iron corrosion penetrating through the fissures; another two-pronged longitudinal fissure in lower aperture plate.

**PROVENANCE:** Reported to have come from a tomb near Mount Mithradates, a large hill on the outskirts of Kerch; recovered by Mr. Messaksudi, a resident of Kerch, in about 1918.

**COLLECTION:** Musée des Antiquités Nationales de la France, Salle des Comparisons, Saint-Germain-en-Laye; formerly Messaksudi, Kerch.

**MEASUREMENTS:**

L 4.81	ApL 1.50
W 1.05	ApD .28
D .78	ApX 2.06

Depth of upper plate over aperture .38. The upper plate is widest at the head, tapering in a regular line to the lower end where the width is .94. The sides of the upper plate are perpendicular to the upper surface, but the aperture walls slope slightly inward so that the mean width of the lower aperture plate is .91.

**DATE:** Among the dated, or datable, objects recovered from the tomb, the latest are three gold coins with a representation of the emperor Pupienus who ruled for ninety-nine days in A.D. 238. The tomb is, therefore, probably to be dated to the middle of the third century. The scabbard slide is probably to be dated to the earlier part of the same century.

Unornamented. The upper plate is about twice the thickness of the normal slide of Chinese manufacture. The forward edge is essentially perpendicular to the upper plate, the angles rounded and superbly carved. The forward end terminates in a blunt ridge without the formation of a back-curving hook. The upper surface of the upper plate is flat; .19 above the lower end, it turns inward at an oblique angle (similar to *V.1* and *V.2*) to meet the underside of the upper plate at an acute angle. The lower end of the slide is unique: there is no lower protuberance of hook or wedge form projecting inward beyond the level of the undersurface of the upper plate to form the lower bay. Among the authors who have described this slide, no doubt has been expressed that its present form may not accurately reflect its original shape. The mere uniqueness of its shape is sufficient cause to speculate that it may once have been provided with a lower hook (thus bringing it into conformity with other locally carved South Russian and Volga slides) at some time broken off, and a close exam-

ination of the piece revealed that this might well be true.

The slide has a cleaned and polished appearance. The existence of iron-oxide stains in the fissures of the underside suggests that these were probably more widely spread on the surfaces at one time, and that the surfaces were cleaned after the slide was recovered from the tomb. The only appreciable signs of surface decomposition are on the underside where the lower hook would have been. Possibly a softer area in the stone at this point caused an irregular break in the end hook so that in order to conceal the break and reshape the piece it was necessary to remove the hook entirely. The lowermost .38 of the underside of the upper plate is slightly higher than the mean line of the plate and is set off by a perceptible ridge. This is the approximate surface area which the hook would have occupied. If, indeed, there was once a hook, as I believe there must have been, the break and recarving surely occurred in antiquity as the corners of the reformed angle of the lower end were subsequently chipped. The figures below indicate the lower end of the slide as it now appears (left) and the probable earlier form suggested by analogy to *V.1*, *V.2* and **SR.10** which are otherwise similar to **SR.2** in form.



FIGURE 100.—Scabbard slide SR.2 as it appears, and restored.

Very little is known about the excavation of this tomb save the small amount of information contained in a report submitted by Mme. Messaksudi in June 1920, some two years after the tomb was opened and subsequent to the death of her husband who had executed the project. According to this report, the sword and its parts were found *in situ*. Nothing remained of the scabbard. The long, double-edged iron sword (hilt cast in one piece with the blade) with a total length (surmised—the tip is broken off) of slightly more than a meter, was provided with a partially decomposed wooden grip, a gilded silver pommel set with five red semi-precious stones and secured by means of a silver nail into a wooden roundel, and (according to the report), the scabbard slide mounted as the guard, the blade having been passed through the aperture (the cast hilt being broader than the aperture). It is characteristic of late Sarmatian swords in this region to have no guards and the restoration of the scabbard slide as guard by the excavators, or by some other party, was undoubtedly performed in the belief that the stone object must have fulfilled this function and by some means had become separated from the sword (see page 00 here). The

scabbard slide is still (1961) thus mounted, held in place by a red cementing material filling those portions of the aperture not occupied by the thin blade of the sword.

## REFERENCES:

Reinach, *Les accroissements des musées nationaux français* (1912), 3, p. (pl. ?), 35, not seen; cited in Rostovtsev [1923], p. 106, and in Kusheva-Grozevskaya [1929], p. 162, n. 5).

Paris, Société des Antiquaires de France, Extrait des proces-verbaux . . . *Bulletin de la Société nat. des Antiquaires de France*, 1920, pp. 257–262, report by M. Michon on Messaksudi find; not illustrated.

Mély, “Émaux et émailleurs,” pp. 221 ff. (not seen; cited in Rostovtsev [1923], p. 106, and in Kusheva-Grozevskaya [1929], p. 162, n. 5).

Rostovtsev, “Une trouvaille de l’époque gréco-sarmate de Kertch” (1923), p. 106, fig. 3, photo of full sword with slide mounted as guard; p. 106, fig. 4, bottom/profile photo of slide; p. 107, fig. 5, photo detail of sword with slide mounted as guard, hilt and inlaid pommel disk. The above photos are poorly reproduced.

Tallgren, *L’Orient et l’Occident dans l’âge du fer finno-ougrien* (1924), p. 23, fig. 11, 1, drawing of slide mounted on sword as guard; p. 23, fig. 11, 3, oblique bottom/profile drawing of slide; drawings inaccurate.

Ginters, *Das Schwert der Skythen und Sarmaten* (1928), p. 69, pl. XXVIII, a, drawing of slide mounted as guard on sword (recognized as incorrect reconstruction); p. 69, pl. XXVIII, b, oblique bottom/profile drawing of slide; drawings inaccurate.

Obermaier, “Südrussland” (1928–1929), pl. XL-D, a, oblique bottom/profile drawing of slide; drawing inaccurate.

Kusheva-Grozevskaya, “Odin iz tipov Sarmatskogo mecha” (1929), not illustrated; text, p. 162.

Rostovtsev, “Le porte-épée des iraniens” (1930), p. 338, fig. 254, photo of slide mounted as guard on sword; p. 338, fig. 255, oblique bottom/profile photo of slide p. 339, fig. 258, 3, oblique bottom/profile drawing of slide, misunderstanding Tallgren (1924), p. 23, fig. 11, and misidentified as coming from the Perm region; p. 339, fig. 258, 1, drawing of slide mounted as guard on sword (after Tallgren [1924]). Drawings inaccurate.

Tallgren, “Notes marginales” (1933), p. 237, fig. 4, top, oblique bottom/profile drawing of slide, repeating Rostovtsev’s (1930) mistaken identification based on misunderstanding of Tallgren (1924). Drawings inaccurate.

Umehara, *Kodai hoppo-kei bumbutsu no kenkyū* (1938a), pl. XX, 2, photo of top of slide mounted as guard on sword and oblique top/profile photo of slide mounted as sword guard (best available photos); p. 59, fig. 21, 2, lower right, top, profile and bottom drawings of slide (all inaccurate); p. 59, fig. 21, 2, center, drawing of slide mounted as guard on sword, giving section of

sword blade and grip (after Rostovtsev [1930]); p. 64, fig. 22, left, oblique bottom/profile drawing of slide (after Ebert, in Obermaier [1928–1929]). Drawings inaccurate. Text, pp. 60–62, erroneously attributes reconstruction of slide as sword guard to Rostovtsev.

Egami, *Yūrashia kodai hoppo bunka* (1948) pl. XXIX, 3, drawings of top, profile and bottom of slide (after Umehara [1938a], p. 59, fig. 21, 2, lower right): all inaccurate. Misidentified as coming from the Volga-Ural region.

Sokol’skiĭ, “Bosporskie mechi” (1954), not illustrated; text, p. 192, no. 16.

Maenchen-Helfen, “Crenelated Mane and Scabbard Slide” [1957], p. 91, fig. 6, a, drawing of sword hilt with slide mounted as guard; fig. 6, b, oblique bottom/profile drawing of slide: drawings inaccurate (after Ginters [1928]).

SR.3 . . . . . Plate 20c

MATERIAL: Gold, inlaid with garnets.

PROVENANCE: Recovered from a tomb on Hospital Street, Kerch, in 1904, by V. V. Shkorpil.

COLLECTION: Leningrad, Gosudarstvennyiĭ Ermitazh, Byzantine Section.

DATE: Late fourth century after Christ. Coins of Valentinian II (A.D. 375–392) recovered from the tomb.

The slide has the shape of a small section of a truncated pyramid. The upper surface, ends, and sides are decorated with inlaid triangular circular and lozenge-shaped garnets arranged in a regular, symmetrical geometric pattern. The aperture is broken, a small portion only remaining of the upper and lower aperture walls. The aperture appears to have been set close to the upper end so that there is no bay between the upper aperture wall and the forward end of the slide.

The slide was found in association with a long, double-edged iron sword in a gold-sheathed scabbard decorated with precious and semiprecious stones. A small socket in the side of the scabbard was evidently intended to receive the projecting aperture of the slide.

## REFERENCES:

Shkorpil, *Ocheti* (1904), not seen.

Spitsyn, “Veshchi s inkrustatsē iz Kerchenskikh katakomb” (1905), p. 120, fig. 34; text, p. 124, regarded as object of unknown use, apparently for sword.

Matsulevich, *Serebryanaya chasha iz Kerchi* (1926), pl. III, 1; text, p. 35, considered as cleat for hanging up a sword.

Ginters, *Das Schwert der Skythen und Sarmaten* (1928), p. 75, pl. XXXI, e, top/profile drawing (after Shkorpil [1904]); text, p. 74; p. 75, pl. XXXI, b and C, pommel and other sheath ornaments of inlaid gold from same tomb.

Kusheva-Grozevskaya, "Odin iz tipov Sarmatskogo mecha" (1929), not illustrated; text, pp. 161 and 166.

Behmer, *Das zweischneidige Schwert* (1939), pl. XI, 5f, top/profile drawing (after Ginters [1928]).

Sokol'skiĭ, "Bosporskie mechi" (1954), not illustrated; text, p. 164.

Werner, *Archäologie des Attila-Reiches* (1956), Heft 38-B, pl. LVIII, 7, oblique top/profile drawing (after Ginters [1928]).

#### SR.4

**MATERIAL:** Nephrite, according to Umehara, with iron-oxide stains on underside.

**PROVENANCE:** Discovered in Kerch, according to Umehara.

**COLLECTION:** Moscow, Russkiĭ Istoricheskiĭ muzeĭ (according to Umehara, p. 63=Gosudarstvennyi Istoricheskiĭ muzeĭ?).

**MEASUREMENTS:**

L 3.20  
W .80

**DATE:** Probably third to fourth century after Christ. Possibly identical to RX.1.

Unornamented. Umehara compares the piece to SR.1, a slide of Chinese manufacture. The published sketches suggest, by the slight arch of the upper plate, back-curved forward edge, undercut forward hook and lower end with forward-projecting ridge on the underside, a common Chinese form. But the fact that it is unornamented, a characteristic of South Russian stone slides but not of Chinese, indicates that it must be a local South Russian copy of the Chinese slide and that Umehara's drawings possibly emphasize the Chinese characteristics too strongly.

**REFERENCES:**

Umehara, *Kodai hoppō-kei bumbutsu no kenkyū* (1938a), p. 59, fig. 21, 3, small sketches of top, profile and bottom; text, p. 63.

Egami, *Yūrashia kodai hoppō bunka* (1948), pl. XXIX, 6, top, profile and bottom sketches (after Umehara).

#### SR.5

**MATERIAL:** Jade, white translucent.

**PROVENANCE:** Unknown, acquired in Kerch.

**COLLECTION:** M. Georges Salles, Paris (formerly).

**DATE:** Carved in China, probably during the first century after Christ; probably not interred in South Russia before the third century after Christ.

This slide, a typical, rather late Chinese example of the CH class, is described by M. Georges Salles (who believed it to have been a belt plaque carved slightly later than Han) as having been altered in the Crimean region and transformed into a pendant. Probably the aperture walls

and plate have been broken off. The ends have been enclosed in gold plate, with gold loops at one side through which the suspension cord was presumably passed. Salles may be correct in assuming that this mutilation took place sometime between the third and sixth centuries. Most likely the slide arrived in South Russia in the period during which its function was understood, and during which such objects were locally made. The transformation into an ornament may have resulted from breakage of the aperture on the underside, rendering it no longer serviceable as a scabbard slide, but too precious to be discarded.

The upper surface is ornamented with two hydras, each partly covered by the added gold sheathing about each end. The figures are carved in high, rounded relief, but do not appear to be cut free of the surface at any point. The simple incised-line side borders are interrupted at several points by the figures.

**REFERENCES:**

Vignier, "Notes sur un livre récent" (1926), pl. III, 4, photo of top; text, p. 16.

Werner, "Bogenfragmente aus Carnuntum" (1932), not illustrated; text, p. 55, n. 26.

#### SR.6 . . . . . Plate 20d

**MATERIAL:** Nephrite, greenish white; traces of iron oxide on underside.

**PROVENANCE:** Unknown, purchased in South Russia.

**COLLECTION:** Leningrad, Gosudarstvennyi Ermitazh, Greco-Scythian Department, no. 102/136.

**MEASUREMENTS:**

L 4.13	ApL 1.09
W .94	ApD .19
D .66	

**DATE:** Third to fourth century after Christ (?).

Unornamented. The surface and line of the upper plate are flat. The forward end is rounded in a regular arc, terminating on the underside in a rounded, blunt ridge not undercut to form a hook. At the lower end, the upper surface of the upper plate inclines inward at an oblique angle, meeting the base of the slide at an acute angle, somewhat rounded at the vertex; a blunt, triangular knob ridge, similar to those of V.1 and V.2, is formed at the lower end. Both forward and rear aperture walls are perpendicular to the upper plate. Both forward and rear aperture ends are rounded out, and the aperture is partly cut from the area of the thick upper plate. The slide appears to have neither vertical nor lateral taper, but to have approximately constant width and depth along its length.

**REFERENCE:** Kusheva-Grozevskaya, "Odin is tipov Sarmatskogo mecha" (1929), pl. II, 1, oblique top/profile drawing; text, p. 160.

*SR.7* ..... Plate 21a

MATERIAL: Chalcedony.

PROVENANCE: Kerch; discovered in 1842.

COLLECTION: Leningrad, Gosudarstvennyiĭ Ermitazh, Greco-Scythian Department, no. 408.

MEASUREMENTS:

L 5.71

W .91

D .71

The slide is widest at the upper end, tapering to .83 at the lower end.

DATE: Fourth century after Christ, possibly somewhat later.

Unornamented. The thick upper plate is straight. The forward edge is rounded, terminating on the inner side in a blunt ridge without the formation of an involuted hook ridge. Near the lower end, the upper surface of the upper plate inclines inward at an oblique angle, meeting the base of the slide at an acute angle. The lower knob ridge section is exceptionally large, the bays unusually shallow. The upper plate below the aperture was broken in antiquity and reinforced by two gold wires bound about the shaft in hollow grooves cut to receive them and by an iron brad inserted into a small hole drilled through the two pieces of the upper plate.

In place of the normal rectangular aperture are two parallel laterally drilled holes. Kusheva-Grozevskaya (p. 165) suggests that the holes served as passages for thongs by means of which the slide was bound to the scabbard, and that the leather sword belt passed through either the upper or lower bay. While such an arrangement is possible (the three projections of the underside are equal in height and all, therefore, would have rested closely against the scabbard wall), it is unlikely. Suspension of the sword by means of a scabbard slide could be effective only if the belt passed through an enclosed aperture allowing the sword free movement on the belt. Passing through either the upper or lower bay, it would be liable to binding between the slide and the scabbard wall. There is evidence, however, that in late times, and in regions far from the Asian territories where the slide was the usual or only method of sword suspension over several centuries, the primary value of the slide as a suspension device which lies in its enclosed aperture was not understood and crude imitations requiring the belt to pass between slide and scabbard wall were produced (e.g., E class). A more reasonable hypothesis on the function of the two holes replacing the aperture might be that the cord by means of which the sword was hung from the belt looped through the two holes, the two ends being fastened some distance apart on the belt (see text here, p. 94, on this type of suspension). If this is true, then *SR.7* may represent the adaptation of an older, traditional

suspension device to a newer suspension technique which, by the date of this slide, was replacing the scabbard slide.

The slide was apparently found in association with a sword equipped with a gold-decorated pommel, agate hilt, remains of gold leaf which had covered the scabbard and a gold clasp the exact function of which is unknown to me; but if it is not a fibula, then perhaps it is a clasp which served to unite the cords from the slide to the belt. It was presumably the lack of a sword guard (a common condition with South Russian swords of this period) that persuaded the museum authorities to attribute this function to the slide in spite of its manifest unsuitability to fulfill this function.

REFERENCES:

Kareish, "Razrytie kurganov vozle Kerchi i Tamani" (1844), not seen.

Kusheva-Grozevskaya, "Odin iz tipov Sarmatskogo mecha" (1929), pl. II, fig. 2, oblique top/profile drawing; text, p. 160 f.

*SR.8* ..... Plate 21b

MATERIAL: Gold, inlaid with garnets.

PROVENANCE: Recovered from a tomb on Mount Mithradates, a large hill on the outskirts of Kerch, opened in 1890.

COLLECTION: Moscow, Gosudarstvennyiĭ Istoricheskiiĭ muzei; formerly Novikov Collection, Kerch.

DATE: Fourth or early fifth century after Christ.

A long, slender "rod" of gold, rounded on top and terminating at either end in a point. The rounded upper surface is inlaid with triangular garnets arranged in a regular, symmetrical geometric pattern. Just below the inlaid upper surface, a line of gold grains has been placed along each side and around the lower end. The slide is greatest in depth at the upper end, tapering gradually and regularly to the lower end. The rectangular aperture is entirely enclosed within the body of the slide; the under surface of the slide is flat, without bays.

This scabbard slide little resembles in form either those of Chinese manufacture or those of stone from eastern and southern Russia. However, besides the enclosed aperture, two aspects of its form clearly reveal its descent from the stone shapes. On the forward edge, a highly geometrized animal mask of garnets defined by thin gold borders has been placed, an element which was certainly derived from a familiarity with Chinese slides of the CV class, such as *SR.1*. Near the lower end, the straight line of the upper surface inclines inward, suggesting that the form was derived from East European stone pieces on which this feature is particularly pronounced.

An interesting link between the South Russian slides and those of northern Europe (see *E.10* and *E.11*) is suggested by the thin zigzag gold lines separating the

individual garnet inlays. K. Böhner ("Das Langschwert des Frankenkönigs" [1948]), and more recently W. Holmquist (*Germanic Art* [1955], pp. 27 ff.) have traced this style of gold inlay work from the Black Sea region where it was in fashion during the third and fourth centuries throughout the Balkans, to Italy, Germany, Belgium and England during the fifth and sixth centuries (Holmquist, op. cit., figs. 36, 38, from Italy; fig. 41, from Italy and Belgium). The jeweled gold buckles, strap mounts, and sword pommel from the Sutton Hoo ship burial in Suffolk, England, dated A.D. 655 (Bruce-Mitford, *The Sutton Hoo Ship Burial* [1961], p. 42) are inlaid with garnets framed with thin zigzag gold lines identical to those of *SR.8* (Bruce-Mitford, pls. XIX, XXI, b). The jeweled sword pommel is possibly a survival of a tradition begun a millennium earlier by the Chinese who mounted disks of jade in round, concave pommel sockets.

## REFERENCES:

Baye, "La bijouterie des Goths en Russie" (1890), pl. III, 1 and 1, a, profile and top color copies (not from photographs); text, p. 363, n. 1. Slide reproduced in inverted position.

Matsulevich, *Serebryanaya chaska iz Kerchi* (1926), not illustrated; text, p. 35.

Ginters, *Das Schwert der Skythen und Sarmaten* (1928), not illustrated; text, p. 74.

Kusheva-Grozevskaya, "Odin iz tipov Sarmatskogo mecha" (1929), not illustrated; text, pp. 164-166, *passim*.

Sokol'skiĭ, "Bosporskie mechi" (1954), not illustrated; text, p. 164.

Werner, *Archäologie des Attila-Reiches* (1956), Heft 38-A, p. 130, fig. 2, 3, a and 3, b, top and profile drawings.

Zasetskaya, "O khronologii pogrebeniiĭ *epokhi pereseleniya naradov*" (1968), p. 56, proposes date of fourth to first half of fifth century.

Trousdale, "Possible Roman Jade" (1969), p. 60, fig. 12, after Baye (1890).

*SR.9*

MATERIAL: Gold, triangular in section.

PROVENANCE: Kerch, discovered by E. R. Shtern in a tomb in the northwest quarter (Glinishche) of the city in 1896.

COLLECTION: Odessa Museum, Odessa.

DATE: Early fourth century after Christ.

I have not seen the initial report on this find published by Shtern in 1897 in which a drawing of the object and its measurements were doubtless given. Subsequent notices have not provided this information.

Kusheva-Grozevskaya (p. 162) notes that the object was found firmly attached (by corrosion) in a vertical position to the blade of an iron sword, and that (p. 165) the sword when found had no guard. A date for the tomb

was provided by coins of Galeria Maximian, who ruled A.D. 293-311 (Kusheva-Grozevskaya, p. 166).

Sokol'skiĭ (p. 164) adds the following remarks. The tomb structure and furnishings were typical of third and fourth century Bosphorus burials. The iron sword, much corroded, was 91 cm. long in its state at the time of recovery. It was provided with a hemispheric pommel ornament of gold, incrustated with chalcedony and glass paste; the grip was trimmed with gold. The slide lay on the blade about midway between tip and shoulder. The upper end of the slide is in the form of a serpent's head. Besides the slide, several gems that had decorated the wholly decomposed scabbard lay on the blade. Sokol'skiĭ presumes that the straight iron guard, sometimes associated with such swords of the third and fourth centuries, had entirely rusted away.

The triangular cross-section and the configuration of a serpent's head at the upper end suggest that the slide may rather closely resemble *SR.8*.

## REFERENCES:

Shtern, "K voprosu o proiskhozhdeniiĭ 'got'skogo stilya'" (1897), pl. I, 3, a, not seen.

Ginters, *Das Schwert der Skythen und Sarmaten* (1928), not illustrated; text, p. 74.

Kusheva-Grozevskaya, "Odin iz tipov Sarmatskogo mecha" (1929), not illustrated; text, pp. 162, 165 f.

Sokol'skiĭ, "Bosporskie mechi" (1954), not illustrated; text, pp. 164 and 192, s.v. no. 21; p. 165, pl. X, 3, drawing of iron sword with which *SR.9* was found.

*SR.10* . . . . . Plate 21c

MATERIAL: Nephrite, gray translucent, the surfaces decolored to brownish cream with darker veins and tan markings; iron-oxide stains on base; visible drill marks on interior of lower aperture plate.

COLLECTION: Reputed to have come from the Maikop region, Kuban area of North Caucasus.

COLLECTION: Art Institute of Chicago, 50.833; Edward and Louise B. Sonnenschein Bequest; formerly M. Georges Salles, Paris.

## MEASUREMENTS:

L 4.13	ApL .88
W 1.48	ApD .27
D .77	ApX 1.42
Depth of upper plate over aperture .31; depth of upper plate over lower bay .47.	

DATE: Probably third to fourth century after Christ.

This exceptionally broad, angular and massive piece, so uncharacteristic of Chinese scabbard slides, was published by A. Salmony in his catalog of the Sonnenschein Collection as an example of Han dynasty jade carving. He was evidently unaware that Vignier had published the piece some twenty-six years before with the notation



that it came from the Maïkop region. I am grateful to M. Gentles, late associate curator of Oriental Art, Art Institute of Chicago, who kindly informed me that the Sonnenschein records contain a notation that this piece was "exported to Russia," which suggests knowledge of its South Russian provenance, but also reliance on it as an object of Chinese manufacture. Its similarity to attested locally made slides from South Russia, the Lower Volga and Perm regions leaves no doubt as to its non-Chinese origin (see also CP.3).

The upper surface is flat, the forward edge rounded, with a pronounced back-slope on the inner portion but without the formation of an undercut, involuted hook ridge. Near the lower end, the upper surface of the upper plate inclines inward at an oblique angle, meeting the base of the slide at a blunted acute angle. The upper plate is extremely thick, the square-cut bays shallow. About half of the depth of the aperture is cut from the

area of the upper plate, a characteristic frequently encountered on non-Chinese slides. The lower end of the aperture is squared, the upper end rounded, largely as a result of strap wear. The upper and lower end hook ridges extend inward to a depth equal to that of the exterior surface of the lower aperture plate so that the aperture could not have been inserted into a socket in the Chinese fashion, but would lie flush with the scabbard wall.

## REFERENCES:

Vignier, "Notes sur un livre récent" (1926), pl. III, 5, bottom/profile photo; text, p. 16.

Werner, "Bogenfragmente aus Carnuntum" (1932), not illustrated; text, p. 55, n. 26.

Salmony, *Sonnenschein Collection* (1952), pl. CVII, 1, top and profile photos.

Trousdale, "Possible Roman Jade" (1969), p. 59, fig. 7, after Salmony (1952).

## TURKEY

## T.1

**MATERIAL:** Scabbard slide (?) of jade stone, found in Asia Minor.

**COLLECTION:** Musée du Louvre, Département des antiquités grecques et romaines, inventory MND.75.

The object was given to the museum about 1910 by M. Paul Gaudin, along with other objects. After the discovery, but before publication, of the Messaksudi scabbard slide (*SR.2*), initially misidentified as a sword guard, Michon, p. 257, noted the similarity of T.1 to *SR.2* and believed them to be of the same class of object, T.1 being slightly larger than *SR.2*, but of the same general type of stone and closely resembling *SR.2* in shape (probably having lower hook). Accepting Rostovtsev's identification of *SR.2* as a sword guard, Michon, p. 258, wrote of T.1: "Le morceau de jade isolé que possédait le Louvre était donc, sans nul doute possible, lui aussi la

garde d'une épée. . . ." Michon, p. 259, questions whether this object might not have originally come from South Russia. No photograph of the piece has been published, but it seems probable, in view of its isolation and evident resemblance to *SR.2*, that it belongs to the locally made South Russian group.

## REFERENCES:

Paris, Société des Antiquaires de France, Extrait des procès-verbaux . . . *Bulletin de la Société nat. des Antiquaires de France*, 1920, pp. 253-265, report by M. Michon, pp. 257-262, on Messaksudi find (see *SR.2*) and related objects; not illustrated.

Rostovtsev, "Une trouvaille de l'époque gréco-sarmate de Kertch" (1923), p. 132, n. 2; not illustrated.

Ginters, *Das Schwert der Skythen und Sarmaten* (1928), p. 72: not illustrated.

## LOWER VOLGA RIVER REGION OF THE USSR

*V.1* . . . . . Figures 91 and 92, Plate 22a

**MATERIAL:** Chalcedony. J. Werner (E, p. 43) believes that the chalcedony "jade stone" must have come from the Kashgar region, over the existing trade route between this region of Chinese Turkistan and South Russia which passed through the lower Volga region. Umehara (G, p. 64) compares the stone to that of *SR.2*.

**PROVENANCE:** Kurgan D-16 of a group near Pokrovsk on the lower Volga excavated by P. Rau in 1926.

**COLLECTION:** Central Museum, Pokrovsk (after 1930 Engels).

## MEASUREMENTS:

L 3.56  
W .91 (at upper end)  
W .75 (at lower end)  
D .39 to .50

**DATE:** Third to fourth century after Christ.

Unornamented. The relatively thick upper plate is straight, but with a gradual slope inward from the upper end where the depth is greatest, to a point above the lower end where it is less. The forward end of the upper plate, extended above the aperture, curves inward in a

broad, regular arc, terminating in a thin, back-projecting ridge only slightly articulated from the solid mass of the forward end. At the lower end the upper surface of the upper plate inclines inward at an oblique angle, meeting the base of the slide at an acute angle somewhat rounded at the vertex, and forming a blunt, roughly triangular knob at the lower end. The published drawings of this slide are evidently incorrect (see Figure 91), to judge from the published photograph (see Plate 22*a*). The drawings indicate that the exterior of the upper aperture wall is perpendicular to the upper plate while the exterior of the lower aperture wall is cut at an angle sloping downward. The photograph suggests that there is a slight slope to both walls; the upper sloping upward, the lower downward. Possibly the sides taper inward from the upper plate to the lower aperture plate, but the sources have not indicated this. The aperture extends into the area of the upper plate, but apparently not to the depth indicated in the drawings. The drawings indicate also that the upper end of the aperture is rounded, the lower squared, whereas in the photograph both ends appear to be quite square. Possibly the lower end is somewhat more squared, the upper end more rounded at the outer edges from belt wear, this feature having been emphasized and exaggerated in the drawings.

The grave (see plan in A, p. 36, fig. 29) in which the scabbard slide was found was that of a middle-aged man, laid with his head to the northwest. The skull was by design deformed. At the left side of the skeleton, in inverted position with pommel near the foot and tip near the waist, lay an iron sword 115 cm. in length, with double-edged blade. Owing to decomposition the blade was broken into numerous large and small fragments, the pommel detached from the iron tang. The grip of wood about the tang, and the scabbard, also of wood, had completely decomposed. Traces of red cinnabar remained on the blade and where the grip had been. When found the sword lay on its edge. About halfway between pommel and tip lay the chalcedony scabbard slide, on its side, stuck fast by rust to the flat surface of the blade. Beneath the upper bay of the slide lay a carefully polished oval disk of dark green stone (3 cm. long, 2.5 cm. wide, .07 cm. thick, central perforation diam. .08 cm.), and directly below the perforation in the stone disk lay a small elliptical bronze clasp (1.8 cm. to 1.5 cm. diam.), rounded, or dome-shaped, on one side, flat on the other, with a small tongue rather rectangular in section (Figure 91). The disk and clasp lay under the slide owing to the inverted position of the sword in the tomb. Normally, as worn, with slide attached to the side of the scabbard away from the body, the clasp is forward of the slide, and the drawing of the sword (Figure 92) indicates that, as the sword would have hung at the man's side, this would have been the case here.

Kusheva-Grozevskaya (C, pp. 159 and 163) notes that Rau considered the slide to have been fastened to the scabbard by means of this bronze clasp, but suggests that the clasp and disk were ornaments on the strap that lashed the slide to the scabbard (see p. 78 f. for discussion of the function of such disks and clasps).

The chalcedony pommel disk (7.5 cm. diam., .08 to .09 cm. thick at rim) is perforated in the center, and through this perforation a copper nail 8.5 cm. long had been inserted and served to fasten the stone onto the wooden end of the grip, decomposed fragments of which still adhered to the stone and nail. The head of the nail is in the shape of a flat quatrefoil (Figure 91) with a small, violet-colored piece of glass paste set into a central bronze

Rau (A, p. 39) was one of the first scholars to deduce that the sword belt used to attach the sword to the bearer's side passed through the aperture in the slide.

#### REFERENCES:

- A. Rau, *Prähistorische Ausgrabungen auf der Step-penseite* (1927), p. 37, fig. 30, drawing of slide in position on sword; p. 38, fig. 31,B, top and profile drawings of slide; p. 38, fig. 31.A, top and profile drawings of pommel disk; p. 36, fig. 29, plan of burial; text, pp. 37 and 39.
- B. Ginters, *Das Schwert der Skythen and Sarmaten* (1928), p. 69, pl. XXVII,d, top and profile drawings of slide, poorly copied after Rau; pl. XXVII,e, drawing of sword with slide in position, after Rau (A); pl. XXVII,c, profile and top drawings of pommel disk, after Rau (A).
- C. Kusheva-Grozevskaya, "Odin iz tipov Sarmatskogo mecha" (1929), not illustrated; text, pp. 159 and 163-166.
- D. Obermaier, "Südrussland" (1928-1929), pl. XL-D,b, top and profile drawings of disk pommel, after Rau (A), pl. XL-D,e, drawing of sword with slide in position, after Rau (A).
- E. Werner, "Bogenfragmente aus Carnuntum" (1932), not illustrated; text, p. 43.
- F. Sinitsyn, "Pozdne-sarmatskie pogrebeniya" (1936), p. 74, fig. 2, no. 1, oblique top/profile photo (very poor).
- G. Umehara, *Kodai hoppo-kei bumbutsu no kenkyū* (1938a), p. 64, fig. 22, right, drawing of sword with slide in position, after Rau (A).
- H. Behmer, *Das zweischneidige Schwert* (1939), pl. A, 11, profile and top drawings; pl. A,9, drawing of sword with slide in position; pl. A, 10, top and profile drawings of pommel disk; all based on Rau (A).
- J. Egami, *Yūrashia kodai hoppo bunka* (1948), pl. XXIX,4, lower right, drawing of sword with slide in position, after Rau (A); text, p. 373.
- K. Böhner, "Das Langschwert des Frankenkönigs" (1948), p. 223, fig. 1,1.
- L. Merpert, "Iz istorii oruzhiya plemen" (1955), p. 156, fig. 7,10, drawing of sword with slide in position, copied from, but not after Rau (A).

M. Werner, *Archäologie des Attila-Reiches* (1956), Heft 38-B, pl. XXXVIII,4, profile and top drawings; pl. XXXVIII,3, drawing of sword with slide in position; pl. XXXVIII,1, drawing of grave showing find position of sword and slide; all after Rau (A).

N. Maenchen-Helfen, "Crenelated Mane and Scabbard Slide" [1957], p. 91, fig. 6,d, top and profile drawings of slide, after Ginters (B); fig. 6,e, drawing of sword with slide in position, after Ginters (B); fig. 6,c, profile and top drawings of pommel disk, after Ginters (B).

P. Zasetskaya, "O khronologii pogrebenii epokhi pereseleniya narodov" (1968), p. 56, proposes date of A.D. 375-450.

V.2 ..... Plate 22b

MATERIAL: Nephrite, greenish white (according to Sinitsyn), but possibly chalcedony.

PROVENANCE: Recovered from a tomb four kilometers southeast of Pokrovsk on the lower Volga, April 25, 1929.

COLLECTION: P. Rau examined on May 4, 1929, the finds from the tomb discovered accidentally by workers on a collective farm, assembled them, and conveyed them to the Central Museum, Pokrovsk (after 1930 Engels).

MEASUREMENTS:

L 4.53	ApL 1.02
W .91 maximum	.24
D .67	

FORM II

CHINA

Unornamented Class\*

XCP.1 (?)

MATERIAL: Jade, yellowish brown.

COLLECTION: A. Becker and A. Newman, Köln.

MEASUREMENTS:

L 2.24

PROFILE TYPE: A-1.

DATE: Han (?)

This piece has been published in profile only and may, therefore, properly belong to the XCR class. It consists of a sturdy, strongly arched upper plate with perpendicular aperture walls and a lower aperture plate of about half the depth of the upper plate. The lower exterior edge of each aperture wall is notched, which suggests that the slide was inserted into a shallow socket on the scabbard wall to a depth slightly exceeding that of the lower aperture plate. The interior aperture is shaped in conformity with the external contours of the slide.

REFERENCE: Berlin, Gesellschaft für östasiatische

\*For explanation of the profile types designated here and in following classes, see Figure 1.

DATE: Third to fourth century after Christ.

Unornamented. Similar in all respects to V.1, but somewhat longer and more grossly proportioned. The forward end is more massive, the forward edge more strongly arched and apparently not undercut to form a hook-ridge. The vertical taper is less pronounced than in V.1, and the aperture, set between heavier plates, is more rounded at each end.

The tomb was not scientifically excavated, and no report has been published on the relative positions of the artifacts exhumed. A well-preserved, tanged, double-edged iron sword 89.5 cm. in length was recovered from the tomb (Sinitsyn, p. 74, fig. 1).

REFERENCES:

Sinitsyn, "Pozdne-sarmatskie pogrebeniya" (1936), p. 74, fig. 2, no. 2, oblique top/profile photo (very poor); text, p. 74.

Werner, *Archäologie des Attila-Reiches* (1956), Heft 38-B, pl. XL,3, oblique top/profile drawing (after photo in Sinitsyn [1936]).

Smirnov, "Zheleznyi vek Bashkirii" (1957), p. 38, not illustrated.

Zasetskaya, "O khronologii pogrebenii epokhi pereseleniya narodov" (1968), p. 56, proposes date of A.D. 375-450.

Kunst, *Ausstellung chinesischer Kunst* (1929), p. 434, no. 1204, photo of profile; identified as a buckle.

XCP.2

MATERIAL: Jade, opaque brownish gray.

COLLECTION: Museu Luis de Camões, Macao.

PROFILE TYPE: C.

DATE: Late antiquarian.

The slide is rather carelessly carved, with irregular but smooth, polished (possibly waxed) surfaces. The ends are rounded, but the aperture is rectangular.

Unpublished.

Geometric Class

XCV.1 ..... Plate 22c

MATERIAL: Jade.

COLLECTION: National Palace Museum, Taipei, Taiwan.

MEASUREMENTS:

L 1.88\*  
W .97\*

PROFILE TYPE: A-2 (?).

TYPE: 1.

DATE: Late Eastern Chou.

Owing to the poorness of the published photographs of this scabbard slide, a full description of its form and decor is not possible. At the upper end there is an animal mask in low relief, facing upward and outward. Below, a bilaterally symmetrical geometric decor. Pairs of elongated C's alternately back upon the undefined central vertical axis and upon the side borders. From the lower end of each elongated C, a C-hook is projected horizontally, or at right angles to the elongated C, toward the central axis or border in accordance with the position of the elongated C. Along the central axis a single paired volute opening downward is visible. Along the side borders a single opposed pair of small flattened spirals curling downward and outward is visible. The narrow, plain side borders are apparently defined by incised lines. The principal elements of the decor appear to be carved in low, rounded, modulated relief.

REFERENCES:

*Ku-kung*, no. 28, p. 14, second from top, slightly oblique top/profile photo; identified as *peng* 璆 (presumably ferrule).

*Ku-kung chou-k'an*, no. 16, p. 940, photo of top.

Na Chih-liang, *Yü ch'i t'ung-shih* (1964), pl. LXXVIII,3, photo of top.

XCV.2

MATERIAL: Jade; lower right corner chipped.

MEASUREMENTS:

L 1.66*	ApL 1.34*
W .94	ApD .28*
D .53*	

PROFILE TYPE: B.

DATE: Uncertain, possibly Han.

At the upper end, an animal mask largely, and quite crudely, incised. Below, a bilaterally symmetrical geometric decor. Curving downward from the end of each eyebrow of the animal mask, elongated C's back toward the central vertical axis defined by a slightly raised ridge and are joined to this axis by pairs of parallel incised lines arching downward. In the center is another pair of elongated C's backing toward the side borders; from both the lower and upper ends of each, C-hooks backing toward the axis curve downward and upward respectively. A straight line from the upper end of each of the principal central C's joins the corners of a diamond-shaped motive athwart the axis. Just above this diamond, two small C-hooks spring from the axis, curving downward and outward. At the lower end, two large C-hooks rise from the axis and are projected at right angles to it, extending to the borders. From the upward edge of each of these, small C-hooks spring, curling inward and upward, meet-

ing the axis. The diamond-shaped area on the axis thus defined is marked with incised cross-hatching. Along the side borders, near the lower end, a single opposed pair of small flattened spirals curling inward and down. Between the eyebrows at the upper end, paired volutes curving upward and inward. The principal and larger elongated C's are carved in rounded relief; lesser elements are in very low relief, or are incised. Thin, plain lateral borders defined by an incised line.

REFERENCE: Huang Chün, *Ku yü t'u lu* (1939), III, 19:b; lower, rubbings of upper plate and profile.

XCV.3

MATERIAL: Jade.

COLLECTION: National Palace Museum, Taipei, Taiwan.

MEASUREMENTS:

L 1.84*	ApL 1.09*
W 1.00*	

PROFILE TYPE: A-1.

TYPE: 1.

DATE: Western Han.

While the surface ornamentation of this scabbard slide belongs to the XCV class, the basic form of the piece is closely related to those of the XCR class. The central vertical axis is sharply defined by an angular ridge in moderately high relief separating the two halves of the surface composition more fully than is the usual case with the axes of this class. Nevertheless, the geometric surface ornamentation is bilaterally symmetrical.

The poorness of the published photographs of this slide preclude a full description of the surface ornamentation. At the upper end there may be an animal mask divided into two halves by the central axis, carved in low relief with incised details. The decor below consists of pairs of elongated C's alternately backing upon the central ridge and against the side borders. From the lower end of each elongated C, a C-hook is projected horizontally, or at right angles to the elongated C, toward the central axis or border in accordance with the position of the elongated C. Along the axial ridge, a single paired volute opening downward is visible. Along the side borders, a single opposed pair of small spirals project inward toward the axis and curl upward. The principal elements of the decor appear to be carved in low, rounded relief. The two panels defined by the central ridge are laterally arched between the axis and the side borders which rise at an angle to a height equal to that of the axial ridge and are cut off perpendicularly at the sides.

REFERENCES:

*Ku-kung*, no. 28, p. 14, bottom, slightly oblique top/profile photo; identified as *peng* 璆 (presumably ferrule).

*Ku-kung chou-k'an*, no. 16, p. 940, photo of top.

Na Chih-liang, *Yü ch'i t'ung-shih* (1964), pl. LXXVIII, 1, photo of top.

## XCV.4

MATERIAL: Jade.

MEASUREMENTS:

L 1.69*	ApL 1.16*
W 1.00*	ApD .38* (maximum)
D .66*	

PROFILE TYPE: A-1.

TYPE: 1, variant.

DATE: Western Han.

On the basis of the surface ornamentation this scabbard slide is placed in the XCV class though the basic form is closely related to those of the XCR class. The central vertical axis is defined by a raised, rounded ridge more fully separating the elements of the bilaterally symmetrical decor than is usual on slides of this class. At the upper end there is an animal mask, partly in low relief and partly incised, facing upward and outward. The axial ridge divides the mask into two halves. The surface ornamentation is typical of Type 1 (cf. XCV.5) except that a pair of elongated C's near the center are placed at right angles to the axis and open downward. These replace at this point a pair of elongated C's backing upon the axis with C-hooks projected from the lower ends toward the borders. Along the axial ridge are two opposed pairs of volutes opening downward. Along the plain relief side borders is a single pair of spirals curving downward and outward. The geometric decor appears to be lightly and crudely incised, though from the published rubbing the carving technique cannot be adequately ascertained. The upper plate and end walls are thick; the lower aperture plate exceptionally thin. Axial ridge and borders continue on upper and lower walls.

(See also XCV.5, XCV.6, XCV.11.)

REFERENCE: Huang Chün, *Ku yü t'u lu* (1939), III, 23:a, rubbings of top, both ends, profile.

## XCV.5

MATERIAL: Jade.

MEASUREMENTS:

L 1.91*	ApL 1.69*
W 1.41*	ApD .25*
D .12*	

PROFILE TYPE: A-2.

TYPE: 1, variant.

DATE: Uncertain, probably late antiquarian.

At the upper end, an animal mask with large striated eyebrows, executed in low relief with incised details. The eyes are provided with round incised pupils. Below, a bilaterally symmetrical geometric decor, the two halves

separated by a broad, raised central axis that links this slide to those of the XCR class. The axial ridge (bisecting the animal mask), borders and decor elements are continued on the exterior surfaces of the upper and lower aperture walls. Along the axis are two pairs of elongated C's, the upper pair backing upon the axis, the lower pair confronting it. From the lower ends of the upper pair, straight lines are projected to the side borders; from the lower ends of the lower pair, C-hooks project awkwardly downward and outward toward the side borders. (Among others, this detail is contrary to usual form and suggests late copy work: the lower pair of C's should back upon the side borders, the hooks from the lower ends being projected toward the axis.) Along the axial ridge are two opposed pairs of spirals, the upper curving inward and upward, the lower downward and inward. Along the plain relief side borders are two opposed pairs of spirals, the upper pair curving downward and inward, the lower (which are of extraordinarily large size) curving upward and outward.

The slide is exceptionally broad, the carving of mediocre quality. The aperture is poorly cut, the plates of uneven thickness.

REFERENCES:

Huang Chün, *Ku yü t'u lu* (1939), III, 21:b, rubbings of top, both ends, profile.

*Chung-kuo ku tai* (1960), p. 304, upper left, rubbings of top and lower end, presumably after Huang Chün.

## XCV.6

MATERIAL: Jade, translucent gray-white with brown markings.

MEASUREMENTS:

L 2.13
W .94
D .88

PROFILE TYPE: A-1.

TYPE: 1.

DATE: Uncertain, possibly Western Han.

The slide lacks the lower aperture plate which was broken, or possibly never present. Each aperture wall has two diagonal perforations extending from the inner side at an angle to the open base of the aperture walls. The position and formation of these holes indicates that they were made when the slide was still to be attached to a scabbard wall, probably by thin nails driven through the holes into the scabbard fiber. As observed in connection with XCV.4, XCV.5 and XCV.11, the basic form of the slide, with rounded relief borders and relief axial ridge projecting beyond each end a distance equal to the height of the ridges, is clearly related to those of the XCR class. Here, the axial ridge is marked with incised transverse slanted lines simulating a rope. At the upper

end is an animal mask facing upward, carved in low relief with striated eyebrows. The mask is described as continuing on the forward edge in incised lines where "nostrils, a double row of teeth and large fangs" are represented. These details are not seen in the published photograph and constitute, insofar as the teeth and fangs are concerned, an unusual feature. The axial ridge bisects the animal mask. The decor below the mask is only partly visible in the published photograph, but may fairly surely be described from what is seen. It consists of pairs of elongated C's alternately backing upon the axial ridge and upon the side borders. From the lower end of each elongated C, a C-hook is projected horizontally toward the axial ridge or side border in accordance with the position of the elongated C. Along the axis, two pairs of opposed volutes are visible; the upper opens downward, the lower upward. Along the plain relief side borders are two opposed pairs of spirals curving downward and outward.

All elements of the geometric decor visible, with the exception of the uppermost pair of border spirals, are carved in relatively high, rounded relief above a flat surface and are thicker and less gracefully formed than is the general case with similar elements on authentic late Chou and Han scabbard slides.

REFERENCE: West Palm Beach, Norton Gallery of Art, *Exhibition of Chinese Archaic Jades* (1950), pl. LIV,9, photo of top; ascribed to Eastern Chou.

## XCV.7

MATERIAL: Jade, white and gray.  
 COLLECTION: P. de Tanner, Berlin (now dispersed).  
 PROFILE TYPE: A-2 (? , possibly B).  
 DATE: Late antiquarian.

The surface of the upper plate is ornamented with large, thick C-shaped designs in relief. Two of these enclose a single large round knob grain near the center. At various places on the surface, pairs of curved parallel lines are incised. The resulting pattern is asymmetrical, with no defined central vertical axis. Along the sides narrow plain relief borders. The workmanship is perfunctory and unrefined.

The profile has not been published.

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV, no. 801, small, poor photo of top. (See annotation in bibliography.)

## XCV.8

MATERIAL: Jade, described as "bonewhite and brown."  
 COLLECTION: P. de Tanner, Berlin (now dispersed).  
 PROFILE TYPE: B (?).  
 DATE: Late antiquarian.

In the center of the surface of the upper plate is a

circular incised (or in relief ?) ornament. The surface above is filled with a single pair of thin, extremely elongated C's in rounded relief backing toward each other and opening toward the sides. This pattern is repeated on the lower half of the surface. Along the sides and across both ends are narrow plain borders, defined by an incised line. The workmanship is poor, the sense of design degraded.

The profile has not been published.

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV, no. 812, small, poor photo of top; ascribed to the Han dynasty. (See annotation in bibliography.)

## XCV.9

MATERIAL: Jade, greenish yellow and brown.  
 COLLECTION: P. de Tanner, Berlin (now dispersed).  
 PROFILE TYPE: B (?).  
 DATE: Late antiquarian.

The surface of the upper plate is ornamented with an asymmetrically arranged pattern of plastic volutes, C-hooks, and comma-patterns of varying sizes. Along the sides and across each end are narrow plain borders defined by an incised line. The piece is exceptionally narrow. The workmanship appears to be poor.

The profile has not been published.

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV, no. 684, small, poor photo of top; ascribed to the Han dynasty. (See annotation in bibliography.)

## XCV.10

MATERIAL: Jade, white and brown.  
 COLLECTION: P. de Tanner, Berlin (now dispersed).  
 PROFILE TYPE: B.  
 DATE: Late antiquarian.

The slide is broader at one end, the sides tapering inward regularly toward the other (presumably the lower) end. The sides and ends are set off by broad plain borders. The center of the upper plate is a raised, slightly arched area of roughly rectangular form, paralleling the shape of the plate. Along the central crest of this surface, equally spaced along its length, are three round knob grains. At each end of this raised sector are rounded C-shaped volutes in relief, opening toward the interior. The central grain is bracketed by two C-shaped volutes which swell slightly inward at their centers. The relief of the volutes is highest where their backs touch upon the edges of this arched decor sector, lowering as they approach the interior, resulting in a flat decor plane rising above the arched ground. The grains appear to project above the general level of the volutes. The workmanship is poor.

The profile has not been published.

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV,

no. 868, small, poor photo of top; ascribed to the Han dynasty. (See annotation in bibliography.)

## XCV.11

MATERIAL: Jade.

COLLECTION: National Palace Museum, Taipei, Taiwan.

MEASUREMENTS:

L 1.69\* ApL 1.06\*  
W .91\*

PROFILE TYPE: A-1.

TYPE: 1 (?).

DATE: Possibly Western Han.

This scabbard slide appears to be similar to XCV.3, but is too poorly published to allow a description of the surface ornamentation. The outward form, including projecting angular central vertical axis, side borders, and laterally arched surface areas of the upper plate, are equivalent to these features on XCV.5.

(See also XCV.4, XCV.6.)

REFERENCES:

*Ku-kung*, no. 28, p. 14, fourth from top, slightly oblique top/profile photo; identified as *peng* 璆 (presumably ferrule).

*Ku-kung chou-k'an*, no. 16, p. 940, photo of top.

## Ridge Class

## XCR.1

MATERIAL: Jade.

COLLECTION: National Palace Museum, Taipei, Taiwan.

MEASUREMENTS:

L 2.09\* ApL 1.72\*  
W .84\*

PROFILE TYPE: A-1.

DATE: Late Eastern Chou.

The outer surface of the arched upper plate is divided into three parallel lengthwise bands of equal width separated by thin ridges. The bands are slightly concave.

REFERENCES:

*Ku-kung*, no. 28, p. 14, third from top, photo of top.

*Ku-kung chou-k'an*, no. 16, p. 943, photo of top.

Na Chi-liang, *Yü ch'i t'ung-shih* (1964), pl. LXXVIII, 2, photos of top and profile.

## XCR.2

MATERIAL: Jade, red-brown and pale green with reddish flecks in the green area as well as yellowish and greenish white clouds.

COLLECTION: The late Seiichi Ueno,<sup>4</sup> Osaka.

MEASUREMENTS: (Converted from *kanejaku* 曲尺

scale; estimates from supposedly natural-size photograph.)

L 1.47 (1.56\*)  
W .81 (.72\*)  
D .75

PROFILE TYPE: A-1.

DATE: Han, probably Western Han.

Along the vertical sides of the upper plate are raised squared borders cut off flush with the ends. The surface of the upper plate between the borders has a slight lateral arch, but is otherwise plain.

REFERENCE: Hamada, *Yūchikusaizō kogyokufu* (1925), 2, pl. XXI, 50, oblique top/profile photo (in color); 1, pl. V, 50, line drawings of profile and top. Hamada does not consider this piece to be a scabbard slide (*sui*), but a "jade sword ornament": *feng* (ferrule?).

## XCR.3

MATERIAL: Jade.

COLLECTION: Lo Chen-yü 羅振玉.

PROFILE TYPE: A-I (possibly A-2).

DATE: Han, probably Western Han.

The surface of the upper plate is similar to XCR.2. The sides may slope inward slightly toward the lower aperture plate of reduced width. The arched upper plate is of uneven depth, being slightly thicker in the center of the aperture than at either end.

REFERENCE: *Hsüeh-t'ang so ts'ang ku ch'i wu t'u* (1923), p. 24:a, oblique end/side photo; described as an object of unknown use.

## XCR.4

MATERIAL: Jade, pale green, opaque.

COLLECTION: British Museum, London, 1938.5-24.416.

MEASUREMENTS:

L 1.44  
W .69  
D .53

PROFILE TYPE: C.

DATE: Modern.

The upper surface is laterally arched to either side of a raised, rounded, central vertical ridge which projects slightly beyond each end. Similar raised, rounded side borders also project at each end.

The carving is poor quality, the stone has been cut in such a way that it appears soft and pliant rather than having the qualities of hardness and brittleness emphasized by sharp, clear lines and precise workmanship that characterize authentic pieces.

Unpublished.

## XCR.5

MATERIAL: Jade, mottled light green and brown.

COLLECTION: Yamanaka and Company, Inc. (now dispersed).

MEASUREMENTS:

L 1.75

PROFILE TYPE: A-2 (?).

The surface of the arched upper plate is divided lengthwise into seven bands of equal width. Alternate bands are depressed. The edges of the bands and grooves are squared and their surfaces flat. Two bands at the borders and two of the interior bands are raised.

REFERENCE: New York, Yamanaka and Company, *Far Eastern Art* (1943), no. 317, small, poor photo of top; ascribed to Late Eastern Chou.

### XCR.6

MATERIAL: Jade, opaque brownish, streaked with translucent greenish veins.

COLLECTION: Metropolitan Museum of Art, New York, 13.40.169.

MEASUREMENTS:

L 3.06	ApL 1.69 (maximum)
W 1.06	ApD .31 (maximum)
D .59	

PROFILE TYPE: A-2.

DATE: Late antiquarian (?).

Similar in form to XCR.5.

Unpublished.

### XCR.7

MATERIAL: Whitish marble-like stone with red and brownish black flecks.

COLLECTION: Metropolitan Museum of Art, New York, 13.40.164.

MEASUREMENTS:

L 1.69	ApL 1.25 (maximum)
W .69	ApD .34 to .47
D .81	

Depth of upper plate in center of aperture .25.

PROFILE TYPE: A-2.

DATE: Han, probably Western Han.

The outer surface of the arched upper plate is divided lengthwise by four parallel, narrow, square-cut grooves into five plain, slightly concave bands. The three interior bands are of equal width; the two bands at the borders, of equal width, are narrower than the interior bands.

Cut through the upper aperture wall are two centrally placed parallel slits, each .50 long and .06 wide. The function of these openings is unknown.

Unpublished.

### XCR.8

MATERIAL: Jade, clear green with dark stains.

COLLECTION: Osvald Sirén, Stockholm.

MEASUREMENTS:

L 2.48

No published photograph. Described as being ornamented with four parallel lines (presumably raised, with three similar depressed grooves).

REFERENCE: Sirén, *Documents d'art chinois* (1925), p. 68, no. 515, not illustrated; ascribed to the Sung dynasty, or later.

### XCR.9 . . . . . Plate 22d

MATERIAL: Jade, gray green and brownish green; iron-oxide stains on lower aperture plate; fragment of excavation earth with cloth impression adhering to inside of aperture.

COLLECTION: Dr. Paul Singer, Summit, New Jersey.

MEASUREMENTS:

L 1.78	ApL 1.13
W .98	ApD .31
D .63	

PROFILE TYPE: A-1.

DATE: Early Western Han.

The outer surface of the arched upper plate is divided lengthwise by a central groove into two plain convex panels of equal width. Along each side is a sharp ridge border sloping downward to a shallow groove separating the borders from the plain interior panels. The side ridges, side and axial grooves, are not closed at the ends by borders.

Unpublished.

### XCR.10

MATERIAL: Jade, gray translucent with flecks of decoloration and iron-oxide stains. Evidence of belt wear at two opposing interior corners of the aperture.

COLLECTION: Royal Ontario Museum, Toronto; 928.12.100.

MEASUREMENTS:

L 1.53	ApL 1.00
W .84	ApD .34
D .75	

The sides taper slightly, so that the width of the lower plate is .81.

PROFILE TYPE: A-2.

DATE: Western Han.

The outer surface of the arched upper plate is divided lengthwise into three zones of equal width. The outer two bands are concave, the central band, set below the edge ridges of its bordering bands, is convex. These panels extend to the unbordered ends.

Unpublished.



## Grain Class

*XCG.1*

MATERIAL: Jade.

PROVENANCE: Chao-ku ts'un,<sup>s</sup> Hui-hsien,<sup>t</sup> Honan<sup>i</sup> Province, tomb I, excavated in 1951.

MEASUREMENTS:

L 1.81 (upper plate) 1.42 (lower plate)  
W .98  
D .71

PROFILE TYPE: A-2.

DATE: Fourth or third century B.C.

The published photographs of this scabbard slide (1:109 in report) do not permit detailed analysis of form or decoration. The surface of the upper plate is ornamented with a grain pattern, presumably of the comma-spiral variety. Along the sides are narrow plain borders, and possibly similar borders close the ends.

The slide is one of three (see *XCG.2*, *XCG.15*) found in association with double-edged bronze swords in this late Chou tomb. The slide was found resting upon the blade of the sword, the scabbard having wholly deteriorated. The sword (1:110 in report), about 22.75 long, is bronze, with plain round hilt cast in one piece with the blade. At the point where the blade joins the hilt there is a thick ridge, not exceeding the width of the blade, constituting the guard. The round, concave disk pommel was presumably inlaid with a jade disk which, however, was not found in the tomb. The slide was found in vertical position near one edge of the blade and is, therefore, somewhat removed from its original position on the scabbard wall, though its relative position with regard to distance from guard may be unchanged.

REFERENCE: *Hui-hsien fa-chüeh pao-kao* (1956), p. 120 and pls. LXXX,2, lower sword, showing position in tomb, and XC,2, photo of sword and slide (top view); p. 117, description of sword; p. 111, fig. 131, plan of tomb; position and number of articles in plan does not agree strictly with photo (pl. LXXX,2) of tomb.

*XCG.2*

MATERIAL: Jade.

PROVENANCE: Chao-ku ts'un,<sup>s</sup> Hui-hsien,<sup>t</sup> Honan<sup>i</sup> Province, tomb I, excavated in 1951.

PROFILE TYPE: A-2 (?).

DATE: Fourth or third century B.C.

Even less is known about this scabbard slide than about *XCG.1* from the same tomb. The slide is published in association with a sword (1:112 in report) with which the excavators evidently believe it to have been associated. The slide, however, is not seen in the photograph of the swords *in situ* and it is not shown in the plan of the tomb. In the text of the report (p.120), a jade object

(1:111) is described as being illustrated with this sword (pl. XC,3); the object discussed, however, is not the slide but a piece of jade found near the tip of the blade which may be a chape ornament of rather unusual form and is not, in fact, insofar as I can determine, illustrated in the report. The slide itself does not appear to be discussed in the report.

The upper surface of the scabbard slide is ornamented with a grain pattern, presumably of the comma-spiral variety, though the poorness of the photograph does not permit certainty on this point. Along the sides are narrow plain borders, and presumably similar borders close the ends. The double-edged bronze sword with which this slide is associated in the photograph lay directly beneath the blade of that with which *XCG.1* was found. The preserved part of the sword is about 22.50 in length; presumably, the solid square tang was fitted with a disk pommel. The blade, guard, and hilt are cast in one piece. The flat guard, which does not project laterally from the base of the blade, has rounded shoulders and possibly a suggestion of a saddle in the center where the tang joins it.

REFERENCE: *Hui-hsien fa-chüeh pao-kao* (1956), pl. XC,3, photo of sword and slide (top view); p. 117, description of sword; pl. LXXX,2, photo of sword *in situ* (lower sword, beneath disk-pommeled sword); p. 111, fig. 131, plan of tomb (slide not shown). Position and number of articles in plan do not agree strictly with photo (pl. LXXX,2) of tomb.

*XCG.3*

MATERIAL: Jade.

COLLECTION: National Palace Museum, Taipei, Taiwan.

MEASUREMENTS:

L 2.97\*  
W 1.16\*

PROFILE TYPE: A-2 (?).

The surface of the upper plate is decorated with offset rows of very fine circular rounded knob grains seemingly raised in relief above the unbordered surface. A reticulation of parallel lines in three directions is visible on the surface, lying between the grains and by means of which the individual grains were defined. The decor of grains is centered on the plate, and is surrounded by narrow undefined plain areas at the sides and ends.

REFERENCES:

*Ku-kung*, no. 28, p. 14, top, faint, slightly oblique top/profile photo. Identified as *peng* 璜 (presumably ferrule).  
*Ku-kung chou-k'an*, no. 16, p. 943, faint, slightly oblique top/profile photo.

*XCG.4* .....Plate 22e

MATERIAL: Jade, white brownish black spots; appar-

ently decolored and considerably decomposed; several cracks (probably mended breaks) are visible on the surface.

COLLECTION: Museum of Far Eastern Antiquities, Stockholm, no. 11000:34.

MEASUREMENTS:

L 2.28  
W 1.02

PROFILE TYPE: B (?).

DATE: Han (?).

The surface of the upper plate is ornamented with twenty-two horizontal rows of circular rounded knob grains offset horizontally to form diagonals and contained within narrow plain borders along both sides and across both ends.

The profile of this piece has not been published. The identification as scabbard slide is tentative. While it is almost certainly not a sword guard as described by Sirén and Janse, Sirén notes that the piece has a "décor de grains sur les deux côtes," which would be impossible for a slide of authentic age. Janse does not mention any decor on the reverse.

REFERENCES:

Sirén, *Documents d'art chinois* (1925), pl. XXXVI 504, photo of top. Identified as a sword guard and ascribed to the Sung dynasty.

Janse, "Notes sur quelques épées anciennes" (1930), p. 127, no. 108, and pl. XVII,8, photo of top. Identified as a rectangular sword guard.

XCG.5

MATERIAL: Jade, white.

MEASUREMENTS:

L 1.69\*  
W .75\*

PROFILE TYPE: A-2.

The arched surface of the upper plate is ornamented with thirteen horizontal rows of alternately five and six circular knob grains, offset horizontally to form diagonals, and contained within narrow plain borders along each side and end. Partial grains at the borders suggest the use of a pattern.

REFERENCES:

Wu Ta-ch'eng, *Ku yü t'u k'ao* (1889), p. 96:a, right, oblique top/profile and bottom/profile drawings; identified as *peng* 琕 and described as a scabbard ferrule. (See note with CP.6.)

Laufer, *Jade* (1912), p. 279, fig. 182, after Wu Ta-ch'eng; identified as *peng* and described as a scabbard ferrule.

Rostovtsev, "Une trouvaille de l'époque gréco-sarmate de Kertch" (1923), p. 135, fig. 21, after Laufer. Identified as a scabbard ferrule.

XCG.6 .....Plate 22f

MATERIAL: Jade, white with a pink cast and darker red and purplish spots.

COLLECTION: The late Seichi Ueno,<sup>a</sup> Ōsaka.

MEASUREMENTS:

L 2.23  
W 1.11  
D .67

PROFILE TYPE: A-2.

DATE: Han.

Along both sides and enclosing either end of the surface of the upper plate are plain narrow borders. The interior surface is decorated with twenty-three horizontal rows of closely set small, circular, rounded knob grains offset horizontally to form diagonals. The reticulation of parallel lines laid in three directions and intersecting at regular points to form the small areas from which the grains were fashioned was not entirely polished off. It seems likely that the ornamentation was laid out with a pattern as the horizontal rows of grains contain alternately nine and one-half grains, the half grains resulting from having been cut away by the incised, regular vertical border line on one side.

REFERENCES:

Hamada, *Yūchikusaizō kogyokufu* (1925), I, pl. V, 47, drawing of profile and rubbing of top ornamentation; 2, pl. XXI, 74 (read "47"), color photo of top.

*Shū Kan ihō* (1932), pl. XXXIII,3, photo of top.

XCG.7

MATERIAL: Jade, grayish white.

COLLECTION: P. de Tanner, Berlin (now dispersed).

PROFILE TYPE: A-2 (?).

DATE: Late antiquarian.

The surface of the arched upper plate is ornamented with six vertical rows of alternately eleven and ten circular rounded knob grains offset vertically to form diagonals. Along each side and across both ends are narrow plain borders seemingly elevated, in height equal to the crests of grains.

REFERENCE: Tanner, *Chinese Jade* (1925), I, pl. XV, no. 829, small, poor photo of top. (See annotation in bibliography.)

XCG.8

MATERIAL: Jade, white with dark brown streaks and spots.

COLLECTION: Metropolitan Museum of Art, New York, 16.144.24.

MEASUREMENTS:

L 2.31  
W 1.00  
ApL 1.63 (maximum)  
ApD .31 to .38

D .78

Depth of upper plate over center of aperture .22; with relief .28.

PROFILE TYPE: A-2.

DATE: (?).

The surface of the upper plate is ornamented with small circular rounded knob grains closely set in rows. The decor surface is elevated above narrow plain borders along the sides and ends.

Unpublished.

**XCG.9**

MATERIAL: Jade, yellowish with reddish brown areas.

COLLECTION: Metropolitan Museum of Art, New York, 16.144.25.

MEASUREMENTS:

L 2.13	ApL 1.56 (maximum)
W 1.03	ApD .23 to .31
D .59	

Depth of upper plate at center of aperture .19.

PROFILE TYPE: A-2.

DATE: Late antiquarian.

Within plain borders along the sides and across each end, defined by incised lines, the surface of the upper plate is marked by a reticulation of slant-cut grooves laid out in three directions. These are not placed so that, intersecting at regular points, triangles are formed, but are haphazardly spaced so that rough polygonal areas of varying shape and size are produced. The lines are carelessly cut and many are carried into the border area.

Unpublished.

**XCG.10**

MATERIAL: Jade, gray-brown with areas of white decoloration.

COLLECTION: Metropolitan Museum of Art, New York, 13.40.167.

MEASUREMENTS:

L 1.81	ApL 1.34 (maximum)
W .97	ApD .25 to .38
D .81	

Depth of upper plate at center of aperture .28.

PROFILE TYPE: A-2.

DATE: Han (?).

The arched surface of the upper plate is ornamented with rows of circular rounded knob grains.

Unpublished.

**XCG.11**

MATERIAL: Jade, pale yellowish green on bottom unaltered areas; top and sides decolorated; slight evidence of strap wear at upper left corner of aperture; rough broken

area at one corner; bronze oxide stain on lower aperture plate.

COLLECTION: Dr. Arthur M. Sackler, New York; no. J-585.

MEASUREMENTS:

L 1.53
W 1.16
D .50

The sides taper slightly inward, so that the width of the lower plate is 1.09.

PROFILE TYPE: A-1.

DATE: End of Chou or early Western Han.

The slightly arched upper plate is divided into three zones vertically, of approximately equal width. The central zone is ornamented with three parallel vertical rows of ten circular rounded knob grains interlocked by incised lines now too worn for the exact pattern to be discerned, but presumably they formed a diagonal step pattern. Two closely set parallel and shallowly incised lines separate the central zone from complementary side zones, each decorated with three large T-shaped designs set at right angles to the vertical axis and alternately facing toward and away from the central zone. These T-shaped designs are partly incised and partly defined by slight sloping alterations in the surface level. Pairs of short, curved, parallel incised lines connect the crossbars of each T to the side border or interior border of the central zone in accordance with the direction of each T. Along each side is a narrow, flat, plain border separated from the decorated zones by an incised line.

The upper plate is only slightly arched and joins the end aperture walls in a rounded curve. The upper plate is approximately twice the thickness of the lower.

REFERENCE: West Palm Beach, Norton Gallery of Art, *Exhibition of Chinese Archaic Jades* (1950), pl. LIX, 5, photo of top. (In the description of the object, for "concave" read "convex.")

**XCG.12**

MATERIAL: Jade, upper plate and ends translucent gray, lower plate and small portion of ends reddish brown.

COLLECTION: British Museum, London, 1945.10-17.102; formerly K. C. Wong.

MEASUREMENTS:

L 2.31	ApL 1.81
W .94	ApD .25
D .66	

PROFILE TYPE: B/C.

DATE: Modern.

The upper surface is ornamented with flap-topped polygonal grains defined by a reticulation of deep, slant-cut lines in three directions, haphazardly laid out so that



COLLECTION: Mr. and Mrs. W. Trousdale, Washington, D. C.

MEASUREMENTS:

L 2.31	ApL 1.63
W .78	ApD .16
D .41	

There is a perceptible vertical taper, the width of the lower aperture plate being .72.

PROFILE TYPE: A-I.

DATE: Mid Western Han.

The laterally arched upper surface is ornamented with eighteen rows of irregularly formed knob grains with plain surface between them showing traces of a grid laid in three directions to define and regularize the position of the grains. There is a plain recessed border along all four sides of the upper plate. The workmanship is of moderately fine quality and the slide shows clear evidence of long use.

Unpublished.

Hydra Class

XCH.1..... Plate 23b

MATERIAL: Jade, pale green translucent with yellowish brown shading; a small break in the left edge of the lower aperture plate; considerable aperture wear at all corners (cf. XCG.16), but more pronounced at the upper left and lower right corners.

COLLECTION: Art Institute of Chicago, 50.830; Edward and Louise B. Sonnenschein Bequest.

MEASUREMENTS:

L 1.81	ApL 1.00
W .98	ApD .34
D .78	

The upper plate is exceptionally thin, in some places not exceeding .06.

PROFILE TYPE: A-I.

DATE: Western Han.

The outer surface of the arched upper plate is ornamented with two hydra figures carved in moderately high relief. The larger figure, with single-stem tail, is oriented upward in an extended S-curve, the head facing upward, but not directly toward the smaller hydra placed horizontally across the top of the slide, its head facing downward toward the larger animal. The smaller hydra emerges from the surface, as though from water, and small curved relief lines suggesting ripples mark the spot where the body appears. The animals are vigorously and organically conceived; details of body marking are executed in low relief and by incising. The outer surfaces exhibit considerable evidence of wear and much of the incised detail work is obliterated. There are no visible head horns, nor borders, the figures occupying the full area of the surface.

The arched upper plate is projected a short distance above (.19) and below (.25) the aperture walls, thus establishing a relationship between it and the more numerous Form I slides with fully developed extensions of the upper plate.

REFERENCE: Salmony, *Sonnenschein Collection* (1952), pl. CVII, 4, photo of top.

XCH.2

MATERIAL: Jade, pale green with reddish brown markings (iron oxide?).

COLLECTION: Art Institute of Chicago, 50.831; Edward and Louise B. Sonnenschein Bequest.

MEASUREMENTS:

L 1.69	ApL .94
W 1.00	ApD .25
D .88	

PROFILE TYPE: A-I.

DATE: Late antiquarian.

The outer surface of the arched upper plate is ornamented with a finely sculptured hydra figure carved in softly contoured moderately high relief. The figure is oriented upward (presumably) in an extended S-curve, the head in three-quarters view, facing upward. Details of body ornamentation are executed in low relief. The sides are defined by narrow plain borders marked by crudely incised grooves interrupted in several places by the body of the hydra. The figure is organically conceived and rather more full-bodied than some, but is lacking in vitality of conception.

The upper plate and upper and lower aperture walls are disproportionately thick in relation to aperture size. The exterior of one aperture wall is marked with incised ornamentation consisting of a pair of two concentric circles set into squares with diagonal lines from the perimeters of the outer circles to the corners of the squares. The exterior of the other aperture wall is divided by incised lines into two squares open at two sides, with a spiral in each descending from the inner upper corner, overlapping a diagonal line drawn across each square.

REFERENCE: Salmony, *Sonnenschein Collection* (1952), pl. CVII, 5, photo of top.

XCH.3

MATERIAL: Jade, grayish green with reddish brown markings (iron oxide?).

COLLECTION: Art Institute of Chicago, 50.829; Edward and Louise B. Sonnenschein Bequest.

MEASUREMENTS:

L 1.75	ApL 1.06
W 1.06	ApD .28
D .88	

PROFILE TYPE: A-1.

DATE: Late antiquarian.

The outer surface of the arched upper plate is ornamented with a hydra figure carved in moderately high rounded relief. The figure, with thick single-stem tail, is oriented upward in extended S-curve, the head in three-quarter view, facing obliquely upward. The body is comparatively plain, but with some lesser details modeled in low relief. Thin and rather sinewy, the figure is a bit attenuate and on the whole not vigorously or organically conceived. The facial features, and perhaps the body, appear to be worn, but this may be owing to the deficient original technique of summary carving. There are no borders and the figure occupies the full area of the surface.

The upper plate and upper and lower aperture walls are disproportionately thick in relation to the size of the aperture.

REFERENCE: Salmony, *Sonnenschein Collection* (1952), pl. CVIII, 6, photo of top.

#### XCH.4

MATERIAL: Jade, milky gray-green with black spots.

COLLECTION: Metropolitan Museum of Art, New York, 16.144.27.

MEASUREMENTS:

L 2.06	ApL 1.50 (mean)
W 1.03	ApD .28 (mean)
D .63 (basic)	
D .97 (with relief)	
Thickness of upper plate at center of aperture .19 (mean).	

PROFILE TYPE: A-2.

DATE: Probably modern.

The outer surface of the arched upper plate is ornamented with the body of a single hydra carved in high relief. The head is turned to look down along the body. The workmanship is poor and the plates quite irregularly formed.

Unpublished.

#### XCH.5

MATERIAL: Jade, deep brown with area of yellow brown.

COLLECTION: Metropolitan Museum of Art, New York, 13.40.166.

MEASUREMENTS:

L 1.75	ApL 1.34 (maximum)
W .88	ApD .22 (maximum)
D .56 (basic)	
D .72 (with relief)	
Thickness of upper plate over center of aperture .22.	

PROFILE TYPE: A-2.

DATE: Probably modern.

The outer surface of the arched upper plate is orna-

mented with the figure of a single hydra carved in moderately high relief. The head is turned to look down along the body.

Unpublished.

#### XCH.6

MATERIAL: Jade, brown with patches of milky yellowish brown.

COLLECTION: Metropolitan Museum of Art, New York, 13.40.173.

MEASUREMENTS:

L 2.19	ApL 1.38
W 1.13	ApD .31
D 1.00	
Thickness of upper plate at center of aperture .22 to .25.	

PROFILE TYPE: B.

DATE: Modern.

The outer surface of the flat upper plate is ornamented with an extremely crudely carved, clumsy, and ill-proportioned hydra in moderately high relief. The head is turned to look down along the body.

Unpublished.

#### XCH.7

MATERIAL: Jade, white with brownish markings.

COLLECTION: K. C. Wong (now dispersed).

PROFILE TYPE: C, variant.

DATE: Modern.

The upper plate is arched between the two ends of the flat lower plate. The aperture is very crudely and roughly cut. Along the sides of the outer surface of the arched upper plate are narrow, plain, recessed (?) borders wholly containing between them a rather poorly defined figure of a hydra carved in moderately high relief. The surface is treated as a body of water out of which only the fore and hind parts of the hydra emerge. Where the body "submerges" below the surface, small curved lines reminiscent of ripples are carved. The workmanship and quality of the stone appear to be poor.

REFERENCES: "Ancient Jade Sword and Scabbard Parts" (1927), pl. II, following p. 296, lower section, top right, photo of top; lower section, top left, photo of profile. Identified as a ferrule and ascribed to the Han dynasty.

*Wong Collection of Ancient Chinese Jades* [1937], p. 21, no. 343 and pl. X, 343, photo of top. Identified as a scabbard ornament and ascribed to the Han dynasty.

#### XCH.8

MATERIAL: Jade.

COLLECTION: K. C. Wong (now dispersed).

PROFILE TYPE: B.

DATE: Modern.

The unbordered outer surface of the upper plate is carved with the figure of a hydra in high relief. The animal, with trifurcated tail, is in an extended S-curve, the muzzle touching one of the stems of the tail. The hydra is stylized in a manner wholly incompatible with authentic Han representations.

Plates and walls are of approximately equal thickness. The corners are rounded. Saw lines parallel to the interior sides of both the upper and lower plates penetrate for a short distance into the aperture walls at the four interior corners.

REFERENCE: "Ancient Sword and Scabbard Parts" (1927), pl. II, following p. 296, lower section, fourth item from top right, photo of top; lower section, fourth item from top left, oblique photo of profile. Identified as a ferrule and ascribed to the Han dynasty.

#### XCH.9

MATERIAL: Jade, gray and brown.

COLLECTION: P. de Tanner, Berlin (now dispersed).

PROFILE TYPE: A-2 (?).

DATE: Modern.

The outer surface of the arched (?) upper plate is ornamented with an extremely crudely carved hydra in moderately high relief. The head is turned to look down along the body. The tail is single-stem. From the top center of the head, a long curved and striated horn or tuft of hair is represented. The unbordered background surface of the plate is plain and unmodulated. A crude piece of inferior quality.

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV, no. 750, small, poor photo of top. (See annotation in bibliography.)

#### XCH.10

MATERIAL: Jade, gray and brown.

COLLECTION: P. de Tanner, Berlin (now dispersed).

PROFILE TYPE: (?).

DATE: Modern.

The outer surface of the upper plate is carved in relief with what is described as a "floral decoration," but which appears to be an exceedingly floriate hydra form. Extremely crude work.

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV, no. 1069, small, poor photo of top. (See annotation in bibliography.)

#### XCH.11

MATERIAL: Jade, white and brown.

COLLECTION: P. de Tanner, Berlin (now dispersed).

PROFILE TYPE: (?).

DATE: Modern.

The outer surface of the upper plate is ornamented with the figure of a hydra carved in relief. The piece appears to be very worn, but this must be the result of some circumstances other than age. An extremely crude piece.

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV, no. 991, small, poor photo of top. (See annotation in bibliography.)

#### XCH.12

MATERIAL: Jade, white and brown.

COLLECTION: P. de Tanner, Berlin (now dispersed).

PROFILE TYPE: B, variant.

DATE: Modern.

The outer surface of the upper plate is ornamented with the figure of a single hydra carved in moderately high relief. Crude workmanship.

REFERENCE: Tanner, *Chinese Jade* (1925), 1, pl. XV, no. 926, small, poor photo of top. (See annotation in bibliography.)

#### XCH.13

MATERIAL: Nephrite (by X-ray diffraction), translucent gray with heavy red-brown staining on upper plate and left side.

COLLECTION: Freer Gallery of Art, Washington, D. C., 12.56.

MEASUREMENTS:

L	1.78 (upper plate)	1.56 (lower plate)
W	.80	
D	.66 (basic)	.84 (with relief)

PROFILE TYPE: A-2.

DATE: Late antiquarian.

The outer surface on the upper plate is ornamented with the figure of a hydra oriented upward, with single-stem tail, carved in moderately high relief. The head is turned downward. Along the spine, on alternate sides, are pairs of short incised parallel lines; these same appear at intervals on alternate sides along the tail. The execution of the figure is summary, imprecise, and somewhat unclear.

At the upper right corner there is an irregular depressed area in the upper plate which is not the result of breakage but is the natural surface of the stone which apparently was of insufficient size for the work attempted, or else the depression is intended to suggest a worn or broken area, hence antiquity. Saw lines parallel to the inner surface of the lower plate enter the aperture walls at the lower corners. The exterior of the lower aperture plate is slightly arched horizontally, thus rendering it unlikely that this piece was ever fitted to a scabbard wall.

Unpublished.

## XCH.14

MATERIAL: Jade, gray.

COLLECTION: Osvald Sirén, Stockholm.

MEASUREMENTS:

L 2.76

PROFILE TYPE: B (?).

DATE: Late antiquarian.

The object is described as a rectangular ring (*sic*), decorated with the figure of a hydra in relief on one side. The object is identified as a sword guard and ascribed to the Ch'ing dynasty, Ch'ien Lung period.

REFERENCE: Sirén, *Documents d'art chinois* (1925), p. 68, no. 518, not illustrated.

XCH.15 . . . . . Plate 23c

MATERIAL: Jade.

PROVENANCE: Inner Mongolia, Niao-lan-ch'a-pu 烏蘭察布 (a south central district); excavated in 1956.

MEASUREMENTS:

L 2.75

PROFILE TYPE: B.

DATE: Yüan dynasty.

This late antiquarian scabbard slide illustrates one use of these objects in the post-Han periods. Basically a scabbard slide of Form II, profile type B, one narrow end has been provided with a rectangular rounded loop by which the piece may be hung on a leather strap and worn at the belt as an ornament. It is thus identified as a belt ornament in the publication below, but its derivation from the earlier scabbard slide cannot be doubted. See also CP.4.

The upper surface is ornamented with a complex pattern in high relief of hydra figures among stylized cloud forms. Along the sides are narrow plain borders, but the relief extends nearly to the upper and lower edges. Cut through the small thick plaque is a narrow aperture, arched slightly along its upper side, with shallow squared ends.

Though recovered within the territory of Inner Mongolia, the Chinese origin of this scabbard slide is certain.

REFERENCE: *Nei-meng-ku ch'u-t'u* (1963), pl. 142, no. 185, angled top/profile/end photo.

XCH.16 . . . . . Plate 23d

MATERIAL: Jade, translucent yellowish brown with thin decolored surface areas on upper plate and some internal spots of decolored stone, chiefly on lower plate; flecks of reddish brown stain (iron oxide?) on exterior of lower plate.

COLLECTION: Dr. Ralph W. Chaney, Berkeley, California.

MEASUREMENTS:

L 2.00

W .88 (upper end)

W .86 (lower end)

D .45

Depth of upper plate over center of aperture .13.

ApL 1.69

ApD .23

PROFILE TYPE: A-1.

DATE: Late Eastern Chou, fourth to early third century B.C.

The outer surface of the gently arched upper plate is ornamented with parts of at least two fabulous creatures depicted in profile and carved in low, beveled relief. The principal figure is a highly geometrized dragon figure with powerfully stylized head facing upward. Immediately below the open jaws of the beast is a looped scaly animal appendage terminating in a tuft of hair. Both the scales and lines suggestive of hair are incised. At the lower end, the head of a second animal is seen, also facing upward. Visible are the eye, bulbous upcurled upper lip and small lower jaw, and a ruff of hair at the back of the head.

The delicate modulation of the relief imparts vibrant sculptural qualities to the animals. The workmanship is of superior quality.

Unpublished.

XCH.17 . . . . . Plate 24a

MATERIAL: Jade, pale yellowish gray with flecks of iron oxide on all surfaces and heavier accretions on the inside of the lower aperture plate suggesting that it was fastened to the scabbard wall by a thin, broad iron band.

COLLECTION: Mr. and Mrs. W. Trousdale, Washington, D. C.

MEASUREMENTS:

L 1.78

W .94

D .94

There is a perceptible vertical taper, the width of the lower aperture plate being .89.

ApL 1.19

ApD .31

PROFILE: A-2.

DATE: Mid Western Han.

The upper plate is ornamented with a vigorous hydra figure in an extended S-curve, the head turned to face off the right side. The figure is carved in high relief, but is not undercut at any point. The head, lacking the customary horn or crest, is carved with exceptional strength and sensitivity. Stylized musculature is rendered in incised lines and curved planes. The paws are fully sculptured, the claws set off with additional incised lines. One section of the bifurcated tail is plain, the other marked with incised lines. The hydra extends to, but does not project beyond, the four sides of the upper plate which is plain. The standard of craftsmanship is exceptionally high.

Unpublished.



## Unclassifiable

## XC.1

MATERIAL: Jade, white with russet markings.

COLLECTION: K. C. Wong (now dispersed).

REFERENCE: *Wong Collection of Ancient Chinese Jade* [1937], p. 21, no. 348, not illustrated; identified as scabbard ornament, in a series of similarly identified pieces, some of which are illustrated; ascribed to the Han dynasty.

## XC.2

MATERIAL: Jade, opaque white with black markings.

COLLECTION: K. C. Wong (now dispersed).

REFERENCE: *Wong Collection of Ancient Chinese Jade* [1937], p. 21, no. 347, not illustrated; identified as scabbard ornament, in a series of similarly identified pieces, some of which are illustrated; ascribed to the Han dynasty.

## Atypical

## XCZ.1

MATERIAL: Jade, green on one side, reddish brown on the other.

COLLECTION: Metropolitan Museum of Art, New York.

MEASUREMENTS:

L 1.56	ApL 1.13
W .81	ApD .22 to .25
D .56	
The depth of both upper and lower plates is .16.	

PROFILE TYPE: Between B and C, with rounded corners but without fully rounded ends.

DATE: Modern.

The surface of the green side is ornamented with a crudely carved geometric decor consisting of combinations of C-spirals and elongated C-hooks, in low relief. The surface of the reddish brown side is decorated with a pattern of finely incised geometric forms resembling stars or flowers. Probably not a scabbard slide, but a shape possibly based on authentic examples of slides with related profiles and ornamented on one side only.

Unpublished.

## XCZ.2

MATERIAL: Jade, white with brownish markings.

COLLECTION: K. C. Wong (now dispersed).

PROFILE TYPE: C.

DATE: Modern.

Along the sides of both the obverse and reverse of this piece are narrow, plain, raised borders. Within these borders, the two surfaces are decorated with different patterns. One side is ornamented with fine vertical rows of circular rounded knob grains, offset vertically to form diagonals. The vertical rows are slightly offset, so that

partial grains appear at either end where the lines encounter the borders. Use of a pattern or die is hence suggested. The other side is ornamented with two vertical rows of four pairs each of backed elongated C's, set in alternating positions paralleling the vertical and horizontal axes. The orientation of each pair in one column is opposite to that of the adjoining pair in the other column. The forms appear to be carved in low relief above a flat, plain background.

This object is not a scabbard slide and probably not an element of sword furniture. Its shape may be based on, or derived from, authentic slides of this related form.

REFERENCES:

"Ancient Jade Sword and Scabbard Parts" (1927), pl. II, following p. 296, lower section, second item from top, left photo of side with grain pattern; lower section, second item from top right, photo of side with paired elongated C's; photos small and poor; identified as a ferrule and ascribed to the Han dynasty.

*Wong Collection of Ancient Chinese Jade* [1937], p. 21, no. 344 and pl. X, 344, photo of side with grain pattern; identified as a scabbard ornament and ascribed to the Han dynasty.

XCZ.3 ..... Plate 24b

MATERIAL: Jade, white with brown areas and traces of black.

COLLECTION: K. C. Wong (now dispersed).

PROFILE TYPE: C.

DATE: Modern.

Both sides are ornamented with a single sinuous horned dragon figure with bifurcated tail, in low relief and set upon a background of squared meander units resembling a degenerate *lei-wen* 雷紋 pattern. Such a background pattern is derived from the common *lei-wen* backgrounds on bronze vessels of Shang and Chou age, but this pattern does not appear on archaic jades. In the irregular, haphazard, and crudely carved form in which it appears here, it is hardly older than the Ch'ing dynasty. See Nott, *Rare Chinese Jades* (1940), frontispiece and no. 1, jade vessel with relief figures on *lei-wen* background, dated Ch'ing; Getz, *Woodward Collection* (1913), no. 60, jade vessel with relief ornamentation on *lei-wen* background, dated Ch'ing. It is probably significant that of the 700 purportedly antique jades illustrated in the spurious *Ku yü t'u p'u* (1779), the *lei-wen* pattern appears on 150, and of these, it appears as a background for archaized dragon forms on 15. All of these drawings are, of course, Ch'ing dynasty fabrication (see Ca-Cm), with little reference to authentic archaic decor schemes.

This object is not a scabbard slide and probably not an element of sword furniture. Its shape may be based on, or derived from, authentic slides of this related form.

## REFERENCES:

"Ancient Jade Sword and Scabbard Parts" (1927), pl. II, following p. 296, lower section, third item from top right and left, photos of each side; identified as a ferrule and ascribed to the Han' dynasty.

*Wong Collection of Ancient Chinese Jade* [1937], p. 21, no. 345 and pl. X, 345, photo of one side; identified as scabbard ornament and ascribed to the Chou dynasty.

## XCZ.4

MATERIAL: Jade, pale green with brown markings.

COLLECTION: Dr. Arthur M. Sackler, New York; formerly Mr. and Mrs. Desmond Gure, London.

## MEASUREMENTS:

L 2.88

PROFILE TYPE: B or C.

DATE: Modern.

One long surface of the rectangular aperture is carved with two butterflies in relief; the opposing long surface is carved with a gnarled prunus branch in relief.

Unpublished.

## KOREA

## XK.1

MATERIAL: Jade.

PROVENANCE: Tomb 214 of Sekigan-ri<sup>1</sup> [Sōgam-ni], Lo-lang<sup>k</sup> district, Korea.

## MEASUREMENTS:

L 1.78

W .91

PROFILE TYPE: B.

DATE: Han, probably first century after Christ.

The ornamentation on one outer surface of this rectangular scabbard slide is described as a tracery of curvilinear geometric forms. Undoubtedly it is related to the XCV class, but is probably locally made and the decor is probably only vaguely based on the standard authentic geometric forms (cf. *M.1*). The flat upper and lower plates and aperture walls appear to be of about even thickness.

The slide was found lying by a single-edged iron sword

(p. 51) 83.3 cm. in length. The grip is broken, the pommel, which undoubtedly was of the ring variety and perhaps of bronze, is lost; the restored length of the sword would probably be in the neighborhood of 90 cm.

Another iron sword found in the same tomb, also broken in the hilt, was 91.3 cm. in length. The sword with which the slide is associated is provided with a plain bronze guard of the type having a low central saddle through which the tang (or, in this case, grip) passes, flanked by two raised, rounded shoulders. The blade of the sword is slightly curved, the sharpened edge being on the concave side. This form suggests that of a slashing sword intended for use by an equestrian warrior. The sword was provided with a black-lacquered sheath, a considerable portion of which was preserved.

REFERENCE: Umehara, *Chōsen kobunka sōkan* (1947-1948), 2, pl. XXXVIII, 65, photo of full sword with slide in find position, slide quite indistinct, in top/profile view; text, p. 50 f.; pl. XXXVIII, 66, photo of scabbard.

## MONGOLIA

## XM.1 (?)

MATERIAL: Wood.

PROVENANCE: Mu-durbeljin ("The Poor Fortress"), Edsen-Gol region, Inner Mongolia.

## MEASUREMENTS:

L 2.94

ApL .88

D .94

ApD .50

Depth of section over aperture .44; length of extension above aperture .88; length of extension below aperture 1.06.

PROFILE TYPE: Related to A-1 and A-2.

DATE: Han.

This object is not included in the expedition lists of small finds compiled, after the death of Folke Bergman in 1946, by Bo Sommarström. Included in the publication

below is a cut "from a drawing by F. Bergman" reproduced half natural size. Probably excavated from Locality II.A. Identification as a scabbard slide here is, therefore, extremely tentative; the object may have served as a small handle. It is known only in profile. Along the principal flat side an aperture is cut; the upper and lower walls flair outward slightly. Over the aperture the flat surface is canted slightly downward in the direction of the shorter section above the aperture, which is opposite to the direction of slope on the Chinese jade scabbard slides. Just above and below the aperture this surface slopes more sharply inward, at about forty-degree angles. The ends are cut off square and are about .40 wide. This object differs from the seal case which it resembles in that its ends are chamfered. The upper end, i.e., the

end of the shorter extension, is slightly back-sloped. Roughly in the center of each extension a hole approximately .10 to .12 in diameter is bored through the slide. Fragments of wooden pegs still protrude from these holes at both sides. On the flat, aperture side the upper peg protrudes .25, the lower, somewhat smaller peg, protrudes .50. It must be considered that a peg protruding .50 on the side of the slide attached to the scabbard wall would probably be longer than a wooden scabbard wall is thick. However, the peg may not have originally protruded so far.

(Cf. XM.7)

REFERENCE: Sommarström, *Edsen-Gol*, Pt. 1 (1956), p. 58, fig. 20, 4, line of drawing of profile.

XM.2 . . . . . Plate 24c

MATERIAL: Polished black hardwood; fragmentary.

PROVENANCE: Recovered from the ruins of a house in the vicinity of Khara-khoto, Edsen-Gol region, Inner Mongolia.

MEASUREMENTS:

W .75	ApD .24
D .63	
Depth of upper plate at center of aperture .28; depth of lower aperture plate .11.	

PROFILE TYPE: A-1.

DATE: Han, probably first century B.C.

The field notes of F. Bergman record the following observation on this piece:

Wooden sword-fitting (?) . . . polished black hardwood, decorated with three raised, parallel lines along the front. The corners of the oval opening have been made round through boring. It has been attached to the scabbard (?), which had been lacquered, by means of thick, black cement mixed with hemp fibres (strings?).

The parenthetical additions were made by Bo Sommarström who edited these notes after Bergman's death in 1946.

There can be no doubt that this small fragmentary piece of wood is a scabbard slide of Form II, and that the decor of the arched upper surface—low narrow beveled ridges along each side with a similar ridge along the center of the upper plate—is that which I have designated as Ridge Class, a class only provisionally found among Form I scabbard slides. The gently arched surface between the ridges is plain and unmodulated. The residue of cement and cords may be taken as evidence of the manner of attaching the slide to the scabbard wall.

The expedition records do not mention the finding of a sword at this locality; of military equipment, only a fragment of an oval-shaped iron lamina from a coat of armor was found (p. 245, A.16:10).

The form of the slide and the precision of its manufacture, both of which seem to imitate work in jade, suggest a Chinese origin, but this is uncertain. The shape

itself is not a "jade shape," and it may just as well be that the jade objects of this class copy earlier wooden models only somewhat more crudely carved than this piece. It is the finishing of this piece only that is related to lapidary techniques. Most likely, the slide was made by a local craftsman for a Chinese military man posted at the frontier. Imitations on the frontiers of China of objects normally made of jade in China proper are not unknown at this time, though glass more commonly served as the substitute. In tumulus no. 1 at Noin Ula, for example, an *erh-tang* 耳堵 earplug of wood was found (Umehara, *Mōko Noin-Ula hakken no ibutsu* [1960], p. xiii).

(Cf. XM.3.)

REFERENCES:

Sommarström, *Edsen-Gol*, Pt. 2 (1958), p. 244, A.16:1, description; p. 245, fig. 117, a and b, scaled drawings of top and profile.

Trousdale "Possible Roman Jade" (1969), p. 59, fig. 3, a and b (after Sommarström [1958]).

XM.3 . . . . . Plate 24d

MATERIAL: Hardwood, black-lacquered.

PROVENANCE: Recovered from a watchtower in the vicinity of Khara-khoto, Edsen-Gol region, Inner Mongolia.

MEASUREMENTS:

L 2.20	ApL 1.13*
W .91	ApD .48*
D .91	
Depth of upper plate at center of aperture .34.*	

PROFILE TYPE: A-1.

DATE: Han, probably first century B.C.

The field notes of F. Bergman record the following observations on this piece:

Wooden sword-fitting (?) . . . attached by means of some kind of putty, traces of which remain at the flat back parts [i.e., exterior aperture wall]; well made of hard wood, and lacquered in black. On convex front of the D-shaped object, the longer edges are slightly raised.

The decor of the arched upper plate, low narrow beveled ridges along the sides, relates this scabbard slide to the Ridge class of Form II Chinese slides. The gently arched surface between the ridges is plain and unmodulated. The lower aperture plate is broken, but small sections remain by each wall. This plate is approximately .09 thick.

No other finds of military equipment, or of metal, are reported from this locality.

(Cf. XM.2.)

REFERENCES:

Sommarström, *Edsen-Gol*, Pt. 2 (1958), p. 292, A.25:2, description; p. 245, fig. 117, left, scaled drawing of profile.

Trousdale, "Possible Roman Jade" (1969), p. 59, fig. 3, left (after Sommarström [1958]).

## XM.4 (?)

MATERIAL: Wood.

PROVENANCE: Recovered from Locality 1, watchtower A-22, close to Ikhen-gol at a place called Bukhentorei, Edsen-Gol region, Inner Mongolia.

## MEASUREMENTS:

L 2.36  
W .94  
D .59

PROFILE TYPE: Related to A-1.

DATE: Han.

This small, but somewhat more finely cut, object is similar in form to XM.1, except for the chamfered ends of the upper plate which are shorter and the aperture which is probably about 1.00 long and .28 deep and is square cut. Its identification here as a scabbard slide is based strictly on analogy of form and must be considered tentative. As on XM.1, the extension to one side of the aperture is longer than that to the other. In the center of each of these extensions, holes of much smaller diameter than those of XM.1 are drilled through and probably held metal pins.

No finds of military equipment were made at this locality; of metal, only one fragment of an iron implement (p. 286, A.22:I,76) was found.

REFERENCE: Sommarström, *Edsen-Gol*, Pt. 2 (1958), p. 284, A.22:I,5, description; p. 335, fig. 171,9, scaled drawings of profile and bottom.

## XM.5

MATERIAL: *ma-nao* 瑪瑙 carnelian/agate (incorrectly identified on pl. XLIII, lower, as jade); excavation debris in aperture.

PROVENANCE: (See M.1).

## MEASUREMENTS:

L	1.25	ApL	.88
W	.88	ApD	.17
D	.63		
Maximum thickness of upper plate .25.			

PROFILE TYPE: A-1.

DATE: Last half of first century B.C.

The surface of the arched upper plate is divided vertically into three zones by two incised parallel grooves. The grooves are set equidistant from each side, forming two plain, possibly slightly concave, bands along the sides with a wider central band, possibly also concave.

The slide was found in association with a long, tanged, double-edged iron sword of the thin rapier variety, about 37.50 in length. The tang is about 6.25 in length, and fragments of its wooden casing still adhered to it when it was recovered. The blade was encased in a fairly well-preserved lacquered scabbard. The slide was found lying at a position about two-fifths of the way down from the pommel to the chape, and probably this position represents a point just above the balance point for the sword and scabbard ensemble. The lower end of the scabbard is provided with an extraordinary chape, of a variety rarely encountered in China, consisting of a round hollow tube, closed and rounded at one end. The bronze pommel is similar in form to the chape, though of slightly greater diameter and shorter. The pommel stands about .75 high; the chape is about 1.38 long. A chape similar in form, but in jade, was recovered from the late second-century B.C. site of Shih-chai-shan in Yunnan province (see CP.1). It is 1.81 long and several small holes have been drilled in the lower rounded end, perhaps for attaching ornaments (*Yün-nan Chin-ning Shih-chai-shan* (1959), pl. CXIII, 5). Here also, the object is not Chinese in manufacture, but a product of local craftsmanship and design, among a non-Chinese people who were at this time under more or less irresistible pressure from the southward-advancing Chinese.

(See M.1 for description of the site and tomb and for discussion of relevant chronological and ethnological matters.)

REFERENCE: Ono and Hibino, *Mōkyō kōkoki* (1946), pl. XLII, lower center, photos of top and profile; pl. XLII, lower left, pommel, and lower right, chape; pl. XLII, center, photo of sword, with scabbard slide, pommel, and chape.

## LIST OF CHARACTERS FOR RECURRING CHINESE AND JAPANESE PLACE AND PERSONAL NAMES

a 吊橋	l 壽縣
b 潼關	m 江口治邸
c 陝西	n 山西
d 長沙	o 廣東
e 湖南	p 浙江
f 安徽	q 上野精一
g 金村	r 金匱
h 洛陽	s 趙固村
i 河南	t 輝縣
j 石巖里	u 王莽
k 樂浪	

## TABLES OF AVERAGE MEASUREMENTS OF FORM I SCABBARD SLIDES

NOTE. Reported measurements are often only approximate; wherever possible these have been verified by observation. Scabbard slides for which only approximate measure is known are marked with an asterisk (\*). Only those slides for which reasonably dependable measurements are known have been included. As a class, CH slides tend to be considerably deeper than those of CV and CG classes, owing to the height of relief above the basic slide. The basic CH class scabbard slide is seldom of greater depth than the normal CV and CG slides, and the average depth of the basic slide in all Form I classes probably does not much exceed .50. Wherever maximum and minimum measurements are represented by an estimate, the closest reported measure, if existing, is also given. When two slides have identical measurements, both are listed.

Several excavated and reliably authentic scabbard slides have been studied in relation to existing late Chou and Han measures in an effort to ascertain whether scabbard slides were carved in accordance with any predetermined canon of proportions. While certain strictly corresponding ratios have been noted with respect to certain slides, these appear to be chance occurrence; no broadly encompassing systems were discovered. It is unlikely that definite arithmetical systems based on local, unknown measures were applied. See Ferguson, "Chinese Foot Measure" (1941), *Hsü k'ao ku t'u* (1887), i, 1:a-2:a; K., F. S., "A Han Foot-rule" (1930); Sekino, "Chūgoku kodai no shakudo ni tsuite" (1956a); Swann, *Food and Money in Ancient China* (1950) p. 269, n. 495; Wang Kuo-wei, "Chinese Foot-Measures" (1928); White, *Tombs of Old Lo-yang* (1934b), pp. 32, 101.

## ABBREVIATIONS:

L length	E. Eastern
W width	W. Western
D depth	
Ap aperture	

TABLE I.—Excavated scabbard slides

L 27 examples (17 reported; 10 estimated)						
CP.1	CV.3	CV.8	CV.79	*CG.3	*CH.2	*CH.6
CP.2	*CV.5	*CV.9	CV.80	CG.4	CH.3	CH.7
CV.1	*CV.6	*CV.10	CV.102	CG.58	*CH.4	CH.79
CV.2	CV.7	*CV.11	CG.2	*CH.1	CH.5	
Average L: 3.18						
longest	4.72	CV.8	late W. Han			
shortest	1.77	CV.102	late E. Chou			
W 24 examples (16 reported; 8 estimated)						
CP.1	CV.3	CV.8	CV.79	CG.4	CH.5	
CP.2	*CV.5	*CV.9	CV.102	CG.58	*CH.6	
CV.1	*CV.6	*CV.10	CG.2	*CH.2	CH.7	
CV.2	CV.7	*CV.11	*CG.3	CH.3	CH.79	
Average W: .89						
broadest	1.06	*CV.5	late W. Han			
	1.05	CV.8	late W. Han			
narrowest	.67	*CG.3	mid W. Han			
	.79	CG.58	late E. Chou			
D 14 examples (6 reported; 8 estimated)						
CP.1	*CP.5	*CV.9	CV.79	*CG.3	CH.3	*CH.6
*CP.2	*CV.8	*CV.11	CV.102	*CH.1	CH.5	CH.79
Average D: .60						
deepest	.88	*CH.1	late E. Chou			
	.87	CH.3	late W. Han			
shallowest	.31	*CP.2	E. Han			
	.51	CV.102	late E. Chou			
ApL 11 examples (3 reported; 8 estimated)						
CP.1	*CV.5	*CV.9	CV.102	*CH.1	*CH.6	
*CP.2	*CV.8	*CV.11	*CG.3	CH.5		
Average ApL: 1.23						
longest	1.77	*CV.8	late W. Han			
shortest	.56	*CP.2	E. Han			
ApD 10 examples (3 reported; 7 estimated)						
CP.1	*CV.5	*CV.9	CV.102	CH.5		
*CP.2	*CV.8	*CV.11	*CH.1	*CH.6		
Average ApD: .25						
deepest	.30	*CV.8	late W. Han			
shallowest	.19	*CP.2	E. Han			

TABLE 2.—*Additional authentic scabbard slides*

<i>L 95 examples (83 reported; 12 estimated)</i>						
CP.5	*CV.28	*CV.62	CV.103	CG.21	CG.67	CH.18
CP.9	*CV.29	CV.82	CR.1	*CG.22	CG.70	CH.21
CV.4	CV.30	CV.90	CG.6	CG.23	CG.72	CH.36
CV.13	*CV.31	CV.91	CG.8	CG.24	CG.73	CH.44
CV.14	CV.33	CV.92	CG.9	CG.25	CG.74	CH.54
CV.15	CV.34	CV.93	CG.10	CG.26	CH.8	CH.61
*CV.16	CV.35	CV.94	CG.11	CG.27	CH.10	CZ.2
CV.18	CV.37	CV.95	CG.12	CG.29	CH.11	CZ.3
CV.20	CV.38	CV.96	CG.13	*CG.30	CH.12	CZ.18
CV.21	*CV.39	CV.97	CG.14	CG.32	CH.13	CZ.19
CV.22	CV.43	CV.98	CG.15	CG.33	CH.14	SR.1
CV.23	*CV.45	CV.99	CG.18	CG.34	CH.15	
CV.24	*CV.46	CV.100	CG.19	CG.65	CH.16	
*CV.25	*CV.60	CV.101	CG.20	CG.66	CH.17	
Average L: 2.99						
longest	4.66	CH.14	E. Han			
shortest	1.50	CZ.18	E. Han			
	1.69	CG.9	late E. Chou/early W. Han			
<i>W 92 examples (77 reported; 15 estimated)</i>						
CP.5	*CV.29	CV.82	CG.8	CG.23	CG.72	CH.44
CP.9	*CV.30	CV.90	*CG.9	CG.25	CG.73	CH.54
CV.4	*CV.31	CV.92	CG.10	CG.26	CG.74	CH.61
CV.13	CV.33	CV.93	CG.11	CG.29	CH.8	CZ.2
CV.14	CV.34	CV.94	CG.12	*CG.30	CH.11	CZ.3
CV.15	*CV.35	CV.95	CG.13	CG.32	CH.12	CZ.18
CV.16	CV.37	CV.96	CG.14	CG.33	CH.13	CZ.19
CV.20	CV.38	CV.97	CG.15	CG.34	CH.14	SR.1
CV.21	*CV.39	CV.98	CG.17	CG.63	CH.15	
CV.22	CV.43	CV.99	CG.18	CG.65	*CH.16	
CV.23	*CV.45	CV.100	CG.19	CG.66	CH.17	
CV.24	*CV.46	CV.101	CG.20	CG.67	CH.18	
*CV.25	*CV.60	CV.103	CG.21	CG.70	CH.21	
*CV.28	*CV.62	CR.1	*CG.22	CG.71	CH.36	
Average W: .90						
broadest	1.13	CV.92	late W. Han			
		CV.96	late W. Han			
		CH.11	early W. Han			
narrowest	.58	CG.70	early E. Han			
<i>D 81 examples (69 reported; 12 estimated)</i>						
CP.5	*CV.28	CV.90	CR.1	CG.23	*CG.70	CH.21
CP.9	*CV.29	CV.92	CG.8	CG.25	CG.71	CH.36
CV.4	CV.34	CV.93	CG.10	CG.26	CG.72	CH.44
CV.13	CV.37	CV.94	CG.11	CG.29	CG.73	CH.61
CV.14	CV.38	CV.95	*CG.12	*CG.30	CG.74	CZ.2
CV.16	*CV.39	CV.96	CG.14	CG.32	CH.8	CZ.3
CV.18	CV.43	CV.97	CG.15	CG.33	CH.11	CZ.18
CV.20	*CV.45	CV.98	CG.18	CG.34	CH.12	CZ.19
CV.22	*CV.46	CV.99	CG.19	CG.63	CH.13	SR.1
CV.23	*CV.60	CV.100	CG.20	CG.65	CH.14	
CV.24	*CV.62	CV.101	CG.21	CG.66	CH.17	
*CV.25	CV.82	CV.103	*CG.22	CG.67	CH.18	
Average D: .55						
deepest	1.25	CH.36	E. Han			
shallowest	.20	CG.23	late W./early E. Han			

*ApL 59 examples (45 reported; 14 estimated)*

CP.5	CV.23	CV.43	CG.14	CG.26	CG.67	CZ.2
CP.9	*CV.24	*CV.45	CG.15	*CG.29	CG.70	CZ.3
CV.4	*CV.25	*CV.46	CG.17	*CG.30	CG.71	CZ.18
CV.13	*CV.28	*CV.60	CG.18	CG.32	CH.11	CZ.19
CV.14	*CV.29	*CV.62	CG.19	CG.33	CH.13	SR.1
CV.15	*CV.30	CV.82	CG.20	CG.34	CH.14	
CV.16	*CV.31	CV.90	CG.21	CG.63	CH.17	
CV.20	CV.37	CV.103	*CG.22	CG.65	CH.18	
CV.22	*CV.39	CR.1	CG.25	CG.66	CH.61	
Average ApL: 1.16						
longest	2.06	*CG.29	E. Han			
	1.66	CH.14	E. Han			
shortest	.72	CZ.18	E. Han			
	.75	CV.4	late E. Chou			
<i>ApD 57 examples (45 reported; 12 estimated)</i>						
CP.5	CV.23	*CV.60	CG.17	*CG.30	CG.71	CZ.18
CP.9	*CV.25	*CV.62	CG.18	CG.32	CH.11	CZ.19
CV.4	*CV.28	CV.82	CG.19	CG.33	CH.13	SR.1
CV.13	*CV.29	CV.90	CG.20	CG.34	CH.14	
CV.14	CV.37	CV.103	CG.21	CG.63	CH.17	
CV.15	*CV.39	CR.1	*CG.22	CG.65	CH.18	
CV.16	CV.43	CG.12	CG.25	CG.66	CH.61	
CV.20	*CV.45	CG.14	CG.26	CG.67	CZ.2	
CV.22	*CV.46	CG.15	*CG.29	*CG.70	CZ.3	
Average ApD: .26						
deepest	.56	CR.1	late E. Chou			
	.47	*CV.39	W. Han			
	.44	CG.19	late E. Chou			
shallowest	.13	CG.18	W. Han (see Catalog)			
	.16	CG.33	E. Han (?)			
		CG.65	early E. Han			

TABLE 3.—*Late antiquarian scabbard slides*

<i>L 67 examples (62 reported; 5 estimated)</i>						
CP.4	CV.73	*CG.44	CG.75	CH.50	CH.74	CZ.11
CV.27	CV.85	CG.45	CH.9	CH.51	CH.75	
CV.59	CV.86	CG.47	CH.19	CH.52	CH.78	
*CV.61	CV.89	CG.48	CH.20	CH.53	CH.80	
CV.63	CV.91	CG.49	CH.27	*CH.56	CH.84	
CV.64	CG.7	CG.50	CH.42	CH.57	CH.87	
CV.65	CG.28	CG.51	CH.43	CH.60	*CZ.5	
CV.66	CG.36	CG.55	CH.45	CH.62	CZ.6	
CV.67	CG.37	CG.62	CH.47	CH.67	CZ.7	
CV.68	CG.42	CG.64	CH.48	CH.68	CZ.8	
CV.69	*CG.43	CG.69	CH.49	CH.69	CZ.9	
Average L: 3.78						
longest	6.72	CH.69				
shortest	1.59	CP.4				
<i>W 53 examples (46 reported; 7 estimated)</i>						
CP.4	CV.89	CG.46	CG.64	CH.47	CH.67	CZ.5
*CV.61	CV.91	CG.47	CG.75	CH.48	CH.68	CZ.6
CV.65	CG.7	CG.48	CG.76	CH.49	CH.69	CZ.8
CV.68	*CG.37	CG.49	*CH.9	CH.50	CH.75	CZ.9
CV.69	CG.40	CG.50	CH.19	CH.51	CH.78	CZ.11
CV.73	CG.42	CG.51	CH.20	*CH.56	CH.80	
CV.85	*CG.43	CG.55	CH.27	*CH.57	CH.84	
CV.86	*CG.44	CG.62	CH.45	CH.60	CH.87	
Average W: 1.01						
broadest	1.70	CZ.6				
narrowest	.43	CH.27				

D 44 examples (40 reported; 4 estimated)

CP.4	CV.86	CG.46	CG.62	CH.47	CH.69	CZ.9
*CV.61	CV.89	CG.47	CG.64	*CH.49	CH.75	CZ.11
CV.65	CV.91	CG.48	CG.75	CH.50	CH.78	
CV.68	CG.7	CG.49	CG.76	CH.51	CH.87	
CV.69	*CG.37	CG.50	CH.19	*CH.56	CZ.5	
CV.73	CG.40	CG.51	CH.20	CH.60	CZ.6	
CV.85	CG.42	CG.55	CH.45	CH.68	CZ.8	
Average D:	.66					
deepest	1.22	CH.60				
shallowest	.26	CH.45				

ApL 29 examples (24 reported; 5 estimated)

CP.4	*CG.37	CG.48	CG.62	CH.48	CH.60	
*CV.61	*CG.43	CG.49	CG.64	CH.49	CH.75	
CV.65	*CG.44	CG.50	CH.22	CH.50	CZ.5	
CV.89	CG.46	CG.51	CH.45	CH.51	CZ.6	
CG.7	CG.47	CG.55	CH.47	*CH.56		
Average ApL:	1.40					
longest	1.88	CH.47				
shortest	.33	CP.4				

ApD 25 examples (22 reported; 3 estimated)

CP.4	*CG.37	CG.49	CG.62	CH.48	*CH.56	CZ.6
*CV.61	CG.46	CG.50	CG.64	CH.49	CH.60	
CV.65	CG.47	CG.51	CH.45	CH.50	CH.75	
CG.7	CG.48	CG.55	CH.47	CH.51	CZ.5	
Average ApD:	.23					
deepest	.38	CH.60				
shallowest	.09	CG.55				
		CH.45				

TABLE 4.—Combined average measurements from Tables 1–3

	Excavated	Authentic	Antiquarian
L	3.18	2.99	3.78
W	.89	.90	1.01
D	.60	.55	.66
ApL	1.23	1.16	1.40
ApD	.25	.26	.23

TABLE 5.—Comparative average L of excavated and additional authentic scabbard slides of (A) late Eastern Chou and (B) late Western Han and Eastern Han

(A) Late Eastern Chou: 23 examples (17 reported; 6 estimated)

CV.1	*CV.29	*CV.45	CV.102	CG.15	*CH.2
CV.4	CV.34	*CV.46	CR.1	CG.19	CH.5
CV.13	CV.35	CV.60	CG.8	CG.58	CH.9
*CV.28	CV.37	CV.62	CG.9	*CH.1	
Average L:	2.19				

(B) Late Western Han and Eastern Han: 45 examples (34 reported; 11 estimated)

CP.1	CV.7	CV.18	*CV.62	CG.29	*CH.6	CH.54
CP.2	CV.8	CV.20	CV.79	CG.30	CH.7	CH.61
CP.9	*CV.9	CV.23	CV.90	CG.33	CH.14	CH.79
CV.2	*CV.10	CV.25	CG.4	CG.66	CH.16	
CV.3	*CV.11	*CV.30	CG.23	CG.70	CH.21	
*CV.5	CV.14	*CV.31	CG.24	CH.3	CH.36	
*CV.6	*CV.16	CV.43	CG.26	*CH.4	CH.44	
Average L:	3.63					

## NOTES ON SOME OBJECTS RESEMBLING SCABBARD SLIDES

In the course of researches on the development of the long iron sword in northern Eurasia, and the occurrence of the scabbard slide in the same region, the only examples discovered being either direct imports from China or late derivative forms of these, two classes of objects attracted attention owing to their more or less strict resemblances to scabbard slides of Form II.

1. In the fourth Pazyryk kurgan, in the Altai Mountains of southern Siberia, two small objects carved from bone were found which correspond to Form II, Class XCP scabbard slides with B-type profiles. These objects were classified by S. I. Rudenko as "shlevki," elements of horse harnessing, probably related to, or fixtures upon, the breeching, and were published along with other functional and decorative plaques and fittings from harnesses recovered from the horse burials which formed a part of the interment ritual in the major kurgans at this site (Rudenko, *Kul'tura naseleniya gornogo Altaya* (1953) pl. LXI, 3–4). Two features of these objects which seem unessential for their service in harnessing correspond to observed characteristics of scabbard slides: a slight narrowing toward one end and a thinner plate on one side,

a thicker on the other, of the aperture. The thinner of the two plates would correspond to the lower plate on the Chinese scabbard slide, the side fitted into a socket on the scabbard wall.

If weapons were buried with the deceased in the Pazyryk kurgans, the majority of which seem to belong to the fourth century B.C., they were taken by the people who plundered the tombs at an early date. Sir Ellis Minns and O. Maenchen-Helfen believed that the Pazyryk people were users of the long iron sword and Maenchen-Helfen believes that "they may have carried it on a slide" ("Crenelated Manc and Scabbard Slide [1957] p. 135). It must, in fact, be considered a near certainty that these equestrian people did employ the long iron sword and that it was carried on a form of scabbard slide, for both of these are represented on the gold plaque from the collection of Peter the Great in the Hermitage Museum (Figure 42 here) which has many affinities to Pazyryk and has been ascribed to a corresponding date and provenance (Maenchen-Helfen, *op. cit.*, p. 136; Haskins, "Targhyn—the Hero" [1961]).

The dimensions of these objects have not been report-

ed, but as they are believed by Rudenko to have fitted about harness straps, they must be approximately equivalent in size to the scabbard slide through which a leather belt was passed. While it is impossible to suggest that these objects have been incorrectly identified, their strict agreement in form with a class of scabbard slide raises a question worthy of further consideration.

2. The second type of object resembling the scabbard slide can be more easily rejected as having any relation to it, though again many of them superficially resemble Form II, Class XCP slides with A-2 and B profiles. These objects have been found throughout the western territory of the Soviet Union and Eastern Europe in burials and at sites dating generally between the second and fifteenth century, or even later. They range in length, generally, between 7.5 cm. and 14 cm., and hence are slightly larger than the normal Form II scabbard slide. In burials, they are frequently encountered lying on or beside iron swords or knives, an association which encourages identification with the scabbard slide. However, they are manufactured of iron and are, in reality, small plates for striking fire from flints, "kresaly" in the Soviet archeological reports. Small cloth or leather bags holding a flint are frequently found lying beside these objects.

The following selected references illustrate and describe "kresaly" which resemble the scabbard slide.

- Alikhova, "Muranskiĭ mogil'nik" (1954), p. 268, fig. 10, nos. 11 and 23; text, p. 292 f.; Kuĭbyshev oblast, lower Volga.
- Alikhova and Prėobrazhenski, "La civilisation de Mordva-Mokcha" (1929), p. 335, fig. 3.
- Artsikhovskii, "Raskopki na Slavne v Novgorode" (1949), p. 146, fig. 20, b; post-Christian period.
- Arzyutov, "Atkarskiĭ kurgannyĭ" (1936), p. 89, fig. 2; p. 96, fig. 13; Sarmatian tombs of second to fourth century (p. 87), lower Volga.
- Betz, "Slaven" (1928), p. 255, pl. LXXI, b; text, p. 256, ninth century, or later; identified as knife sharpener.
- Kolchin, "Zhelezoobrabatvayushchee remeslo Novgoroda velikogo" (1959), p. 103, fig. 85; typology of Novgorod from tenth to fifteenth century.
- Kukhareva, "Mogil'nik Kochevnikov" (1961), p. 196, fig. 2 and p. 197, fig. 6; Kiev region, twelfth to fourteenth century.
- Rabinovich, "Krepost' i gorod Tushkov" (1959), p. 276, fig. 14, 2, ca. twelfth to thirteenth century.
- Rhė, *Jutas und Ōskū* (1931), pl. IX, 23; text, p. 33, ca. sixth to seventh century.
- Rykhov, "Suslovskiĭ kurgannyĭ mogil'nik" (1925), p. 69, second to third century Sarmatian tombs, lower Volga.
- Shilov, "Kalinovskiĭ kurgannyĭ mogil'nik" (1959), p. 431, fig. 10, 14; site ca. 71 km. north of Volgograd, lower Volga; graves ca. fourth to second century B.C.
- Symonovich, "Pamyatniki chernyakhovskoi kul'tury" (1955), p. 298, fig. 13, 9; p. 300, fig. 14, 14; tombs of fourth to fifth century, Dnepr steppe.
- Tarakanova, "Arkheologicheskie raboty v gorodne na Volge" (1947), p. 111, fig. 57, 7; text, p. 111, tombs of the tenth to fourteenth century, central Volga.

## SOURCES FOR SCABBARD SLIDES

The following is a list of sources for the published and unpublished scabbard slides described in the Catalog. The heading refers to the publication in the bibliography where a photograph and/or description of the scabbard slide appears. Below each reference are listed scabbard slides published in this source, arranged in the order of their appearance in the Catalog. Unpublished scabbard slides are included at the end of the list, under their present location.

### CHINESE AND JAPANESE SOURCES

An-hui sheng po-wu-kuan (1956)	<i>Ch'u wen-wu</i> (1954)	Egami Namio (1948)	CG.30
CV.2	CH.1 CH.2	CV.8 P.2	Huang-ho shui-ku (1965)
Chang Hsin-ju (1956)	<i>Ch'üan kuo chi pen chien she</i>	CV.67 SR.1	CV.88
CP.8	(1955)	CV.69 SR.2	Hu-nan sheng po-wu-kuan (1960)
Chang Mo-chün (n.d.)	CG.5	CH.23 SR.4	CH.3
CV.77 CG.57	Chung-kuo k'o-hsüeh yüan (1963)	P.1 V.1	Hu-nan sheng wen-wu kuan-li
CG.56 CH.76	CV.83 CG.59	Hamada Kōsaku (1925)	wei-yüan-hui (1956)
<i>Ch'ang-sha fa-chüeh pao-kao</i>	CV.84 CG.60	CV.8 XCR.3	CV.1
(1957)	<i>Chung-kuo ku tai kung-i</i> (1960)	CV.24 XCG.6	Hu-nan sheng wen-wu kuan-li
CV.79	CV.45 Cd	CG.29	wei-yüan-hui (1957a)
Che-chiang sheng (1957)	CV.60 Ch	Hamada Kōsaku and others	CG.1
CH.4	CZ.13 Ci	(1934)	Hu-nan sheng wen-wu kuan-li
Ch'en Jen-t'ao (1952)	Ca Cm	CV.5	wei-yüan-hui (1957b)
CV.58 CH.19	Cb XCV.5	Harada Yoshito (1937)	CG.4
		CV.8	<i>Hui-hsien fa-chüeh pao-kao</i>
		<i>Hsüeh-t'ang so ts'ang</i> (1923)	(1956)
		XCR.3	XCG.1 XCG.15
		Huang Chün (1935)	XCG.2
		CV.62 CH.56	<i>K'ao-ku t'u</i> (1752)
		CH.17 CZ.13	CC.53
		CH.55	Kōbe, Hakutsuru Bijutsukan
		Huang Chün (1939)	(1954)
		CV.28 CH.17	CH.19
		CV.29 CH.55	Komai Kazuchika (1953)
		CV.44 CH.56	CV.39 CH.23
		CV.45 CZ.13	<i>Ku-kung</i>
		CV.46 XCV.2	CV.30 XCV.3
		CV.60 XCV.4	CV.31 XCV.11
		CV.61 XCV.5	CG.37 XCR.1



- CH.57 XCG.3  
XCV.1  
*Ku-kung chou-k'an*  
CV.30 XCV.3  
CV.31 XCV.11  
CH.57 XCR.1  
XCV.1 XCG.3  
*Ku yü t'u* (1752)  
CV.74 CH.71  
CV.75 CH.72  
CV.76 CH.73  
CH.70  
*Ku yü t'u p'u*  
Ca-Cm  
Kuáng-chou shih (1956)  
CZ.1  
*Lo-yang Chung-chou-lu* (1959)  
CG.58  
*Lo-yang Shao-kou Han mu* (1959)  
CV.102  
Mai Ying-hao (1958)  
CG.2  
Mizuno Seiichi and Kobayashi Yukio (1959)  
CV.8  
Na chih-liang (1964)  
CV.10 CH.6  
CV.30 CH.57  
CV.31 XCV.1  
CV.48 XCV.3  
CG.12 XCR.1  
CG.37  
*Nei-meng-ku ch'u-t'u* (1963)  
XCH.15  
Ômura Seigai (1915-1920)  
CH.23 CH.24  
Ono Katsutoshi and Hibino Takeo (1946)  
M.1 XM.5  
*Sekai kôkogaku taikei*  
CV.8  
Sekino Tadashi (1925)  
CV.6 CV.9  
CV.8
- Shang Ch'eng-tso (1939)  
CV.78  
Shen-hsi sheng (1961)  
CP.2 CV.3  
*Shū Kan ihō* (1932)  
CV.24 CG.29  
CV.39 XCG.6  
Su Wen-chin (1964)  
CH.79  
Szu-ch'uan sheng (1958)  
CG.3  
*T'ao-chai ku yü t'u* (1936)  
CG.39  
Umerhara Sueji (1938a)  
P.1 SR.4  
SR.1 V.1  
SR.2  
Umerhara Sueji (1938b)  
CP.5 CZ.10  
Umerhara Sueji (1947)  
CV.6  
Umehara Sueji (1955)  
CV.8 CG.12  
CV.9 CG.22  
CV.10 CH.6  
CV.11 CH.14  
CV.12 CH.17  
CV.22 CZ.12  
CV.25  
Umehara Sueji and Fujita Ryōsaku (1947-48)  
CV.7 CH.7  
CV.8 ZK.1  
Wu Ta-ch'eng (1889)  
CP.6 CG.44  
CV.47 CH.23  
CV.48 CH.24  
CG.31 XCG.5  
CG.43  
*Yün-nan Chün-ning Shih-chai-shan* (1959)  
CP.1
- Boon, G. C. (1957)  
E.6  
Carved Jades of Shang and Chou (1942)  
CV.32 CG.16  
Dalton, O. M. (1924)  
SR.1  
Damascus, National Museum (1951)  
S.1 S.2  
Damascus, National Museum (1969)  
S.1  
Detroit, The Detroit Institute of Arts (1942)  
CH.22  
Detroit, The Detroit Institute of Arts (1962)  
CV.23  
Dohrenwend, *Chinese Jades* (1971)  
CV.90 CH.5  
Dresser, L. (1955)  
CV.8 CV.34  
Engelhardt, C. (1866)  
E.1 E.9  
E.8  
Engelhardt, C. (1869)  
E.2 E.4  
E.3 E.5  
Feddersen, M. (1961)  
CV.10  
Ferguson, J. C. (1939)  
CP.7  
Fogg Art Museum, Harvard University (1969)  
CH.14  
Ginters, W. (1928)  
CV.47 SR.3  
CV.48 SR.8  
CG.44 SR.9  
CH.23 T.1  
P.3 V.1  
SR.2  
Goette, J. A. (1936)  
CH.37  
Gure, D. (1964)  
CV.85 CH.26  
CG.28 CH.54  
Hanoi, Ecole française d'Extrême-Orient (1920)  
CV.81  
Hansford, S. H. (1947-48)  
CV.86 CH.52  
Hansford, S. H. (1957)  
CV.35 CH.53  
CH.16 CZ.15  
CH.52  
Hansford, S. H. (1968)  
CV.8  
Hansford, S. H. (1969)  
CV.91 CV.100  
CV.92 CV.101  
CV.93 CG.72  
CV.94 CG.73
- CV.95 CG.74  
CV.96 CG.75  
CV.97 CG.76  
CV.98 CH.87  
CV.99  
Haskins, J. (1956)  
CH.1  
Hobson, R. L. (1913)  
CV.67 CH.8  
CV.68 CH.12  
CG.42 CH.74  
Hommel, R. P. (1928)  
CV.70 CH.59  
CG.38 C.5  
CG.52 C.6  
CH.58 CZ.17  
Hommel, R. P. (1951)  
CV.70 CH.59  
CG.38 C.6  
CG.61 CZ.17  
Janse, O. (1930)  
CG.11 E.5  
E.2 P.3  
E.3 XCG.4  
E.4  
Janse, O. (1935)  
CG.11 P.3  
Janse, O. (1947-51)  
CV.80 CV.81  
Jenyns, R. S. (1951)  
CV.20 CG.14  
CV.22 CG.51  
CV.43  
Kareish (1844)  
SR.7  
Karlbeck, O. (1955)  
CV.19 CH.27  
CV.20 CZ.4  
CV.21  
CV.38  
CV.40  
CG.8  
CG.13  
CG.14  
CG.24  
CG.25  
CG.27  
CH.10  
CH.15

## WESTERN LANGUAGE SOURCES

- Ancient Jade Sword and Scabbard Parts (1927)  
XCG.12 XCZ.2  
XCH.7 XCZ.3  
XCH.8  
Antiquus Idiota (1928)  
CV.66 C.3  
CG.51 CZ.7  
CH.26  
Aspelin, J. R. (1877)  
P.1 P.2  
Baye, Baron J. de (1890)  
SR.8  
Behmer, E. (1939)  
E.5 E.25  
E.13 E.26
- E.14 E.27  
E.15 E.28  
E.16 E.29  
E.17 E.30  
E.18 E.31  
E.19 E.32  
E.20 E.33  
E.21 E.34  
E.22 SR.3  
E.23 V.1  
E.24
- Berlin, Gesellschaft für östasiatische Kunst (1929)  
XCP.1  
Böhner, K. (1948)  
V.1
- Kusheva-Grozevskaia, A. N. (1929)  
P.1 SR.6  
P.2 SR.7  
P.3 SR.8  
RX.1 SR.9  
SR.2 V.1  
SR.3  
Laufer, B. (1912)  
CP.6 CG.42  
CV.47 CG.44  
CV.48 CH.8  
CV.67 CH.12  
CV.68 CH.23  
CV.69 XCG.5

Lindenschmit, L. (1880)	CG.8	CZ.3	Sirén, O. (1930)*	University of Michigan, Ann Arbor (1953)
E.10	E.12	CG.10	CV.8	CV.23
E.11		Paris, Société des Antiquaires de France (1920)	Sirén, O. (1942-43)	CH.11
Loehr, M. (1965)		T.1	CV.8	CG.18
CP.9		Pelliot, P. (1925)	CH.14	CH.27
London, The British Museum (1963)		CV.18	K.1	University of Michigan, Ann Arbor (1964)
CV.43	CH.67	Pope-Hennessy, U. (1923)	Smirnov, A. P. (1957)	CV.23
London, Royal Academy of Arts (1936)		CV.63	V.2	University of Pennsylvania, Philadelphia (1940)
CV.22	CH.17	CH.8	Sokol'skiĭ, N. I. (1954)	CG.9
CG.14		CV.64	SR.2	CZ.2
London, Royal Academy of Arts (n.d.)		CG.42	SR.3	CH.9
CV.22	CH.17	Rau, P. N. (1927)	SR.9	University of Pennsylvania, Philadelphia (1962)
CG.14	CZ.10	V.1	Sommarström, B., and F. Bergman (1956-58)	CH.9
Luzzatto-Bilitz, O. (1969)		Reinach, S. (1912)	XM.1	University of Pennsylvania, Philadelphia (1962)
CH.86		SR.2	XM.2	CH.27
Majewski, K., and others (1966)		Rostovtsev, M. I. (1923)	XM.4	Venice, City of (1954)
E.35		CH.23	Spitsyn, A. A. (1902)	CV.33
Maenchen-Helfen, O. J. (1937a)		SR.1	P.3	CH.61
CZ.10		SR.1	Spitsyn, A. A. (1905)	CV.34
Maenchen-Helfen, O. J. (1937b)		XCG.5	SR.3	CH.62
CH.23	CZ.10	Rostovtsev, M. I. (1930)	Splieth, A. (1894)	CH.53
CH.24		CG.47	E.1	Vienna, Österreichischer Museum für Kunst und Industrie (1937)
Maenchen-Helfen, O. J. (1957)		CG.48	Stein, M. A. (1928)	CZ.10
CH.23	SR.2	CH.23	ET.1	Vignier, C. (1926)
CZ.10	V.1	CH.46 (?)	Stockholm, Museum of Far Eastern Antiquities (1963)	P.1
P.3		P.1	CV.85	SR.10
Marshall, Sir. J. (1933)		Salin, B. (1904)	CH.62	Watson, W. (1961)
GP.1		E.13	CG.28	CV.43
Marshall, Sir. J. (1951)		E.14	CH.26	CH.80
GP.1	GP.2	Salmony, A. (1938)	CH.84	CH.84
Matsulevich, L. (1926)		CV.15	CH.54	Werner, J. (1932)
SR.3	SR.8	CH.17	Sullivan, M. (1963)	SR.5
Mély, F. de		CG.6	CV.86	SR.10
SR.2		CZ.14	Sunglin Collection of Chinese Art (1939)	SR.3
Merpert, N. Ya (1955)		Salmony, A. (1952)	CV.54	V.1
V.1		CV.13	CV.56	SR.8
Moscow, Moskovskiiĭ Publichnyiĭ i Rumyantsevskiiĭ muzei (1905)		XCH.1	CV.55	V.2
P.1		CH.2	CH.35	West Palm Beach, Norton Gallery of Art (1950)
New Orleans, Isaac Delgado Museum of Art (1914)		SR.10	Talitskaya, I. A. (1952)	CV.57
CH.41		Salmony, A. (1963)	P.3	CH.36
New York, Arden Gallery (1939)		CV.33	Tallgren, A. M. (1924)	CG.15
CG.6	C.1	CH.80	CH.23	CH.44
CH.44		GP.1	P.3	CH.18
New York, Chinese Art Society of America (1962)		CG.7	P.1	CH.20
CH.18		XCH.3	SR.2	XCV.6
New York, Yamanaka and Company, Inc. (1943)		SR.10	P.2	CH.21
CV.51	CG.35	Salmony, A. (1963)	P.2	XCG.11
CV.52	CG.36	CV.33	E.2	White, W. C. (1934a)
CV.53	XCR.6	CH.36	E.3	CH.5
Nott, S. C. (1936)		GP.1	P.3	White, W. C. (1934b)
CH.60		CV.43	SR.2	CV.4
Obermaier, H. (1928-29)		CG.69	Tanner, P. de (1925)	CV.5
CH.23	V.1	Seligman, C. G. and H. C. Beck (1938)	CV.71	CV.26
SR.2		CG.26	CV.72	CH.26
Palmer, J. P. (1967)		Shkorpil, V. V. (1904)	CG.54	CV.27
CV.43		SR.3	XCG.7	C.3
Palmgren, N. (1948)		Shmit, A. V. (1925)	CH.63	C.4
CV.38	CG.23	P.3	XCG.13	CG.51
		Shtern, E. R. von (1897)	CH.64	CZ.7
		SR.9	XCG.14	CG.51
		Sinitsyn, I. V. (1936)	CH.65	CZ.15
		V.1	XCH.9	CV.26
		V.2	CH.66	CV.27
		Sirén, O. (1925)	XCH.10	XCV.12
		CV.50	XCV.7	CV.59
		CH.33	XCH.11	CV.66
		CG.28	XCH.12	XCH.7
		CH.28	Trousdale, W. (1969)	CG.51
		CH.29	CV.8	XC.1
		XCR.9	P.3	C.2
		XCG.4	CG.19	XC.2
		CH.31	CZ.14	XCZ.2
		XCH.14	S.2	C.4
		CH.32	E.2	XCZ.3
			SR.1	Yetts, W. P. (1926)
			E.10	CV.8
			SR.8	CH.43
			E.11	CG.45
			SR.10	CH.45
			E.12	Zasetskaya, I. P. (1968)
			XM.2	SR.8
			GP.1	
			XM.3	

\*Plate XCVIII,A of this work illustrates one of the CH class slides from O. Sirén (1925), but precise identification cannot be made.



# Notes

1. E.g., British Museum (chiefly O. Raphael and H. Oppenheim bequests), 21 examples; O. Sirén (Stockholm), 13 published examples; P. DeTanner (Berlin), 19 published examples; Metropolitan Museum of Art (New York), 18 examples; Art Institute of Chicago (E. and L. B. Sonnenschein Bequest), 11 examples; Dr. A. M. Sackler (New York), 30 examples.

2. Wu Ta-ch'eng, *K'u yü t'u k'ao* (1889) II, 116:a ff.

3. The code letters of the Catalog numbers are explained on p. 122.

4. Moskovskii Publichnyi i Rumyantsevskii musei, *Katalog* (1905), p. 44; B. Laufer, *Jade* (1912), p. 256. "commonsense could lead to no other result"; Isaac Delgado Museum of Art, *Morgan Whitney Collection of Chinese Jades* (1914), p. 40, no. 44; P. Houo, *Comment évaluer les faux?* (1919), p. 80; Hanoi, École française d'Extrême-Orient (1920), p. 197; C. Vignier, "Notes sur un livre récent" (1925), p. 16; Wong *Collection of Ancient Jades* [1937], nos. 179 and 180; J. Goette, *Jade Lore* (1936), p. 254, expresses doubt over identification; J. Ferguson, *Survey of Chinese Art* (1939), pl. CXIV; right; University of Pennsylvania, University Museum, *Archaic Chinese Jades* (1940), nos. 164, 168, 265, 275; Scott, *Golden Age of Chinese Art* (1967), p. 157; Clark, "Archaic Chinese Jades" (1968), p. 59.

5. M. Rostovtsev, "Une trouvaille de l'époque gréco-sarmate de Kerch" (1923).

6. This erroneous identification, habitually credited to Rostovtsev, was actually proposed nearly eighty years before the publication of the Kerch finds. A similar conclusion was drawn on the basis of Kareish's report ("Razrytie kurganov vozle Kerchi i Tamani" [1844]) on the excavation of a tomb in Kerch in 1842 where an object of this type was found in association with an iron sword. It is not unreasonable to assume that persons concerned with the excavation of the Messakudi piece (SR.2) were familiar with the above report of 1844, and with the identification of the chalcedony piece as a sword guard (see SR.7).

7. Pope-Hennessy, *Early Chinese Jades* (1923), pls. XXIX, XXXIII, the author, writing before the above publication of Rostovtsev, while still identifying these objects as "girdle jades," suggests the possibility (p. 73) of their being sword guards; A. Tallgren, *L'Orient et l'Occident dans l'âge du fer finno-ougrien* (1924), p. 23; P. Pelliot, *Jades archaïques de Chine* ((1925), p. 119, and notes to pl. XLII:1 and 3; O. Sirén, *Documents d'art chinois* (1925), p. 67, f., author failed to distinguish between these objects and true sword guards (p. 70).

8. A. Spitsyn, *Drevnosti Kamskoï chudi* (1902), p. 28, "pechat."

9. Taxila Museum, Taxila, West Pakistan.

10. Majewski, "Novae-Sektor Zachodni, 1965" (1966), p. 180, no. 23.

11. Peshawar Museum, Peshawar, West Pakistan.

12. L. Matsulevich, *Serebryanaya chasha iz Kerchi* (1926), p. 35.

13. Sekino, *Rakurō-gun jidai no iseki* (1925). See CV.8.

14. Correctly identified by Takeuchi Kimpei, in Hobson, "Jade" (1913), p. 108, n. See CH, 74.

15. *Prähistorische Ausgrabungen auf der Steppenseite* (1927). See V.1.

16. This term was introduced by O. Karlbeck, "Selected Objects from Ancient Shou-chou" (1955), and has been accepted by most authors subsequently dealing with this object: O. Maechen-Helfen, "Crenelated Mane and Scabbard Slide" [1957]; Watson, *China before the Han Dynasty* (1961); Detroit Institute of Arts, *James Marshall*

*Plumer Collection, A Memorial Exhibition* (1962). It is the most descriptively accurate of the terms by which this object, lacking any precise modern counterpart, has heretofore been known. Earlier, less descriptive or more cumbersome, terms were: sheath decoration, sword buckle, scabbard buckle, sword scabbard fitting, sword clasp, sword-support for a belt, sword-hook, scabbard-jade, scabbard loop, scabbard plaque, sledge-shaped scabbard appliqué, sword slide, belt-slide, sword-fastener, sword belt-clasp, sword slide for hanger, ornament from a sword scabbard, tragbügel. The French term "porte-épée" has been widely used and is descriptive of the object's function if not suggestive of its form.

17. The evolution of Chinese terminology for the scabbard slide has been far more complex and confusing than that of the West inasmuch as it poses an historical and philological rather than purely descriptive problem, and to date no generally accepted term has emerged. The difficulty originates in efforts by the Chinese to equate the scabbard slide with one or another ancient term for unidentified jade objects. The term *sui* 璫, proposed by Wu Ta-ch'eng, appears never to have been associated with scabbard attachments, but with girdle decorations: Giles, *Chinese Dictionary* (1912), no. 10407, "Jewels or ornaments hung at the girdle"; Mathews, *Chinese-English Dictionary* (1963), no. 5532, "Pendant girdle ornaments"; Couvreur, *Dictionnaire classique* (1911), p. 70, col. 3, "Nom d'une pierre qui portait bonheur, et dont on faisait des ornements pour la ceinture"; Legge, *The Chinese Classics* (1893-1895), vol. 2, *Shi king*, p. 355, "If we give them long girdle-pendants [*sui*] with their stones, they do not think them long enough." See also Creel, *Studies in Early Chinese Culture* (1937), p. 91, who considers this poem to be the only "protest against the Chou domination in all of the early Chou literature." The use of this term to designate the scabbard slide is doubtless the cause for its identification as a girdle ornament by some authors: London, Burlington Fine Arts Club, *Catalogue* (1915), p. 68, no. 25; Tanner, *Chinese Jade* (1925), vol. 1, p. 23. This term, nevertheless, without supporting evidence or explanation, has remained current in Chinese archaeological literature: *T'ao-chai ku yü t'u* (1936), p. 76:a (璫); Shang Ch'eng-tso, *Ch'ang-sha ku wu wen chien chi* (1939), ii, 3:b ff.; An-hui sheng, "Ho-fei hsi chiao Wu-kuei-tun" (1956); Hu-nan sheng, "Pei tao chüeh huo-ti ku mu tsang" (1956); Mai Ying-hao, "Kuang-chou Hua-ch'iao Hsi-Han mu" (1958), p. 73; *KKTH* 1958, 2, p. 28; Na Chih-liang, "Yü chien shih" (1960), p. 461; idem, *Yü ch'i t'ung-shih* (1964), p. 106; Shen-hsi sheng, "T'ung-kuan Tiao-ch'iao" (1961), p. 65 (璫). *Sui* has likewise been accepted by several Japanese authors: Hamada, *Yūchikusaijō kogyokufu* (1925); idem, *P'i-tzu-wo* (1929), p. 58; Mizuno and Kobayashi, *Kōko-gaku jiten* (1959), p. 240. The term *chih* 璣, however, from relatively early times seems to have been associated with sword furniture, and though sources have not been constant in regard to a specific object indicated by this term, it seems on the whole the more appropriate of the two. The term *chih* appears in the second-century dictionary *Shuo wen* 說文, where it is explained as a "sword-nose of jade." An early Sung dynasty commentary adds that "the *chih* is said to have been on the side of the sword case, and there was a part of it through which passed a leathern thong." *Chih* is omitted from Giles, *Chinese Dictionary* (1912). Couvreur, *Dictionnaire classique* (1911), p. 856, col. 3, defines the term as an "ornement de jade fixé sur la garde d'une épée," which would appear to be incorrect, though others have sug-

gested the same explanation: Wu Ta-ch'eng, *Ku yü t'u k'ao* (1889), II, 101:a ff.; Szu-ch'uan sheng, "Ch'eng-tu Yang-tzu-shan" (1956), p. 5, no. 172:66 and fig. 19:6; Wong, "Ancient Jades" (1927), vol. 7, (2), p. 61; Na Chih-liang, "Yü chien shih" (1960), p. 456; Hamada, *P'i-tzu-wo* (1929), p. 19, Eng. sum.; Cheng Te-k'un, *Archaeology in China*, vol. 3, (1963), p. 197. See also on this term: O. Maenchen-Helfen, "Zur Geschichte der Lackkunst" (1937), p. 49, n. 66; and Hansford, *Glossary of Chinese Art and Archaeology* (1954), p. 26, "slotted jade fitting, attached to sword-scabbard." Shang Ch'eng-tso, who regarded *sui* as the correct term for scabbard slide (see above, *Ch'ang-sha ku wu wen chien chi* [1939]), considers that *chih*, *wei* 衛, *hsün* 璠, and *erh* 珪 have all the same meaning—sword guard. *Erh* has been adopted quite recently in some Chinese reports to designate the scabbard slide, as *chien erh* 劍珪 "sword ear-ornament," or *yü erh* 玉珪 "jade ear-ornament": Hu-nan sheng, "Ch'ang-sha Yang-t'ien-hu" (1957a), pl. III: 1, after p. 94; Hu-nan sheng, "Hu-nan Ch'ang-sha Hsi-Han mu" (1957b), p. 31. Quite recently the term *peng* 璘, normally identified with the sword guard, has been used to designate the slide: *Ch'ang-sha fa-chüeh pao-kao* (1957). Cheng Te-k'un, who equates *chih* with sword guard (see above), assigns a term *fung* ("oblong loop for the scabbard") to the scabbard slide: *Archaeology in China*, vol. 3 (1963), p. 197. This is evidently a mistake; possibly *peng* was intended. (This term is generally, or sometimes, applied to the Form II scabbard slides described and discussed in the text, through the mistaken belief that these objects are not scabbard slides but scabbard ferrules which is the usual definition of this term in Chinese and Western sources [see Na, "Yü chien shih" (1960), pp. 458 ff.; Rostovtsev, "Une trouvaille de l'époque gréco-sarmate de Kertch" (1923), p. 135]. While one would presume the two distinct forms of the slide were distinguished by separate terms, among the proliferation of terminology for the jade sword and scabbard fittings, no term to designate Form II slides may be isolated.) The majority of older Chinese works on jade, though known chiefly through eighteenth-century editions, identify the scabbard slide as *chih*: e.g., *K'ao ku t'u* (1752), viii, 8:b ( 璠 ); *Ku yü t'u* (1752), ii, 11:a ff. ( 璠 ); *Ku yü t'u lu*. The spurious *Ku yü t'u p'u* which was, regardless of its purported antiquity (see Catalog: Ca-m), published in 1779, identifies *chih* as an object "fitted upon the scabbard to provide means for attachment to the girdle" (lix, 2:a), an identification rejected by Laufer: see Hommel, "Chinese Sword Furniture" (1928), p. 4; Yetts, "A Chinese Scabbard-Jade" (1926), p. 201. *Chih* appears to be no more frequently used in current Chinese publications than *sui*: *Ch'u wen-wu* (1954), pl. XXXVIII; *Lo-yang Chung-chou-lu* (1959), p. 97; *Yün-nan Chin-ning Shih-chai-shan* (1959), vol. 1, p. 118; Hu-nan sheng, "Ch'ang-sha Wu-li-p'ai ku mu tsang" (1960), p. 46; Chung-kuo k'o-hsüeh yüan, "Lo-yang hsi chiao Han mu" (1963), pl. XIV: 9-11, 13; Su Wen-chin, "Shan-tung Liang-shan Pai-mu-shan" (1964), p. 480; Chang Hsin-ju, "Ch'ang-sha Sha-tzu-t'ang" (1956), p. 117. The term *chih* has been accepted by most Western authors in recent times, and is the term favored by the majority of Japanese writers: e.g., Hamada and others, *Rakurō saikyō-zuka* (1934); Umehara, *Shina kogyoku zuroku* (1955), (and other writings); Ono and Hibino *Mōkyō kōkokū* (1945); Egami, *Yūrashia kodai hoppō bunka* (1948).

18. The 35 slides in the "E" category are derivative types for the most part without immediately apparent affinities to either of these two types. Four in the CZ category are also excepted. CZ.16 and CZ.17 are late novelties borrowing certain features of the authentic slide; CZ.15 is probably not a scabbard slide as published; CZ.14 (pl. 11a) poses a difficult problem which will be discussed later.

19. Maenchen-Helfen's contention that scabbard slides were "inlaid with diamonds" ("Crenelated Mane and Scabbard Slide" [1957], p. 98, n. 48) in the Han period is evidently incorrect. It seems to result from a misreading of his own "Two Notes on the Diamond" (1950),

p. 187, where the reference is to a bronze belt hook, not to a scabbard slide, set with diamonds.

20. Average length computed from 122 authentic examples for which reliable measurement was available: the longest 4.72, the shortest 1.50; average width computed from 116 authentic examples for which reliable measurement was available: the broadest 1.13, the narrowest .58; average depth computed from 95 authentic examples for which reliable measurement was available: the greatest depth 1.25, the shallowest .20. Slides of the second basic type (Form II, with X prefix) were not included in the above calculations. See tables I and II for list of scabbard slides included here and for additional computations. The length of the scabbard slide is not determined by the length of the aperture. There is no consistent relationship between aperture and total length.

21. Trousdale, "The Crenelated Mane" (1968).

22. See p. 122 for an explanation of the class code letters.

23. Catalog classes C and XC will not be discussed. Information on these scabbard slides is insufficient to determine to which of the other categories the pieces properly belong.

24. It is not my intention here to discuss, or attempt to resolve, problems of dating jades in general. Nor could this be done in terms of the single jade type to be examined. Basically, the dating of jades here follows that of the late Alfred Salmony as advanced in his two fundamental works on early jade. (*Carved Jade of Ancient China* [1938]; *Sonnenschein Collection* [1952]), and for this a debt of gratitude is deeply acknowledged. Where I have suggested dates not in agreement with those assigned by Salmony to stylistic categories, these have been based primarily on comparison with newly excavated materials and stylistic studies not available at the time Salmony wrote. I have proposed dates as precisely as possible on the basis of available evidence.

25. CV.4 (pl. 1c), CV.13 (pl. 1d), CV.28, CV.29, CV.34 (pl. 1e), C.35, CV.37, CV.45, CV.82, CV.100, CV.101, CV.102.

26. CV.98 appears to combine elements of this and the succeeding stage.

27. CV.33 (pl. 3a), CV.36, CV.95, CV.97, CV.103 (pl. 2b-d).

28. CV.5, CV.6, CV.7, CV.8 (pl. 3b), CV.9, CV.10, CV.11, CV.12, CV.16, CV.81 (pl. 3c), CV.92.

29. CV.2, CV.25 (pl. 3d), CV.30 (pl. 3e), CV.62, CV.93, CV.99.

30. CV.24 (pl. 4a), CV.32 (pl. 4b), CV.33 (pl. 4c).

31. CV.14 (pl. 4d), CV.19, CV.23 (pl. 4e), CV.38, CV.43 (pl. 4f), CV.79 (pl. 5a), CV.90 (pl. 5b).

32. On CG.20 (pl. 7c) the ornamentation was not carried beyond the marking of the surface with deeply engraved parallel sets of lines drawn in three directions.

33. For example, the two large perforated discs in the Art Institute of Chicago: Salmony, *Sonnenschein Collection* (1952), pls. LXX and LXXI.

34. Salmony, *Sonnenschein Collection* (1952), p. 180. See CG.15, CG.18, CG.27, CG.74.

35. Of the twenty-three jade scabbard slides in this class with animal masks at the upper end, only one (CG.59), recovered from a late Western Han tomb, establishes incontrovertibly the authenticity of the type. Two unquestionably authentic examples in the Dr. Paul Singer collection (CG.65, pl. 6c, and CG.67, pl. 8a) extend this range, while two others, of unknown provenance (CG.22 [pl. 7d], CG.33), may also be authentic. The animal mask at the upper end of CG.22 is, however, of unusual form. The piece is known to me from a photograph only. The seeming high quality of workmanship, the comma-grain uncommon in antiquarian pieces or forgeries, and its profile suggest genuineness, but the animal mask and the small cross-hatched area above the eyebrows are features not encountered on other slides of this class. See CG.22, CG.33, CG.36-37, CG.40, CG.42-44, CG.46, CG.48-49, CG.51, CG.65, CG.67, CG.75, CG. 53-54, CG.55, CG.56-57,

CG.59, CG.61, CG.62.

36. CG.25 (pl. 8b), CG.26, CG.27. The upper end of CV.27 is badly decomposed, but it seems likely, from the orientation of the pattern, that there was an animal mask at the upper end.

37. E.g., Seligman, "Early Chinese Glass" (1940-1941), p. 19; Honey, "Early Chinese Glass" (1937), p. 212; idem, "Chinese Glass" (1939-1940), p. 36; Salmony, *Sonnenschein Collection* (1952), p. 169.

38. See Harada, "Ancient Glass" (1962), p. 60 f., who recognizes, in addition to the role of jade substitute, an additional concern for glass as a material revered in its own right.

39. Identification of this animal as "hydra" is manifestly unsuitable and has been objected to by several authors. H. Jayne, University of Pennsylvania, University Museum, *Archaic Chinese Jades* (1940), p. 11, rejects the term with reason in favor of lizard: "To use the word hydra is to introduce an element of terminology completely foreign to the subject." Salmony, *Sonnenschein Collection* (1952), pl. CVII:4-6, prefers "feline-like animal." Hansford, *Glossary of Chinese Art and Archaeology* (1954), p. 15, identifies the form as *ch'ih-hu* 虺虎 and believes it to have evolved from a conventional representation of a lion (which is evidently a mistake for "tiger," or "feline," as the lion was unknown in early China). The problem of the identification of this form is, I think, one which need not be of vital concern here. From a specific need for a brief descriptive term which provides a meaningful conventional reference for the purposes of study, the term "hydra" has been retained to identify this fantastic animal form.

40. Laufer, *Jade* (1912), p. 260.

41. Sixty-eight examples as opposed to 333 of Form I.

42. The Metropolitan Museum of Art, New York, for example, possesses nine objects of this type, none of which has been published.

43. "Crenelated Mane and Scabbard Slide" [1957].

44. Sirén, *Documents d'art chinois* (1925), no. 504; Janse, "Notes sur quelques épées anciennes" (1930), p. 127, no. 108; *Ku-kung*, no. 28, p. 14; *Ku-kung chou-k'an*, no. 16, p. 940.

45. Rostovtsev, "Une trouvaille de l'époque gréco-sarmate de Kertch" (1923), p. 135; Laufer, *Jade* (1912), p. 279; Wu Ta-ch'eng, *Ku yü t'u k'ao* (1889), p. 96:a; Na Chih-liang, "Yü chien shih" (1960), p. 458.

46. Hamada, *Yūchikusaizō kogyokufu* (1925), vol. 2, pl. XXI: 47 (though the author identifies another similar object, vol. 2, pl. XXI: 50, as a sword ornament of undetermined function); Salmony, *Sonnenschein Collection* (1952), p. 249.

47. XCG.12 in the British Museum, and XCG.13 in the P. De Tanner collection, belong to profile type B, but are late, poorly carved imitations.

48. Sirén, *Documents d'art chinois* (1925), ascribes several examples in his collection to the Ch'ien-lung period: see CH.30, CH.31, CH.32, CH.33.

49. *Jade* (1912), p. 258. The specimens referred to by Laufer are here included as CV.67, CV.68, CV.69, CG.42, CH.8, CH.12, CH.78, CZ.8, CZ.9.

50. Rivière, in Sirén, *Documents d'art chinois* (1925), p. 15, but attributing the majority of the objects to the Sung dynasty, or later; Pelliot, "Quelques réflexions sur l'art sibérien et l'art chinois" (1929), p. 2, correcting his earlier post-Han date for the appearance of these objects in China (*Jades archaïques de Chine* [1925], p. 119), based upon an acceptance of Rostovtsev's ("Une trouvaille de l'époque gréco-sarmate de Kertch" [1923]) misidentification of the slide as a sword guard (see SR.2), and belief in the priority of the South Russian pieces; Hommel, "Chinese Sword Furniture" (1928), p. 4; Hansford, *Seligman Collection* (1957), p. 29, suggesting, however, that prototypes may have been fashioned in metal.

51. See Jenyns, *Chinese Archaic Jades* (1951), p. xii f., for summary to date of early sites where jade objects have been found.

52. See Hansford, *Chinese Carved Jade* (1968), pp. 38-40.

53. Korea: CV.5, CV.6, CV.7, CV.8, CV.9, CV.10, CH.6, CH.7, XK.1; Inner Mongolia: M.1, XM.5. Until recently virtually no Chinese jades of Han date other than those from Lo-lang and Noin Ula have had known provenance (Lion-Goldschmidt and Moreau-Gobard, *Chinese Art* [1960], p. 135).

54. "Crenelated Mane and Scabbard Slide" [1957], p. 98.

55. CV.1, CV.4, CG.1, CG.5, CG.58, CH.1, CH.2, CH.5.

56. Ho-chin, southwest Shansi (CG.5); Lo-yang, Honan (CV.4, CG.58, CH.5); Ch'ang-sha, Hunan (CV.1, CG.1, CH.1, CH.2).

57. The distribution is further extended by Form II slides XCG.1, XCG.2, XCG.15 from Hui-hsien in northern Honan.

58. See Catalog for references here and for following scabbard slides, and for additional pertinent observations on individual pieces.

59. *Chinese Bronze Age Weapons* (1956), pp. 77 ff.

60. *Ibid.*, p. 197 f., and pl. XXXVII: 96.

61. *Ibid.*, p. 77.

62. Bronze-hilted iron swords of Han date, but of non-Chinese type, were found in considerable number at Shih-chai-shan in Yünnan Province. See Catalog, under CP.1. Bronze-hilted iron swords, again non-Chinese, have been recovered from Hsiung-nu 匈奴 graves in Inner Mongolia: see Sun Shou-tao, "Hsiung-nu Hsi-ch'a-kou" (1960), p. 26, figs. 2 and 3. They have also been found in Han-age Dōng-so'n tombs in Annam (Viet-Nam): Janse, *Archaeological Research in Indo-China* (1951), vol. 2, p. 48.

63. Loehr, *op. cit.*, p. 79.

64. Radlov, *Sibirskiya drevnosti* (1891), tom 1, vyp. 2, pls. XII:4; XIII:1-4.

65. An example of this bronze guard type on an iron sword, probably of Han date; in Loehr, *op. cit.*, p. 206, no. 103, and pl. XXXIX: 103.

66. *China* (1961), p. 139.

67. Loehr, *op. cit.*, p. 77.

68. Hu-nan cheng, "Ch'ang-sha Yang-t'ien-hu" (1957a), pl. II:3 and p. 92.

69. Loehr, *op. cit.*, p. 205 f.

70. Salmony, *Sonnenschein Collection* (1952), p. 180. See also Hui-hsien *fa-ch'ieh pao-kao* (1956), pls. LXVI: 17, LXXVIII: 20; Szu-ch'uan sheng, "Ch'eng-tu Yang-tzu-shan" (1956), fig. 19:1; *Ch'üan kuo chi pen* (1955), vol. 2, pl. CXIX:1; *Ch'u wen-wu* (1954), pl. XXVII:50; White, *Tombs of Old Lo-Yang* (1934b), pl. CXXXII:323; Salmony, *op. cit.*, pls. LXXIII:1-3, LXXIV:1-2; Jenyns, *Chinese Archaic Jades* (1951), pls. XVII, XVIII, XXXII:D-F; XXXIII:B-C; Warner, "Far Eastern Art" (1950), pl. II:A; Mizuno, *In Shū seidōki to gyoku* (1959), pl. CLX; Umehara, *Shina kogyoku zuroku* (1955), pl. XXI: upper; Hamada *Yūchikusaizō kogyokufu* (1925), pl. XI:20 (ascribed to Han, but probably Late Eastern Chou). The fully modeled commagrain on jades may be related to similar forms on Chin-ts'un 鎡 卬 style bronze mirrors and vessels (e.g., Umehara, *Rakuyō Kinson* [1937], appendix, pls. VII-VIII), but on bronzes these grains seem to relate back to forms on vessels of the earlier *Li-yü* 鬲 卣 style (e.g., Bachhofer, *Short History of Chinese Art* [1947], pl. XXX), considerably in advance of their appearance on jade.

71. Salmony, *Sonnenschein Collection* (1952), p. 180 f.

72. *Ibid.*, p. 181. Cf. also Sickman, *Art and Architecture of China* (1960), p. 10.

73. CV.13 (pl. 1d), CV.28, CV.29, CV.34 (pl. 1e), CV.35, CV.37, CV.82, CV.100, CV.101.

74. A thin, small, rectangular plaque in the collection of His Majesty King Gustaf VI Adolf, with an animal mask at one end and the remainder of the surface covered with a geometric composition in all respects similar to that found on the scabbard slide, is an exception. See Palmgren, *Selected Chinese Antiquities* (1948), pl. LI:9, and p. 97, no. 1188. The geometric composition on this piece corresponds to

Stage c of Type I in the scabbard-slide sequence. Palmgren suggests that the piece formed part of a girdle pendant, but it may actually be the upper plate of an XCV category (Form II, Geometric Class) scabbard slide refashioned (after breakage of the aperture) to serve another function.

75. E.g., striae filling of horn-shaped forms: Palmgren, op. cit., pl. XLVIII:5; incised drop-shaped ornaments, polygonal cross-hatched areas and pairs or arched lines drawn between, and serving to connect, various forms: "Carved Jades of Shang and Chou" (1942), p. 118; White, *Tombs of Old Lo-yang* (1934b), pl. VI:012, a and b (bronze), and pls. XXIII, XXV:053 (bronze), CXXXV, 9th item from top; *Wu sheng ch'u-t'u* (1958), pl. LXVII:1, top; Visser, *Asiatic Art* (1948), pl. LV, no. 111; Umehara, *Rakuyō Kinson kobo shūei* (1937), pls. LXXXV-LXXXVII, LXXXIX; William Rockhill Nelson Gallery of Art, *Handbook* (1959), pp. 117:left, 178:upper left and upper right; Umehara, "Sengoku jidai no gyokuren gyokuhai" (1956), pl. XIII:B.

76. The Late Eastern Chou slides of the Grain and Geometric classes are all between 1.50 and 2.16 in length.

77. CV.34, length 2.91. The profile of this piece has not been published. See also the atypical and questionable excavated example CV.1, with a length of 3.94.

78. CH.1 and CH.2 from Ch'ang-sha, Hunan Province; CH.5, reputed to have come from a late Chou tomb at Lo-yang, Honan Province.

79. CH.9 and CH.10, both acquired in Shou-hsien, Anhui Province.

80. "Selected Objects from Ancient Shou-chou" (1955), p. 126.

81. White, *Tombs of Old Lo-yang* (1934b), pl. CXXXII.

82. See *Ch'ang-sha fa-chüeh pao-kao* (1957), pl. XXXIV.

83. In order of discussion: CG.2, CG.3, CG.4, CG.59, CG.60; CV.5, CV.6, CV.7, CV.8, CV.9, CV.10, CV.79, CV.80, CV.83, CV.84, CV.88; CH.3, CH.6, CH.7; CP.1; CZ.1.

84. Korea: CV.5, CV.6, CV.7, CV.8, CV.9, CV.10; CH.6, CH.7; western and south-central Inner Mongolia: M.1, XM.1, XM.2, XM.3, XM.4, XM.5; Viet-Nam: CV.80.

85. Honan: CG.59, CG.60, CV.83, CV.84, CV.88; Hunan: CG.4, CV.79, CH.3; Szechuan: CG.3; Kwangtung: CG.2, CZ.1; Yunnan: CP.1.

86. Korea: Sekino, *Rakurō-gun jidai no iseki* (1925), pl. XL (CV.8 and CV.9 from same tomb); Viet-Nam: CV.80.

87. Bronze: CV.4, CG.1, CG.58, CH.1, XCG.1, XCG.2, XCG.15; iron: CV.1 (wholly decomposed), CZ.10; bronze and iron: CH.2. However, iron oxide stains are found on the exteriors of CV.100, CV.101, CG.15, CH.5.

88. Bronze: CG.3, CH.3; iron: CV.6, CV.7, CV.8, CV.9, CV.10, CV.80, CV.83, CV.84, CV.88, CG.2 (wholly decomposed), CG.4 (wholly decomposed), CG.59, CG.60, CH.6, CH.7, CP.1, CZ.1.

89. CV.7, CV.8, CV.9, CV.10, CG.3, CH.6, CH.7, CP.1.

90. CV.15, CV.20, CV.22, CV.23 (?), CV.36, CV.97, CV.103, CG.8, CG.10, CG.12 (with iron sword), CG.14, CG.20, CG.21, CG.23, CG.63, CG.65, CP.5 (?), CZ.2, CZ.3, XCR.10, XCG.16, XCH.17 (?).

91. CV.5, CV.6, CV.7, CV.8, CV.9, CV.10, CV.79, CV.80, CV.83, CV.88, CG.4, CG.59, CH.3, CH.6, CH.7.

92. CG.6, CG.8, CG.10, CG.11, CG.12, CG.14, CG.16, GC.17, CG.18, CG.20, CG.21, CG.23, CG.25, CG.26, CG.63, CG.65, CG.67, CG.72, CG.73, CG.74.

93. Interlocked grains of this type are found on other contemporary jade objects: Mizuno, *In Shū seidōki to gyoku* (1959), pl. CLXII: D and E; Maxwell, "Chinese Jade" (1914), p. 295, fig. C; Umehara, *Rakuyō Kinson kobo shūei* (1937), pls. LXXVI-LXXX, LXXXIV, LXXXVIII; idem, *Shina kogyoku zuroku* (1955), pls. XV, LX, LXI, LXXXII:6; White, *Tombs of Old Lo-yang* (1934b), pls. CXXIV:309, CXXXVIII:332.

94. CV.5, CV.6, CV.7, CV.8, CV.9, CV.10, CV.79, CV.80, CV.83, CV.84, CV.88.

95. CV.5, CV.6, CV.7, CV.8, CV.9, CV.10.

96. CV.15, CV.20, CV.22, CV.23, CV.24, CV.33, CV.36, CV.38, CV.43, CV.92, CV.95, CV.97, CV.98, CV.103.

97. See Gure "Jade Exhibition at Stockholm" (1964), pls. III:1a, IV:1b, IX:1a, XIII:1 and 2.

98. Lo-lang: CH.6, CH.7; Ch'ang-sha: CH.3.

99. CH.8, CH.11, CH.12, CH.13, CH.15, CH.18, CH.54.

100. The late Desmond Gure, London, called my attention to one or more scabbard slides recovered from a tomb of immediately post-Han times. I have not been able to confirm the publication of this find. The slides have been described as varying somewhat from the normal form and may, therefore, represent anachronistic survivals. Tombs belonging to the Silla Kingdom, Korea, corresponding in date to, and influenced by, the Six Dynasties period in China (A.D. 265-589), have produced enormous quantities of jade, as much as 30,000 pieces in a single tumulus, but no slides (Umehara, "Deux grandes découvertes archéologiques" [1926], pp. 29, 33).

101. Shensi: CV.3, CP.2; Shantung: CH.79; Anhui: CV.2; Chekiang: CH.4. But see also CV.102, Honan.

102. Iron swords were found in the two tombs of the CV.2 site, but neither has been identified as associated with the slide. No weapons were found with either CV.3 or CH.79, though with regard to the latter it is presumed the tomb was robbed.

103. Swann, *Food and Money in Ancient China* (1950), p. 348. Needham, *Iron and Steel Technology* (1958), p. 2.

104. CG.24, CG.27, CG.28, CG.29, CG.30, CG.66, CG.70, CG.71.

105. CH.14, CH.16, CH.17, CH.21, CH.36, CH.44.

106. Sekino, *Rakurō-gun jidai no iseki* (1925), pl. LXXII.

107. The volute forms and polygonal cross-hatched areas of the slides are found also on bronze objects and other types of jades from the Ch'in-t's'un area: Umehara, *Rakuyō Kinson kobo shūei* (1937), pls. XIII:B, XLVI.

108. See Salmony, *Chinese Jade* (1963), p. 115, on geographical localizations of styles and techniques.

109. Among others, see Hansford, *Seigman Collection* (1957), p. 29, and Loehr, "Fate of the Ornament" (1967-1968).

110. Separate references will be made to only a few of the late antiquarian slides. The reader is referred to the numerous examples listed under each class in the Catalog.

111. This practice on the part of the Chinese of imitating ancient forms is often misunderstood by the Westerner accustomed to constant change and novelty. Thus, a number of writers on jade have attempted to warn the prospective collector of the pitfalls in examining "ancient" jade. While it is certainly true that enterprising, ignorant, or unscrupulous merchants of the nineteenth and twentieth centuries, both in China and elsewhere, seldom discouraged and doubtless even at times promoted belief among Westerners in the antiquity of specimens for sale, such pieces would less often confuse the discriminating Chinese connoisseur. In the last century, however, the profitable jade trade has encouraged the production of forgeries which, to judge by collections such as that of P. De Tanner (formerly Berlin: see under Tanner in Bibliography), found a ready market. On the techniques of forgery, see Hillburgh, "Chinese Imitations of Hard Stone" (1906); Takeuchi Kimpei, "The Chinese Appreciation of Jade" (1913); [Bishop], *Investigations and Studies in Jade* (1900), pp. 265 ff.; Wang, "Archaeology in the Sung Dynasty" (1927); Sullivan, *Introduction* (1961), p. 91; Hansford, *Chinese Carved Jade* (1968), pp. 38-40.

112. Since our concern here is focused chiefly on the authentic scabbard slide, an attempt has been made in only a few instances to assign a particular antiquarian slide to a specific period.

113. Forty years ago Sirén, *Early Chinese Art* (1930), p. 65, remarked that "the decisive criteria for the attribution of a jade ornament to the Han period have . . . little or nothing to do with its general (italics mine) shape and ornamental motive; they lie deeper and can hardly

be realized through descriptions."

114. Antiquus, "Sui and Ancient Chinese Swords" (1928) maintains that the slide generally has a length of about four inches, supporting his contention by reference to several of the poorest type antiquarian pieces.

115. Burling, *Chinese Art* (1953), p. 34, is incorrect in stating that "a good old piece of jade will have no hard corners . . ." Such a criterion, while largely useless as a generality for judging jade of any period, would be more applicable to Sung and Ming pieces.

116. Examples of the use of slide decor schemes on objects post-dating the authentic scabbard slide. Grain: Nott, *Chinese Jade throughout the Ages* (1936), pls. XXV, LXXXVII (rounded knob grains); Getz *Woodward Collection* (1913), no. 79 (rounded knob grains with incised perimeters); Krechetova, *Reznoj kamen' Kitaya* (1960), pl. XVII (round flat grains defined by incised perimeters). Geometric: Nott, op. cit., pl. XC (interlocked elongated C's; idem, *Rare Chinese Jade* (1940), nos. 106 and 144 (scalloped and elongated C's bracketing knob grain); New York, China Institute in America, *Chinese Jade Carvings* (1954), no. 8 (interlocked elongated C's); Buhot *Arts de la Chine* (1951), p. 93 (interlocked elongated C's); Tanner, *Chinese Jade* (1925), vol. 1, pls. VII:1431, VIII:80, 105 and 1378, XVI:1990 and passim (numerous examples of elongated C's bracketing grains, interlocked, or in other configurations; cross-hatched diamonds, triangles, etc.); Whitlock, *Story of Jade* (1949), pls. LXXXVI, LXXXVII, CLVI, CLXXI, (various combinations of volutes, elongated C's, grains); New York City, Parke-Bernet Galleries, *Chinese Porcelains and Jades* (1938), no. 81 (interlocked elongated C's and elongated C's bracketing shorter C's; idem, *Jades* (1939), no. 157 (elongated C's on monster mask). Hydra: Maxwell, "Chinese Jade" (1914), p. 299, fig. B, Nott: *Chinese Jade throughout the Ages* (1936), pls. XVII: lower, XXXV: lower, XXXIX; idem, *Rare Chinese Jades* (1940), no. 133; idem, *Nott Collection* (1942), pls. XXXIV, XCVII, XCVIII, CVI, CVIII, CXIV; Hamada, *Yūchikusai-zō kogyokufu* (1925), vol. 2, pl. XIV:24 (ascribed to Han, but certainly later); Hansford, *Seligman Collection* (1957), pl. LXIII:B:41; Krechetova, *Reznoj kamen' Kitaya* (1960), pls. VII, X, XI, XVIII; Venice, *Mostra d'arte cinese* (1954), nos. 430 and 915; Whitlock, *Story of Jade* (1949), pl. LVIII; Tanner, *Chinese Jade* (1925.) passim (entire collection late).

117. See, e.g., CH.59, CZ.5, CZ.7 (pl. 10b), CZ.8.

118. Goette, *Jade Lore* (1936) p. 254. See also CZ.17.

119. Wong, "Ancient Jades" (1927), vol. 7(2), p. 62; Takeuchi Kimpei, "The Chinese Appreciation of Jade" (1913), p. 145. T'ang Jung-tso has compiled an interesting, if partly fabulous, treatise entitled *Yü-shuo* 玉說 (A discourse on jade) on the causes of staining and decomposition of buried jade (see [Bishop], *Investigations and Studies in Jade* [1900], pp. 358 ff.) Jades are sometimes given a decomposed ("chicken bone") surface by subjection to a heat of 700 to 1000 or more degrees centigrade, depending on the particular stone. Jades can, of course, be subjected to fires producing such heat under natural conditions; there is no way to distinguish the accidentally from the deliberately burned. If the decomposition results from heat, nephrite is altered into either diopside or enstatite, both of which produce X-ray diffraction patterns distinct from that of nephrite. If the decomposition has been caused by age, that is by prolonged burial in the earth and contact with other minerals and substances, the molecular structure is basically unaltered and its diffraction pattern will remain that of nephrite.

120. [Bishop], *Investigations and Studies in Jade* (1900), p. 297; Pope-Hennessy, *A Jade Miscellany* (1914), p. 52.

121. Pope-Hennessy, op. cit., p. 35 f., and illus. facing p. 46.

122. Goette, *Jade Lore*, (1936), p. 255; Hommel, "Chinese Sword Furniture" (286), p. 3.

123. Hansford, *Seligman Collection* (1957), p. 112; H. Rivière in Sirén, *Documents d'art chinois* (1925), p. 15; Pelliot, "Quelques réflexions

sur l'art sibérien" (1929), p. 20 n; Goette, *Jade Lore* (1936) p. 254 f.; Hommel, "Chinese Sword Furniture" (1928), p. 3; Antiquus, "Sui and Ancient Chinese Swords" (1928), p. 399; Wong "Ancient Jades" (1931), vol. 14 (1), p. 6; White, *Tombs of Old Lo-yang* (1934b), p. 137 f.; Na Chih-liang "Yü chien shih" (1960), pp. 461 ff.; Shang Ch'eng-tso, *Ch'ang-sha ku wu wen chien chi* (1939), ii, 3:a ff.; Yetts, "A Chinese Scabbard-Jade" (1926), p. 201; Salmony, *Sommenschien Collection* (1925), p. 176; Dresser, "Ancient Chinese Jades" (1955), p. 26; Ginters, *Das Schwert der Skythen und Sarmaten* (1928), pp. 70 ff.; Maenchen-Helfen, "Zur Geschichte der Lackkunst" (1937b), pp. 49 ff.; Rostovtsev, "Le porte-épée des iraniens" (1930), p. 341.

124. "Chinese Sword Furniture" (1928). The late antiquarian slide shown in this reconstruction is CV.70 in our Catalog.

125. This reconstruction was advanced again by Hommel in 1951: "Notes on Chinese Sword Furniture" (1951).

126. "Yü chien shih" (1960).

127. In his last work on Chinese jade, published posthumously, the late Alfred Salmony proposed an equally erroneous hypothesis on the function of the scabbard slide. He described the object as being "inserted into the scabbard above its center to accommodate the hook of a chain suspended from saddle or belt" (*Chinese Jade* [1963], p. 121).

128. *Jade Lore* (1936), p. 255.

129. Yetts, "A Chinese Scabbard-Jade" (1926), p. 201.

130. *Carved Jade of Ancient China* (1938), pl. LIII:5; Huang Chün, *Heng-chai ts'ang chien ku yü t'u* (1935), II, 17:a.

131. *Tomb Tile Pictures* (1939). For a discussion of the date of these tiles, see Maenchen-Helfen, "Crenelated Mane and Scabbard Slide" [1957], p. 95, n. 33. A. Bulling's attempt to assign a date of first-century B.C. to these tiles raises a series of complex questions which cannot be argued here, but which clearly indicate that the chronology of these tiles requires further study: "Hollow Tomb Tiles" (1965).

132. White, *Tomb Tile Pictures* (1939), pls. LXII, LXIV, LXV, LXVIII.

133. Several swords with this hilt wrapping well preserved are known: Stanford University, *Arts of the Chou Dynasty* (1958), no. 100; Watson, *Handbook* (1963), p. 60, fig. 17b, from Ch'ang-sha; *Hsin Chung-kuo-ti k'ao-ku* (1961), pl. LXV:1, from Ch'ang-sha.

134. Maspero, "La vie privée en Chine" (1931), p. 196.

135. Antiquus, "Sui and Ancient Chinese Swords" (1928), p. 299.

136. "Early Chinese Belt" (1939).

137. "Crenelated Mane and Scabbard Slide" [1957], p. 99.

138. Belt hooks alone also were found in association with *CI.80, CH.1, M.1*.

139. See Rudolph, *Han Tomb Art* (1951), p. 30f.

140. I cannot agree with Maenchen-Helfen ("Crenelated Mane and Scabbard Slide" [1957], p. 98) that these are "very long swords." See the examples cited by him in Jung Keng, *Pao-yün lou i ch'i t'u-lu* (1929), vol. 2, 85:a; and idem, *Wu-ying tien i ch'i t'u-lu* (1934), vol. 2, 109:a. Vandier notes that such swords in a similar scene on a late Chou bronze vessel in the Louvre are short and provided with the disk pommel typical of the short bronze sword of late Chou ("Notes sur un vase chinois" [1938], p. 133). See also Yang, *Chan-kuo hui-hua* (1957), pl. XXII.

141. "Crenelated Mane and Scabbard Slide" [1957], p. 93.

142. *Izobrazitel'noe iskusstvo Kitaya* (1960), p. 3, lower.

143. *Ch'üan kuo chi pen* (1953), vol. 1, pl. XXII; Guiganino, *La pittura cinese* (1959), vol. 2, pl. DLXXXV, in color; Haskins, "Recent Excavations" (1956), p. 51, says: "The long Han sword carried by the courtier is worthy of comment. The pommel is a flat disk, similar to that of the well-known Chou weapons, and not a ring, as is so often the case with Han sabres. The blade is the long straight form, however, of which many examples have been found. The chape at the end of



the scabbard is easily visible." The disk pommel indicates that the sword is probably not, as Haskins supposes, a saber, but a rapier. The disk pommel is extremely rare on sabers and almost ubiquitous on rapiers.

144. Tibor Horváth, who saw painted copies of the Wang-tu paintings, confirms that the hilt is before, the chape behind ("Pictorial Representations" [1955], p. 333). The sword position is not so unusual as he imagines.

145. See Rudolph, *Han Tomb Art* (1951), pl. XXXVII; *Shen pei Tung-Han hua-hsiang shih-k'e* (1957), pp. 194, 111; Chavannes, *Mission archéologique* (1909-1915), pls. XCI:170, LXXVII:148, sword carried by a mythical being (Chavannes, *ibid.*, vol. 1, p. 224, describes the sword as being point down before, hilt up behind; the sword is clearly represented and the chape rises behind, the hilt with flat disk pommel and exaggerated guard is seen before the right knee).

146. Hilt down behind, chape up before: New York, Chinese Art Society of America, *Arts of the Han Dynasty* (1961), no. 90; Tōkyō, Tenri Gallery, *Exhibition of Figured Bricks* (1965), fig. 42, upper center.

147. Rudolph, *op. cit.*, pl. XLIII.

148. Rudolph, *op. cit.*, pl. LXX.

149. *Chung-kuo ku wen-wu* (1962), pl. CCLII.

150. Chavannes, *Mission archéologique* (1909-1915), pl. XLV:76; see also pl. LI:108. Both of these swords have cloth festoons attached to the ring pommels. Chavannes, vol. 1, p. 178, identifies these decorations as representing "une dragonne en étoffe. . ."

151. Lodge, *Catalogue of Chinese Bronzes* (1946), pl. XL (sword with enormous, stylized chape in form of a hand drum with contracted sides, and a flat disk pommel—a clearly antiquarian view of an obsolete sword type); Bulling, *Mirrors of the Han Period* (1960), pl. LXXI and p. 87, possibly as late as mid third century after Christ.

152. *I-nan ku hua-hsiang* (1956), pls. XXXI, L, LII-LIV, LIX-LX, LXVIII; *Chung-kuo ku tai shih-k'e hua* (1957), pl. III: upper left. The compilers of *I-nan ku hua-hsiang* date the tombs in the late second century; Shih, "I-nan" (1959), argues quite convincingly for a date of late third to early fourth century.

153. Photographs of full relief in *I-nan ku hua-hsiang* (1956), pl. LV.

154. Sirén, *Kinas Konst* (1942), vol. 1, p. 424, fig. 308, left.

155. See Waley, *Chinese Poems* (1946), p. 87.

156. In the year 1764 the governor of Yarkand alone sent 5,300 pounds of jade stone to the Emperor Ch'ien-lung 乾隆 to be fashioned into a set of musical stones (Raphael, "Jade" [1936], p. 346; Kemp, *Wanderings in Chinese Turkestan* [1914], p. 25). Arnold, *Green Jade Pagoda* (1933), describes an enormous jade pagoda carved for exhibition at world fairs. See also p. 36 f.

157. "He [Julius Caesar] always addressed [his troops] not with 'my men,' but with 'comrades . . . ' which put them into better humor; and he equipped them splendidly. The silver and gold inlay of their weapons both improved their appearance on parade and made them more careful not to get disarmed in battle, these being objects of great value." (Suetonius [1957], p. 37 f., Julius Caesar, section 67). The philosopher Mo Tzu 墨子 expressed a hard-mindedly practical view of weapons in the fifth century B.C. which seems to be reflected quite well by the material evidence: "One tries to make them as light, sharp, durable, and difficult to break as possible. What is merely decorative and does not contribute to these ends should be avoided." (Watson, *Mo Tzu* [1963b], p. 63).

158. Sirén, *Early Chinese Art* (1930), p. 65; Hansford, *Seligman Collection* (1957), p. 32.

159. Harada, *Kan Rikuchō* (1937), p. 28, English summary. Cf. McCune, *The Arts of Korea* (1962), p. 44, who feels only officials in outposts wore swords.

160. Werner, *Chinese Weapons* (1932), p. 12: *jung* ceremonial sword without an edge; *ya* 御 wooden ceremonial sword.

161. Loehr, *Chinese Bronze Age Weapons* (1956), pp. 72 ff.

162. Janse, *Notes sur quelques épées anciennes* (1930), pp. 97-99; Watson, *China* (1961), p. 139; Goodrich, *Short History of the Chinese People* (1943), p. 27; Bachhofer, *Short History of Chinese Art* (1947), p. 46; Egami and Mizuno, *Inner Mongolia* (1935), pt. 2, p. 29. Watson, *Handbook* (1963), p. 58, in a later opinion, suggests that it may have been no more than the idea of sword fighting which the Chinese received from the northern nomads.

163. See also four small bronze statuettes from Pusht-i Kūh in the Luristan region of western Iran which are equipped with swords held simply by being thrust through the belt. The swords have ringed hilts resembling those of the classic Chou sword of China, though the tentative date of tenth-century B.C. for the figures would quite preclude their having any direct relation to the Chinese swords. The belts, showing an impressed line along each edge, are undoubtedly intended to represent leather. See Grousset, "L'exposition iranienne" (1948), p. 109, fig. 4; Berghe, *Archéologie de l'Iran ancien* (1959), pl. CXXIV:a; Ternback, "Herzfeld Bent Iron Dagger" (1964). K. R. Maxwell-Hyslop and H. W. M. Hodges have published several studies of these Iranian daggers and swords with ringed, or flanged grips. Such rings and flanges on flat hilts they believe may be a "moulding representing the thong which bound hilt and blade together on earlier [tanged] blades . . ." ("Bronzes from Iran" [1962], p. 126), and elsewhere, with regard to another weapon with solid ringed hilt: "The three bands would represent lashings by which organic parts (wood, bone, ivory, horn, etc.) were secured to the handle, and seen in this light we can look at the [flat] flange-hilted daggers of the region for immediate precursors." ("A Note on the Significance of 'Casting on'" [1964], p. 51). On the development of these weapons, see also *idem*, "Three Swords from Luristan" (1966). The chronology of the Iranian weapons is poorly known. Topologically, the swords and daggers with ringed solid hilts, round or oval in cross-section, seem later than those with flat flanged hilts. A date for some specimens as late as the eighth or seventh century B.C. is not excluded, and may even be probable. Recent evidence for bronze swords in China as early as the eighth century B.C. narrows the chronological gap between the Iranian and Chinese swords, though these earliest Chinese swords do not seem to exhibit the characteristics later Eastern Chou swords share with possible Iranian precursors. See Chang Kwang-chih, *Archaeology of Ancient China* (1968), p. 334; Lin Shou-chin, "Tung Chou shih t'ung chien ch'u lun" (1962).

1964. E.g., Detroit, Institute of Arts, *Exhibition of Ritual Bronzes* (1940), pl. XXXVII:60, 43.50 inches long; New York, Arden Gallery, *Three Thousand Years of Chinese Jade* (1939), p. 39, no. 186, 31.50 inches long, p. 39, no. 187, 35.50 inches long; Loehr, *Chinese Bronze Age Weapons* (1956), pl. XXXIX:102 and p. 205, 36.85 inches long. Other examples will be cited below.

165. Hansford, *Seligman Collection* (1957), p. 9, "perhaps about 500 B.C."; Watson, *Archaeology in China* (1960), p. 14, "about 600 B.C."; Barnard, *Bronze Casting* (1961), p. 14, sixth-fifth century B.C.; Chang Hung-chao, *Chung-kuo t'ung ch'i shih-tai*, about fifth century B.C.; Needham, *Science and Civilization* (1954), p. 93, about the middle of the Chou period; *idem*, *Iron and Steel Technology* (1958), p. 46 f., metallic ore known from the sixth century B.C., but casting from about the fourth century B.C., only; Read, "Chinese Iron" (1937), p. 403, the sixth century B.C.

166. Sekino, *Chūgoku shoki tekki-bunka no ichi kōsatsu* (1956b); Janse, "Notes sur quelques épées anciennes" (1930), p. 94; Yang K'uan, *Chung-kuo ku tai yeh t'ieh chi-shu-ti-fa-ming* (1956); Wilhelm, *Chinas Geschichte* (1942), pp. 49, 61.

167. Lodge, *Catalogue of Chinese Bronzes* (1946), pl. XLIX:34.10 and 34.11; Umehara, "Some Ancient Chinese Relics" (1957), p. 13, favors an early eighth, or even ninth, century date for these weapons.

168. Barnard, *Bronze Casting* (1961), p. 19. Acceptance of the

independent origin of the iron industry in China is not universal: cf. Chang, "Iron Ores of China" (1921-1924); Seligman, "Early Chinese Glass" (1940-1941), p. 19.

169. Barnard, *op. cit.*, p. 21 f.; Needham, *Iron and Steel Technology* (1958), p. 9, on decarburization of cast iron to produce a more ductile metal. Needham (p. 2) maintains that the Chinese had cast and wrought iron only, the former too brittle, the latter too malleable, for the manufacture of swords owing to too high or too low a carbon content respectively. The transition in weapons, he claims, is not from bronze to iron, but rather from bronze to steel. Sekino and Barnard (*op. cit.*, pp. 21 f., 36) suggest that satisfactory weapons were forged from wrought iron, a process developed somewhat later than the casting technique and, according to Sekino, received from the West. We lack still sufficiently accurate analyses to late Chou sword blades to clarify this point, but the rapid increase in the number of iron swords during the late Chou is ample testimony to the existence of a satisfactory weapon producing technique, whatever the basic process may have been. Carbon steel blades, accidentally or knowingly produced, were in use in the Luristan region of Iran as early as the twelfth to tenth centuries B.C. (our figs. 33 and 34). It does not, therefore, seem impossible that some technique of manufacturing a suitable sword blade might have reached, or been developed in, China by the fifth or fourth century B.C. (Godard, *Bronzes du Luristan* [1931], p. 40; Smith, "Materials and the Development of Civilization" [1965], p. 914, fig. 7; Maleki, "Une fouille en Luristan" [1964], p. 17; Bird and Hodges, "Two Early Iron Swords" (1958).

170. *Ch'üan kuo chi pen* (1955), vol. 1, pls. XLVIII-LI, iron molds for tools; Hsia Nai, "Tracing the Thread of the Past" (1959), p. 47, states that iron tools have been found at twenty or more sites of Warring States time, fifth to third centuries B.C. See map locating these sites in Barnard, *Bronze Casting* (1961), p. 16. On the tools and metalurgy of late Chou and Han, see: Hua Chüeh-ming, "Chan-kuo liang Han t'ieh ch'i" (1960); Tseng Yung, "Han tai-ti t'ieh chih kung-ch'ü" (1959); Chiang Jo-shih, "Lo-yang ku mu chung-ti t'ieh chih" (1957); Sun T'ing-lieh, "Hui-hsien ch'u-t'u" (1956); Watson, *China* (1961), pp. 140 ff., reviews sites and types of iron objects in late Chou China.

171. Needham, *Iron and Steel Technology* (1958), p. 6, intimates that steel must have existed in China by, or before, the middle of the third century B.C.

172. Watson, *China* (1961), p. 144, attributes the continuance of the use of bronze long after iron was known chiefly to the fact that cast iron is brittle, though a forged steel was seemingly known by the middle of the third century B.C. (according to Needham, n. 171). I am inclined to believe this date shall prove to be still earlier.

173. Eder, "Eiserne Degen und Schwerter" (1943), p. 395 f., cites an iron sword 23.03 inches in length, but whether this specimen is Western or Eastern Han he does not hazard to guess. From the fact that the hilt is still wrapped with thirty-eight winds of cord, I am inclined to believe that it may be a ring-pommel weapon and perhaps not strictly a sword. It was reputed to have been found in Shantung province. Kuo Pao-chün, "Lo-yang" (1956), pl. X:13, illustrates an atypical iron sword recovered from a late Western Han (or later) tomb at Lo-yang in 1954. The overall length of blade and hilt is 25.29 inches. The double-edged, round-shouldered blade leads directly into a round (hollow?) iron hilt which probably was once terminated with an inset bronze disk pommel.

174. Laufer, *Prolegomena* (1914), p. 215 f., notes that iron swords were modeled to some extent on their bronze predecessors, though he errs in stating that the bronze sword did not give way to the iron until Eastern Han times.

175. *Sunglin Collection* (1939), p. 44, no. H-915A, reports a tanged iron sword with a wooden grip, lacquered and with gold decoration, found in Honan province.

176. Janse, "Notes sur quelques épées anciennes" (1930), p. 77, adds horn and bone.

177. Apart from those associated with scabbard slides and described in the Catalog (*CP.1, CV.6, CV.7, CV.8, CV.9, CV.10, CV.78, CV.80, CV.83, CV.88, CG.59, CH.6, CH.7, CZ.10*), a few additional late Chou and Western Han iron swords of this type may be cited: Kuei-chou sheng po-wu-kuan, "Kuei-chou Ch'ing-chen P'ing-pa Han mu" (1959), p. 98, fig. 14, three iron swords from graves 12, 13, 15, measuring 32.87, 29.34, 32.87 inches respectively, without pommels, grips or scabbards, two furnished with projecting bronze guards, from Kweichow province, South China (an inscribed lacquer carried the date yüan-shih 元始 3 [A.D. 3/4], thus placing these swords at the end of Western Han); *Sunglin Collection* (1939), p. 44, no. H-915A and pl. XL, no dimensions given, found with jade guard in place and poorly preserved wooden scabbard; *Seikai kōkogaku taikai* (1959), vol. 7, pl. CXXIX:upper, 33.07 inches long, without grip, pommel, or scabbard; Eder, "Eiserne Degen und Schwerter" (1943), pl. XVI:1 and 3, and p. 395, excavated in Shantung Province 1941, 39.17 inches long without grip, pommel, or scabbard, blade .37 inches thick at guard, separately cast projecting bronze guard; Ho-nan sheng, "Ho-nan Yü-hsien Pai-sha Han mu" (1959a), pl. X:1, and p. 74, grave 116, 35.43 inches long without pommel or scabbard, unusual hilt with two rings may be bronze; Ho-nan sheng, "Ho-nan Hsin-an T'ieh-men chen Hsi-Han mu" (1959b), pl. VI:17, and p. 66, 38.98 inches long without grip, pommel, or scabbard; *ibid.*, p. 60, lists another 37.79 inches long, and p. 63 another 28.35 inches long; *K'ao-ku t'ung-hsün*, 1957 (5), pl. VII:2, grave 72 at Ch'ang-sha, ca. 31.00 inches long without grip, pommel, or scabbard, and possibly tip of blade missing, from Ch'ang-sha in Hunan province; *Shü Kan ihō* (1932), pl. LVII:4; Li Cheng-kuang, "Ch'ang-sha Sha-hu-ch'iao" (1957), p. 55, reports an iron sword from a Western Han tomb at Ch'ang-sha 40.16 inches long; *Hui-hsien fa-chüeh pao-kao* (1956), pl. XXXVIII:4, ca. 38.00 inches without grip, pommel, or scabbard; *K'ao-ku hsüeh-pao*, 1959 (2), pl. VI:16 and 17 (following p. 74); Huang-ho shui-ku, "Ho-nan Shansien Liu-chia-ch'ü" (1965), p. 156 f., a group of forty-six tombs of Western and Eastern Han date in which were found eight tanged rapiers, the length of only one stated: 45.28 inches.

178. It is interesting to note that this use of separately cast bronze guards on iron swords has parallels in Achaemenian Iran (Schmidt, *Persepolis* [1957], p. 97) where they appear on short iron swords, and in the Minusinsk region of southern Siberia (Tallgren, *Collection Toostine* [1917], pl. XII:16) where such a guard is used on a dagger. As we shall see, this practice occurred also in northern India (see *GP.1* and *GP.2* supplementary note in Catalog) and probably in South Russia.

179. Eder, "Eiserne Degen und Schwerter" (1943), p. 398, notes that the jade forms copy the more compact bronze guards, though he errs in concluding that the jade pieces were intended for iron swords, the bronze guards for bronze swords.

180. Janse, "Notes sur quelques épées anciennes" (1930), p. 79. Karlbeck, "Ancient Chinese Bronze Weapons" (1925), p. 130, notes that the presence of wood fibers adhering to many later Chou swords may indicate prevalence of wooden scabbards during this period. *Sunglin Collection* (1939), p. 44, no. H-915A, reports the following wooden scabbard on an iron sword: "Most of the wood has rotted away, but enough remains to show that the wood was first covered with fibre wound round, then with a coarsely woven fabric, and last, with a fabric of very fine texture, probably silk. The scabbard was then coated with a dark brown lacquer, of which still shining traces remain." A fragmentary iron rapier in the Sackler Collections, New York City, reveals traces of wood and textile adhering to the blade. The sword is fitted with a small jade guard fractured by the swollen oxidized tang.

181. I know of only one example of an iron sword copying the hilt form of the bronze sword: Hu-nan sheng po-wu-kuan, "Ch'ang-sha Ch'u mu" (1959), pl. IX:6, an iron sword from a late Chou tomb at Ch'ang-sha, Hunan province. The sword, 28.35 inches long, has a

round cast hilt with irregular ridges reminiscent of the rings on bronze hilts, and a concave disk pommel, both cast in one piece with the flat, round-shouldered, iron blade. The hilt could only be cast iron, though the blade may have been lightly forged. If such a sword does indeed reflect an experimental stage in the transition from bronze to iron swords, its unsatisfactory qualities must soon have caused it to be abandoned. See also *CV.80*, from Viet-Nam, possibly of non-Chinese manufacture.

182. At least two unpublished swords of this type are in the British Museum, both 31.00 inches long, with tang not pointed, but blunt-ended and oval in cross-section like that of the classic bronze sword hilt.

183. See also Hu-nan sheng po-wu kuan, "Ch'ang-sha Ch'u mu" (1959), pl. IX:5, long pointed tang, round or oval in cross-section, with flat rectangular (separate?) guard; *K'ao-ku t'ung-hsün*, 1957(5), pl. VII:1, late Chou tomb at Ch'ang-sha, round or oval tang, ca. 24.38 inches long, blade 1.88 inches wide at shoulder, from tomb 61, excavated 1955.

184. Lochr, *Chinese Bronze Age Weapons* (1956), pl. XXXIX, no. 102, and p. 205 f.

185. Lochr, loc. cit.; Harada, *Shū Kan ihō* (1932), pl. LVII:1, suggests that another such long sword, 36.81 inches in length but with ring pommel, was ceremonial. Janse, "Notes sur quelques épées anciennes" (1930), p. 77, inclines to the same opinion in reference to another long bronze sword.

186. This date was recently advanced as well by Watson, *Handbook* (1963), p. 60.

187. Needham, *Iron and Steel Technology* (1958), p. 2, notes that the transition from bronze to iron weapons in Europe followed such a course, and we have already noted (ns. 62 and 64) the existence of bronze-hilted iron swords in southern Siberia. See also n. 181, an attempted late Chou copy in iron of a bronze sword.

188. Biot, *Le Tcheou-li* (1851), vol. 2, p. 497. This is a peculiarly naive statement for a text which is believed to have been largely, or wholly, composed before the end of Chou, but which, at any rate, was in existence by the middle of the second century B.C. See Broman, "Studies on the Chou Li" (1961), p. 73; Karlgren, "Early History of the Chou Li" (1931), p. 59.

189. Salmony, *Chinese Jade* (1963), p. 121, believes long sword and slide were together "after 600 B.C." But in describing the sword as "the long slashing sword," he errs; the long sword of Late Eastern Chou was a double-edged piercing sword. The single-edged slashing sword appears only toward the end of this period. There is yet no evidence for either the long sword or scabbard slide in China as early as 600 B.C., though the slide, at least, seems to have appeared not long after this date.

190. Chiang Yüan-i, *Ch'ang-sha* (1950), vol. 2, pls. XIV, XV, illustrates a wooden tomb figure (our Figure 39) from Ch'ang-sha drawing a sword in this manner, though with that distinct lack of soldierly bearing which characterizes so many Chinese sword-bearers. The sword belt and the scabbard slide are not depicted, but the foot of the scabbard is fitted with an imitation chape ornament.

191. *Shih Chi*, chapter 86, trans. by Bodde, *Statesman, Patriot, and General* (1940), p. 34 f. Textual evidence indicates that the biography of Ching K'ao was written by Ssu-ma Ch'ien's father, Ssu-ma T'an 司馬談, who had begun the *Shih Chi* (Bodde, p. 41 f.).

192. The average height of the Han dynasty soldier above eighteen years of age seems to have been about five feet four inches: Chang Chun-shu, "Han Colonists and their Settlements" (1966a), p. 177 ff. The military records, recovered from the Chü-yen 居延 (Etsin-gol) district of the northwest frontier, in Inner Mongolia, are for Han Chinese military and civilians and do not include the local populace. Chang has made the following observation of interest concerning these records (p. 179): "If results of this table are not of sheer coincidence, there existed a close correlation between a person's height and status

in the garrison units. The officers not only had an average height larger than the soldiers', but all except one were above 7.2 *ch'ih* [five feet four inches]. It appears very likely that a certain standard of height was among the physical qualifications generally required of a garrison officer." It is probably equally true that officers generally were from more well-to-do families enjoying standards of living generally more conducive to robust health. A sword 40 inches long must surely at times have been a somewhat difficult weapon for a soldier 64 inches tall to manage.

193. Le Coq, *Bilderatlas* (1925), p. 58, fig. 65. The scabbard slide is concealed by the bow case, but the angle of the sword belt indicates that it is passed through a slide. See also *Chung-kuo ku wen-wu* (1962), pl. CCLII: lower right.

194. See Lebedev, *Vereshchagin* (1958), p. 280.

195. E. g., Maenchen-Helfen, "Chenelated Mane and Scabbard Slide" [1957], p. 93 and passim; Janse, "Notes sur quelques épées anciennes" (1930), pp. 104 ff; Laufer, *Prolegomena* (1914), pp. 217 ff; Rostovtsev, *Iranians and Greeks* (1922), p. 203. For some unknown reason, William Watson states that "the short [Chinese bronze] sword looks like a horseman's weapon, made to sling conveniently from the belt when its owner is in the saddle" (*China* [1961], p. 140; idem., *Handbook* [1963], p. 59). During the greatest vogue of the short bronze sword, the Chinese were not riding horses. By the time equestrian tactics were introduced, the long sword was well on its way to preeminence.

196. Martin, *L'âge du bronze* (1893), pls. XI:6, XIII:5, XXVI:44, 45, 47, and especially pl. X, a flat copper sickle in the Minusinsk Museum with end perforation which probably suggests the origin of this type of terminal. Similar rings also appear as terminals on copper and bronze pins, idem, *Sibirica* (1897), pl. XXVI:6; Tallgren, *Collection Tovostine* (1917), pls. III:10, V:4, 22, 23, 25, XII:16; Kyzlasov, "Zheleznyĭ toporik iz Sinyavino" (1948), p. 84, fig. 4, iron, from a late Tagar (ca. 600 B.C.) grave in the Abakan region; Merhart, *Bronzezeit am Jenissei* (1926), pl. IV:1; Komarova, "Tomskii mogil'nik" (1952), p. 31, fig. 17:9, and p. 35, fig. 20:7, from Tomsk in western Siberia; Zavitukhina, "Mogil'nik vremeni rannikh kochevnikov" (1961), p. 100, fig. 4:11 and 12 iron knives from the Altai, probably fourth or third century B.C.

197. Egami and Mizuno, *Inner Mongolia* (1935), Corpus III: Knives; Lochr, "Ordos Daggers and Knives" (1949-1951). During the Han dynasty such pommels occur throughout northern Eurasia, from the Caucasus to Manchuria.

198. Watson, *Handbook* (1963), p. 60, does not consider the single-edged sword to have appeared before Han.

199. Lochr, *Chinese Bronze Age Weapons* (1956), pl. XX:41 (?) and p. 65, fig. 46B, p. 66, fig. 47B-E; Li Chi, *Beginnings of Chinese Civilization* (1957), pl. XII:5-6; idem, "Yin-hsü t'ung ch'i" (1932), pl. 1:6; White, "Sacrificial Knives" (1935), p. 641, figs. 16 and 18; idem, "Bronze Knives" (1946).

200. *K'ao-ku hsüeh-pao*, 1956 (2), pl. VI:14 (following p. 31), late Chou tomb at Lo-yang, excavated in 1954. This small inward-curving knife reflects the continuation of the bronze form known from the Shang dynasty, but possibly developed earlier in southern Siberia. *K'ao-ku hsüeh-pao*, 1956 (3), pl. I:10 (following p. 75), bronze ring-pommelled knife of Han age, illustrating the contiguity observed in swords of similar objects in bronze and iron. See also Karlbeck, *Hallwylska Samlingen* (1933-1935), grupp XLIX, I: A.f. 1 and 2 (bronze); *Hui-hsien fa-chieh pao-kao* (1956), pl. XXXVIII:1 and 11 (iron); *Ch'üan kuo chi pen* (1915), vol. 1, pl. LVIII:2 (iron); Sekino, *Rakurō-gun jidai no iseki* (1925), pl. CLXXXIII:856 and 857 (iron); *K'ao-ku hsüeh-pao*, 1959 (1), pl. X:3 following p. 84 (iron); Sommarström, *Edsen-Gol* (1956), pt. 1, p. 93, fig. 39: A.10:1.80, and p. 96, fig. 43, p. 95: A.10:11.27 and pl. VI:1-2, p. 165: K.13779:107 (Han iron knives from Inner Mongolia).

201. E.g., Eder, "Eiserne Degen und Schwerter" (1943), pl. XVI:1-2 and p. 395, a single-edge long knife or short sword, 12.20 inches long

excavated in Shantung Province in 1941; well-preserved cord wrapping on grip.

202. From a single group of excavations of Han dynasty tombs at Lo-yang, 65 double-edged iron swords were recovered, 64 belonging to Western Han; 17 had preserved lengths of over one meter, the longest being 46.46 inches (8011.20). From the same excavations, 52 single-edged iron sabers were recovered, all belonging to Western Han; 5 had preserved lengths of over one meter, the longest being 44.88 inches (7041:22 and 7051:3); Chung-kuo k'o-hsüeh yüan, "Lo-Yang hsi chiao Han mu" (1963). Scabbard slides were found with four of the double-edged blades (see *CV.83, CV.84, CG.59, CG.60*). Not a single bronze sword was found. Of the 12 iron swords found in another group of 46 tombs in Honan Province belonging to late Western and Eastern Han, eight are tanged rapiers and four ring-pommel sabers. They range in length from 42.52 to 45.26 inches. No bronze swords were recovered. See *CF.88*, from these excavations; Huang-ho shui-ku, "Ho-nan Shan-hsien Liu-chia-ch'u" (1965), pp. 156-157. See also Ho-nan sheng, "Ho-nan Hsin-an T'ieh-men chen Hsi-Han mu" (1956b), pl. VI:11, 38.58 inches; *Hui-hsien fa-chüeh pao-kao* (1956), pls. XXXVIII:2, ca. 37.50 inches, XXXVIII:11-12, cord-wrapped grip and terminal ring; *Shü Kan ihō* (1932), pl. LVII:4, 43.73 inches; *K'ao-ku hsüeh-pao* 1959 (2), pl. VI:11 (following p. 74); *K'ao-ku t'ung-hsün* 1958 (7), p. 29, fig. 7: lower, 35.87 inches; Sekino, *Rakurō-gun jidai no iseki* (1925), pl. CLXXXI:850.

203. *Sekai kōkogaku taikēi* (1959), vol. 7, pl. CXXIX: lower.

204. *K'ao-ku hsüeh-pao* 1956 (3), pl. I:10 (following p. 75).

205. *Shü Kan ihō* (1932), pl. LVII:1, 36.81 in. The author suggests it was for ceremonial use. See also *Sekai kōkogaku taikēi* (1959), vol. 7, pl. CXXVIII, 27.56 inches; Watson, *Handbook* (1963), p. 59, fig. 16h, Western Han. The atypical sword published in *Hui-hsien fa-chüeh pao-kao* (1956), pl. XXXVIII:3, may also be of an essentially non-functional type. About 26.25 inches in length, the flat double-edged blade has sloped shoulders leading directly into a flat grip which is provided with a ring pommel.

206. The British Museum possesses an iron ring-pommel saber of reputed Han date (Seligman Bequest) 33.00 inches long, with scabbard foot reinforced with a bronze band which extends upward along the edges of the scabbard, farther on the side contiguous with the sharpened edge of the sword than on the other side. Chape reinforcements of this sort are known from Eurasian swords from the fourth century after Christ onward, and it may be that this Chinese sword properly belongs to a period later than Han.

207. Mizuno and Kobayashi, *Kōkogaku jiten* (1959), p. 71.

208. See *CH.4*; Umehara, *Chōsen kobunka sōkan* (1946), vol. 2, pl. XXXVIII:67.

209. E.g., Umehara, *ibid.*, pl. XXXVIII:63, 45.28 inches long.

210. Rapiers: Ch'eng Ying-lin, "Chiang-hsi-ti Han mu" (1957), pl. II:2 (following p. 168), iron, 31.89 inches; Hu-nan sheng po-wu-kuan "Ch'ang-sha Wu-li-p'ai ku mu tsang" (1960), p. 45, fig. 38, bronze, 27.95 inches; *Sekai kōkogaku taikēi* (1959), vol. 7, pl. CXXX, lower, iron, 37.72 inches. Sabers: Ho-nan sheng "Ho-nan Yü-hsien Pai-sha Han mu" (1959a), pl. X:2, iron, preserved portion 34.25 inches; *Sekai kōkogaku taikēi* (1959), vol. 7, pl. CXXX: upper, iron, 36.61 inches; *K'ao-ku t'ung-hsün* 1958(2), pl. V:13, iron, 27.56 inches; Hu-nan sheng po-wu-kuan, "Ch'ang-sha Wu-li-p'ai ku mu tsang" (1960), p. 47 (not illustrated), iron, 28.74 inches; *Shen pei Tung-Han hua-hsiang shih-k'e* (1959), p. 121, fig. 9 and p. 123, fig. 14, bronze; *Shü Kan ihō* (1932), pl. LVII:1, bronze, 36.81 inches.

211. E.g., Shen, "Szu-ch'uan Chao-hua" (1959), pl. VIII:21 and 22, iron saber 44.68 inches, fifth-sixth century. See also Schafer, *Golden Peaches of Samarkand* (1963), p. 262: "Among the bladed weapons recognized by the official armory of T'ang there were long ceremonial and processional swords, ornamented with gold and silver, short swords girded on by soldiers, and long infantryman's swords. All of these (and some others) were single-edged knives and sabers. . . ."

212. Eder, "Eiserne Degen und Schwerter" (1943), p. 398, has noted this elaboration of later Han sword and dagger pommels.

213. Mizuno and Kobayashi, *Kōkogaku jiten* (1959), p. 206; Wu Hsing-han, "Shou-hsien" (1957), p. 83, upper left; see also sword associated with *CH.4*; Umehara, *Shina kodō seika* (1933-1935), pt. 3, vol. 2, pl. CIX:c; idem, "Furiya bijutsukan" (1930), p. 261, fig. 1, and p. 262, fig. 2; Rostovtsev, "L'art chinois" (1924), p. 16, fig. 4.

214. London, Burlington Fine Arts Club, *Catalogue* (1915), p. 90, no. 26.

215. *Chung-kuo ku tai shih-k'e hua* (1957), pl. XXIII:1 and 3, a stone slab from Shensi Province, T'ang; Harada, *Saiki hakken no kaiga* (1925), pl. VII:2.

216. Chavannes, *Mission archéologique* (1909-1915), pls. XXXVIII:63, LIII:109, LV:123, LXV:129, LXVIII:132, LXXI:137 (Wu Liang t'zu 武梁祠); XXVI:47, XXVIII:48 (Hsiao-t'ang Shan 孝堂山); Chiang-su sheng, *Chiang-su Hsü-chou Han hua-hsiang shih* (1959) pl. XXIX, fig. 34; *T-nan ku hua-hsiang* (1956) pls. XXIV:left, L:lower left, LIX:upper right, LX and LXVIII; *Ku ming-ch'i t'u-lu* (1916) iv, 4:a.

217. Laufer, *Prolegomena* (1914), p. 201.

218. Noted by Werner, *Chinese Weapons* (1932). See Mizuno and Kobayashi, *Kōkogaku jiten* (1959), p. 71; Sun Shou-tao, "Hsiung-nu Hsi-ch'a-kou wen-hua" (1960), p. 26, fig. 5; Umehara and Fujita, *Chōsen kobunka sōkan* (1948), vol. 2, p. 51 and pl. XXXVIII:63 and 67.

219. Watson, *Early Chinese Literature* (1962), pp. 74-91. See also Crump, "The Chan-kuo Ts'e and Its Fiction" (1960), idem, *Intrigues* (1964).

220. See Chavannes, *Mémoires historiques* (1895-1905), vol. 5, pp. 69-84, especially pp. 81-84.

221. Kierman, *Four Late Warring States Biographies* (1962), p. 58; Goodrich, *Short History of the Chinese People* (1943), p. 80.

222. E.g., Laufer, *Prolegomena* (1914), p. 222; Granet, *Chinese Civilization* (1958), p. 282; Needham, *Iron and Steel Technology* (1958), p. 2, n.

223. B. Watson, *Records of the Grand Historian* (1961), vol. 2, p. 159, chapter 110 of the *Shih Chi* concerning the Hsiung-nu 匈奴 records Wu-ling encouraging his troops to practice riding and shooting the bow from horseback.

224. Sulimirski, "Les archers à cheval" (1952). The author believes the Assyrians employed cavalry only against their northern adversaries, while employing infantry in their wars with the urban and agrarian centers to the south.

225. "Hu fu k'ao" (1923); Pelliot, "Oeuvres de Wang Kuo-wei" (1928), pp. 137-148. See also Couvereur, *Tch'ouen Ts'ouen et Tso Tchouan* (1914), vol. 2, p. 529. A related aspect of external influence on Chinese military organization, especially on the frontier, is discussed by F. Bergman, "Note on Ancient Laminae Armour" (1936), p. 108.

226. The eleventh-century writer Kuo Jo-hsü records the following (Soper, *Experiences* [1951a], p. 14): "Prior to the Three Dynasties all men went barefoot. With the dynastic age, they began to wear wooden clogs. Yin made (sandals) out of grass and gave them the name *li*. In the Ch'in period they made use of plaited grass in combination with leather. *Hsüeh* boots were originally an item of Tartar dress, but Prince Ling of Chao liked them, and ruled that the proper footgear for officials in long outer gowns should be black boots. In the reign of Tai Tsung of T'ang [A.D. 763-780] the palace ladies and attendants were ordered to wear high boots of scarlet brocade." See also Eberhard, *Lokalkulturen im alten China* (1942) pp. 223-224.

227. Schafer, *Golden Peaches of Samarkand* (1963), especially pp. 28 f. and 106 f.

228. "Are Chinese *hsi-p'i* and *kuo-lo* IE Loan Words" (1945a).

229. *Ancient China in Transition* (1965), pp. 68-71.

230. *Ibid.*, p. 69 f.

231. Hsu Cho-yun, loc. cit.

232. In speaking of Han-dynasty colonists on the northwest frontier, Chang Chun-shu, (1966a), p. 160, notes: "Among them, the largest groups were garrison soldiers (*shu-tsu* 戍卒); the cavalrymen (ch'i-shih 騎士) were few." Chang further notes (p. 195) that an examination of Han-period documents relating to the military reveals that virtually all the cavalry came from the Kansu region. Whether they were Han Chinese, or local, sinicized, central Asians, is not revealed by the documents; but it is significant that whereas a large portion of the garrison soldiers were from interior China, cavalry were from the frontier region itself.

233. Watson, *Records of the Grand Historian* (1961), vol. 2, pp. 165, 167, 176, 178, 180 f., 200 ff. A recent article in which contrasting conclusions are urged is both selective and misleading in its presentation of the relevant data: Chang, "Military Aspects of Han Wu-ti's Campaigns" (1966b). Even if as many cavalry as Chang maintains had been deployed (and a generous reading of the pertinent texts could account for no more than half his numbers, to say nothing of the masses of infantry and baggage transport he omits), the record still shows the same poor results. Of the seventeen commanders listed in Chang's own chart (p. 170) who led campaigns against the Hsiung-nu between 129-90 B.C., only two showed any degree of success, and these, Wei Ch'ing and Huo Ch'ü-ping, won ten out of some thirty-six major engagements, a total record which few military would find praiseworthy. It should be pointed out also that the *Han Shu* 漢書 records nearly as many Chinese killed in Hsiung-nu raids and battles as Hsiung-nu killed or captured by the Chinese. If the Chinese losses are increased by the same percentage that the Hsiung-nu losses are assuredly to be decreased, the resulting ratio is hardly favorable to the Chinese, see Loewe, *Military Operations in the Han Period* (1961), p. 2.

234. Watson, op. cit., p. 182.

235. Laufer, *Prolegomena* (1914), p. 314.

236. Loewe, *Military Operations in the Han Period* (1961), p. 20.

237. Broman, *Studies on the Chou Li* (1961), p. 71.

238. Granet, *Chinese Civilization* (1958), p. 282.

239. B. Watson, *Hsün Tzu* (1963a), p. 62. In the mid-fourth century B.C., a hierarchy of eighteen degrees was established and promotion upward was contingent upon the cutting off of an enemy's head in battle for each degree of advancement: Kierman, *Four Late Warring States Biographies* (1962), p. 101, n. 10. See also Duyvendak, *The Book of Lord Shang* (1928), pp. 297-300.

240. Hsu Cho-yun, *Ancient China in Transition* (1965), p. 71.

241. Needham, *Science and Civilization* (1954), vol. 1, p. 97; Edwards, "Cave Reliefs at Ma Hao" (1954), p. 14.

242. Loewe, *Military Operations in the Han Period* (1961), p. 3.

243. Watson, *China* (1961), p. 146; Sekino, "Chūgoku shoki tekki bunka no ichikōsatsu" (1956b); Barnard, *Bronze Casting* (1961), pp. 21 f., 36; Needham, *Science and Civilization* (1954), vol. 1, p. 93.

244. Watson, *Handbook* (1963), p. 60.

245. Sekino, "Chūgoku shoki tekki bunka no ichikōsatsu" (1956b); Needham, *Science and Civilization* (1954), vol. 1, p. 93.

246. Barnard, *Bronze Casting* (1961), p. 36.

247. Barnard, loc. cit.

248. Hsu Cho-yun, *Ancient China in Transition* (1965), p. 67; Barnard, op. cit., p. 36.

249. White, *Tombs of Old Lo-yang* (1934b), p. 99. According to another version of the story, this three-foot sword was carried by the father of Kao-tzu: Needham, *Iron and Steel Technology* (1958), p. 24.

250. Needham, op. cit., p. 22; Granet, *Chinese Civilization* (1958), p. 413.

251. E.g., Salmony, *Sommenschein Collection* (1952), pl. CVII: 4-6.

252. West Palm Beach, Norton Gallery, *Exhibition of Chinese Archaic Jades* (1950), pl. LIX:5.

253. Chiang-su sheng Su-chou, "Su-chou Wu Chang Shih-ch'eng" (1965), pl. X:4, belt with six objects resembling Form II scabbard

slides separating rectangular jade or silver plaque appliqué; text, p. 297.

254. XCG.12, XCH.7, XCH.8, XCH.15, XCL.1, XCL.2, XCL.3.

255. Of the 44 slides classified in categories XCV, XCG, and XCH, 25, or over half, are late antiquarian.

256. Of the 18 slides classified in categories XCP, XCR, XM, and XK, 12, possibly 15, are authentic.

257. E.g., Noin Ula: Barovka, "Kul'turno" (1925), fig. 15; idem., "Die Funde der Expedition Koslow" (1926), col. 363, fig. 13. Rudenko, *Kul'tura Khunov* (1962a), pp. 117-124, and pls. XX, XLVI:1; Pelliot, "Quelques réflexions sur l'art sibérien et l'art chinois" (1929), p. 20. "L'emploi même du jade, que l'art scythe n'a guère connu (malgré l'abondance du jade dans la région d'Irkoutsik) alors que cette pierre jouissait en Chine, depuis les temps les plus reculés, d'une faveur que ne s'est jamais démentie, suggère ici une origine chinoise. . . ." Of the thousands of objects collected by the Sino-Swedish Expedition in the Edsen-Gol region of Inner Mongolia, only one fragment of jade appears in the published lists: Sommarström, *Edsen-Gol* (1956-1958), pt. 1, p. 169, K. 13783:14.

258. Seventeen, possibly 24, are Han.

259. XCV.1, XCR.1, XCG.1, XCG.2, XCG.15, XCH.16.

260. Karlgren, "Ordos and Huai" (1937), p. 110 f.

261. "Crenelated Mane and Scabbard Slide" [1957], p. 98. No swords were among the finds in Hsiung-nu burials of Inner Mongolia reported by Li I-yü. "Hsiung-nu ho Han tai wen-wu" (1957).

262. Egami and Mizuno, *Inner Mongolia* (1935). *Ono and Hibino, Mōkyō kōkoki* (1946) p. 310, point out that the present day inhabitants of the former Hsiung-nu territories still employ a short dagger-sword (ca. 11.81 inches long) with ring pommel and cord-wrapped grip to kill wolves.

263. Kao Chü-hsün, "Sword Worship in Hsiung-nu Religion" (1960); Egami, *Yūrashia kodai hōppō bunka* (1948), pp. 133-163; Watson, *Records of the Grand Historian* (1961), p. 155.

264. Watson, op. cit., p. 168.

265. Sun Shou-tao, "Hsiung-nu Hsi-ch'a-kou wen-hua" (1960), p. 26, figs. 4 and 5. The longest is ca. 40.16 inches. Chinese sources record numerous instances between 51 B.C. and A.D. 143 of gifts of "jade swords" to the Hsiung-nu: see Egami, *Yūrashia kodai hōppō bunka* (1948), pp. 371 ff. The fact that these jade-adorned swords made suitable presents probably indicates they were weapons the Hsiung-nu did not manufacture or commonly possess.

266. Sun Shou-tao, op. cit., p. 26, figs. 2 and 3. These average 17.72 to 25.59 inches. One may be nearly 31.50 inches in length.

267. E.g., Hu-nan sheng po-yu-kuan, "Ch'ang-sha Wu-li-p'ai ku mu tsang" (1960), p. 45, fig. 38, tang 7.00 inches long; Lochr, *Chinese Bronze Age Weapons* (1956), pl. XXXIX:102, hilt 7.75 inches long. Lochr (p. 205) points out that the hilt of this bronze sword is so long that it could have been wielded with both hands. Such an observation has been made by several authors with reference to long hilts on swords of western Asia as well: Haskins, "Northern Origins" (273), p. 331 f., and passim; Tacitus, *History* (1937), 1, 79, in speaking of the Rhoxolani, a Sarmatian people placed by him between the Don and the Dnepr, but by some modern authors (viz., Tolstov, *Altchoresmischen Kultur* [1948], p. 156) in Bessarabia, refers to the "long swords which they wield with both hands . . ."; Herzfeld, *Am Tor von Asien* (1920), p. 66; Seyrig, "Armes et costumes iraniens" (1937), p. 28, "Il en est de même chez la majorité des peuples iraniens, lesquels, dit-on, devaient se servir de cette arme à deux mains." Seyrig (p. 28), however, doubts the efficiency of such sword handling, calling our attention to the fact that such a manner of wielding the sword has not been represented in ancient Near Eastern art. His explanation of the long hilt is that the protracted grip extends the center of gravity upward on such long swords so that, held with the Italian grip (forefinger over the quillon), the hand is nearly at the point of

balance. Cf. Haskins, op. cit., p. 260, who believes the sole purpose of the protracted grip (i.e., Italian in this case) is to place the sword in direct line with the arm, thereby increasing its effectiveness as a weapon for slashing downward from horseback. See also n. 318.

268. Umehara and Fujita, *Chōsen kobunka sōkan* (1947), vol. 1, pl. XII:41, and text p. 29 f. Harada, *Tōa kobunka kenkyū* (1944), p. 234, fig. 69. The hilt was thus extended to 6.25 inches, providing a grip area of about 6.00 inches.

269. Maechen-Helfen, "Crenelated Mane and Scabbard Slide" [1957], p. 96.

270. Sun Shou-tao, "'Hsiung-nu Hsi-ch'a-kou wen hua'" (1960), p. 33, fig. 2; idem "Hsi-ch'a-kou" (1957), p. 55, upper right; *Hsin Chung-kuo-ti k'ao-ku* (1961), pl. XC:1. See also Catalog numbers *M.1* and *XM.5*.

271. Laufer, *Prolegomena* (1914), p. 277, suggests that the Hsiung-nu tactics of equestrian archery were acquired from the Yüeh-chih.

272. Haloun, "Zur Üe-tsi-Frage" (1937), pp. 306 ff.

273. "Chinese hsi-p'i and kuo-lo" (1945a).

274. Maechen-Helfen, "The Yüeh-chih Problem Re-examined" (1945b); idem, "The Legend of the Origin of the Huns" (1944-1945b), p. 249: "Between 133-129 B.C. they conquered Bactria"; Tolstov, *Altchoresmischen Kultur* (1948), especially pp. 135 ff., and 153ff.; Tarn, "Seleucid-Parthian Studies" (1930), p. 106, believes that the Yüeh-chih still resided north of the Oxus River, in the vicinity of Samarkand, in 128 B.C., and that their invasion of Bactria is subsequent to this date. Tarn believes also that the information contained in the Chinese envoy Chang Ch'ien's 張騫 account of his mission to the Yüeh-chih in this year (see Hirth, "The Story of Chang K'ien [1916]) stems largely from his second journey to the western regions in 115 B.C.

275. Maechen-Helfen, "Yüeh-chih Problem" (1945b), p. 77 f.

276. Current and credible theories place year one of Kanishka at A.D. 78, A.D. 120, A.D. 128, A.D. 144, and most recently A.D. 225 (Göbl, "Zwei neue Termini" [1964]).

277. Kushan materials at Sirkap all lie within the first two feet below the surface: Marshall, *Taxila* (1951), vol. 1, p. 118. Generally they are unstratified. The exact date at which the Kushana abandoned Taxila and moved to Sirsukh is not known. Marshall believed that the conquest of Taxila was carried out by Kujula Kadphises and that the walls of Sirsukh were constructed by his son and successor Vima Kadphises (Marshall, op. cit., vol. 1, p. 218). During subsequent excavations at Sirkap in 1944/45, A. Ghosh recovered a coin of Huvishka from the upper Kushan stratum in a newly opened trench and is inclined to believe that, regardless of when Sirsukh was founded, Kushana continued to reside at Sirkap at least as late as the reign of Huvishka: Ghosh, "Taxila 1944-5" (1947-1948), p. 45. It is plausible that Sirkap should not have been totally abandoned with the founding of Sirsukh, and the scabbard slides from the Kushan level at Sirkap may, therefore, belong anywhere within the first century, or so, of Kushan occupation.

278. Marshall, *Taxila* (1951), vol. 2, p. 476 f.

279. See also Cammann, "Chinese Contacts with India" (1958) who failed to note the bronze sword guards.

280. While these proportions are not known to occur on any indisputably authentic slide of later Western or Eastern Han, they have been noted on a few clearly antiquarian pieces, e.g., **CH.75**.

281. Vogel, *La sculpture de Mathurā* (1930), pl. I; Zimmer, *Art of Indian Asia* (1955), vol. 2, pl. LXI, ascribed to second century after Christ; Osten, *Die Welt der Perser* (1956), pl. CX; Bachhofer, *Early Indian Sculpture* (n.d.), vol. 2, pl. LXXVI.

282. Vogel, op. cit., pl. XXXIII:b, identified as god Surya in Kushan garb; Zimmer, op. cit., vol. 2, pl. LX, identified as Kushan king and ascribed to second century after Christ; Fischer, *Schöpfungen indischer Kunst* (1959), fig. 85; Kieffer, "Kusana Art" (1962), fig. 16.

283. Vogel, op. cit., pl. III; Bachhofer, op. cit., vol. 2, pl. LXXVIII.

284. Burgess, "The Gandhara Sculptures" (1900), pl. XI:1; Foucher,

*L'art gréco-bouddhique* (1905-1951), vol. 1, p. 277, fig. 140.

285. Burgess, op. cit., pl. XXIV:4th register right (?), extremely poorly reproduced.

286. Hackin, *Guide-catalogue* (1923), pl. II:B.

287. Smith, *Fine Art in India* (1911), p. 123, pl. XXX; Le Coq, *Bilderatlas* (1925) p. 52, fig. 46; Foucher, op. cit., p. 405, fig. 202; New York City, Asia Society, *Gandhara Sculpture from Pakistan Museums* (1960), p. 55; Rome, Istituto Italiano, *L'arte del Gandhara* (1950), pl. XVI; Ingholt, *Gandhāvan Art in Pakistan* (1957), no. 64.

288. Kansas City, William Rockhill Nelson Gallery, *Handbook* (1959), p. 221; Yale University, New Haven, *Palmyrene and Gandharan Sculpture* (1954), no. 33; "Oriental Art Recently Acquired" (1956), p. 72, fig. 17.

289. Burgess, op. cit., pl. X:6; Ingholt, op. cit., no. 65; New York City, Asia Society, *Gandhara Sculpture from Pakistan Museums* (1960), p. 30; Rome, Istituto Italiano, *L'arte del Gandhara* (1958), pl. XVII; Foucher, op. cit., vol. 2, pt. 1, p. 15, fig. 306; Smith, op. cit., p. 119, fig. 72.

290. Ingholt, op. cit. no. 92; New York City, Asia Society, *Gandhara Sculpture from Pakistan Museums* (1960), p. 27; Marshall, *Buddhist Art of Gandhāra* (1960), pl. LXXVIII, fig. 113; Foucher, op. cit., p. 453, fig. 227.

291. Foucher, op. cit., vol. 2, pt. I, p. 77, fig. 343; Ingholt, op. cit., no. 442.

292. Soper, "The Roman Style in Gandhara" (1951b), pl. XXVII:B; Yale University, New Haven, *Palmyrene and Gandharan Sculpture* (1954), no. 24; Maechen-Helfen, "Crenelated Mane and Scabbard Slide" [1957], fig. 25.

293. Marshall, op. cit., pl. XXIX, fig. 46.

294. Cartwright, *Guide to Art Museums* (1958), p. 35; *Indo Tōnan Ajia* (1953), pl. LXXXV; Blumberg, "Goiter in Gandhara" (1964), p. 1010; Lippe, *The Freer Indian Sculptures* (1970), pl. XI.

295. Foucher, op. cit., vol. 2, pt. 1, p. 121, fig. 373.

296. Foucher, op. cit., vol. 2, pt. 1, p. 197, fig. 402.

297. Facenna, *Sculptures from Butkara I* (1962), pls. CXXXVII, no. 824, and CXXXVIII:a, no. 824.

298. Barthoux, *Les fouilles de Hadda* (1930), pl. CXI:d; Rome, Istituto Italiano, *L'Afghanistan dalla preistoria all'Islam* (1961), pl. XXXIV:92.

299. Schlumberger, "Le temple de Surkh Kotal" (1954), pl. III:1; Kieffer, "Kusana Art" (1962) fig. 12.

300. Barthoux, op. cit., pl. CX.

301. Meunié, *Shotorak* (1942), pl. XIV:48; Hackin, "Les Travaux de la Délégation archéologique" (1938), pl. VI:19.

302. Meunié, op. cit., pl. XV:50; Hackin, op. cit., pl. V:18.

303. Godard, *Les antiquités bouddhiques de Bāmiyān* (1928), p. 21, fig. 6.

304. Hackin, *Col de Khair khaneh* (1936), pls. XII, XIII.

305. Schlumberger, "Excavations at Surkh Kotal" (1961), pl. XI:1; Kieffer, "Kusana Art," (1962), fig. 4.

306. Hackin, "Le monastère bouddhique de Fondukistan" (1959), fig. 195.

307. Strzygowski, *Altai-Iran* (1917), fig. 207; Yakubovskii, *Zhivopis' drevnego Pyandzhikenta* (1954), p. 132, fig. 4.

308. Strzygowski, op. cit., fig. 208.

309. Pugachenkova, "Koroplastika drevnego Merva" (1962), p. 147, fig. 20.

310. Frye, *Heritage of Persia* (1963a), pl. CXI; Weitzmann, "Three Bactrian Silver Vessels" (1943).

311. Dalton, *Treasure of the Oxus* (1964), pls. XXIX-XXXI, especially details on pls. XXX: lower and XXXI: lower, and pp. 53-55.

312. See Foucher, *L'art gréco-bouddhique* (1905-1951), vol. 2, pt. 1, pl. V:15, gold coin of Vasudeva on which the sword belt and scabbard slide are clearly shown.

313. Sekino, *Rakurō-gun jidai no iseki* (1925), p. XLIII:310 and 311.

Examples of the type of Chinese belt hook which may have joined the ends of sword belts have been published in Nagahiro, *Taikō no kenkyū* (1943), pls. XII:9, XII:1g.

314. LL is presently ascribed to Bactria, first century B.C.–first century after Christ. The slide is set high, just below the mouth of the scabbard. This position is not found on any other piece from the Kushan territories, but is common on Sasanian reliefs of the third century and appears thus in association with the baldric on a fourth-century Greek silver amphora from South Russia: Matzulewitsch (Matsulevich), *Byzantinische Antike* (1929), p. 132, fig. 43. The rim border on LL in the Freer Gallery is identical to that on the Strogonov silver bowl in the Hermitage: Smirnov, *Vostochnoe serebro* (1909), pl. XXXVIII:67; Trever, *Greko-baktriiskogo iskusstva* (1940), pls. XVIII–XXI. Trever dated the Strogonov bowl first century B.C.–first century after Christ. In a recent article on the Strogonov bowl, Boris Staviskii has convincingly demonstrated that the iconography and style belong to the Sogdian territory and that the bowl is to be dated fifth to eighth century after Christ ‘O datirovke Ermitazhnoï serebrnaoï chashi’ (1960). While the Strogonov bowl is clearly later than the Freer piece, as evidenced by the double-locket suspension on a dagger worn by one personage, a third or fourth century date is plausible for the Freer bowl.

315. Ingholt, *Gandhāran Art in Pakistan* (1957), pl. XXII:2, no. 63, no. 66, and no 163c; Marshall, *Buddhist Art of Gandhāra* (1960), pl. XLIII, fig. 67; New York City, Asia Society, *Gandhara Sculpture from Pakistan Museums* (1960), p. 31. Strangely, neither scabbard slide nor sword belt appear to be represented in most of these reliefs, but from the position in which the sword is held it may be taken for granted that the method of drawing reflects the use of this suspension system. The shield held by the warrior at the right side in the Peshawar Museum piece illustrated here has a mask on its outer side reminiscent of Greek-tragedy masks.

316. They range from 21.00 to 34.25 inches in length: Marshall, *Taxila* (1951), vol. 2, p. 544. See also supplement to GP category in Catalog.

317. Marshall, op. cit., vol. 2, p. 545. I cannot agree with Maenchen-Helfen (“Crenelated Mane and Scabbard Slide” [1957], p. 119) that an examination of the ratio of sword length to an estimated height of the bearers depicted on Gandharan reliefs indicates swords 29.00 to 40.00 inches in length. Accepting his figure of five feet four inches for the average height of the bearers, I calculate sword lengths between 22.00 and 29.00 inches, some ten to seventeen inches shorter than the normal Chinese iron sword, but agreeing quite well with the lengths of the swords found in Taxila.

318. Arrian, *Indica*, XVI (1949), vol. 2, p. 355, records that in the fourth century B.C. the Indians carried a long sword, in length “not under three cubits,” which in close fighting they wielded with both hands. Pliny (1953), XXXIV, 41, p. 233, records that the best iron in the Roman provinces was that imported from the Seres, but Schoff, *Periplus* (1912), p. 172, believes that the iron referred to was probably Indian iron which was shipped to Persia to be made into steel. The iron and steel of India were famed in medieval times, to judge from their praises by the twelfth-century geographer al-Idrīsī (1960), p. 23: “There (in India), there are workshops where swords are manufactured, and their craftsmen make excellent ones surpassing those made by other peoples. . . . No iron is comparable to the Indian one in sharpness. This is well-known fact, and no-one can deny its superiority. . . .”

319. Maenchen-Helfen, “Crenelated Mane and Scabbard Slide [1957], p. 119, n. 127, maintains, on the basis of personal examination, that Kanishka’s sword is not equipped with a scabbard slide. Personal observation of the sculpture on my own part has led me to a contrary opinion. The fastening of the slide to the scabbard is unusual, but hardly unique. The sword belt is not represented, but the clasp in the form of a rosette which joins the ends of the belt is depicted at

the end of a strap which passes through the aperture of the slide. Possibly there are errors in the representation; the statue as a whole is a strong but not a refined work of art. Possibly the sword is held in the hand without support of a belt which, unfastened, is wrapped about the scabbard. The other example (G) which shows straps wrapped about the scabbard is a sword held in the hand rather than hung on the belt. I see no reason in either case to doubt that the object depicted on the side of the scabbard was intended to represent a slide.

320. Marshall, *Taxila* (1951), vol. 3, pl. CCXIX, nos. 104, 105.

321. K K is dated in the third century after Christ by Pugachenkova, “Koroplastika drevnego Merva” (1962), p. 156, on the basis of coins; II and JJ, though not dated by Strzygowski, probably belong to the third or early fourth century in spite of their similarity to a clay relief from a wall found in a seventh- or eighth-century room at Panjikent: Belenitskii, *Central Asia* (1969), pl. CII. The Kushana were defeated by the Sasanians in the later part of the fourth century.

322. Meunié, *Shotorak* (1942), p. 70.

323. Maenchen-Helfen, “Crenelated Mane and Scabbard Slide” [1957], p. 111, maintains that the pistol-grip hilt is “un-Sasanian.” It occurs, however, on the rock reliefs of Fars province, the royal nature of which suffers no doubt.

324. Kieffer, “Kusana Art” (1962), p. 47, erroneously ascribes an Iranian origin to the Kushan sword belt and scabbard slide.

325. The term “Iranian Asia” was first coined by Rostovtsev to define the broad geographical sphere populated by, or under strong influence from, various basically Iranian peoples in late Hellenistic times: “Dura and the Problem of Parthian Art” (1935), p. 270.

326. The recent excavations conducted by the Institute for Oriental Culture, Tōkyō University, in the Dailaman region of northern Iran have produced several long iron rapiers and sabers belonging to late Parthian times, but no objects which might have served as scabbard slides have yet been identified as such: *Dailaman II* (1966), pls. XVI:11 and 12, XL:19, XLV:6, XLVI:1. The preserved lengths of these swords range from 26.97 to 34.66 inches; all are tanged blades and some are furnished with separate lozenge-shaped iron guards. See also *Dailaman III* (1968), pls. XXXIX:10, XLIV:8, LXVI:9, LXXIII:8. The excavators believe the tombs to date from the first three post-Christian centuries. The burials exhibit a number of affinities to late Sarmatian-period burials in the Soviet Union.

327. Andrae, *Die Partherstadt Assur* (1933), p. 106, no. 3; Homès-Fredericq, *Hatra* (1963), p. 16, ascribes the majority of Hatra sculptures to the first half of the second century; Fukai, “Artifacts of Hatra” (1960), places some in the first century (see below: B and C); Ghirshman, *Parthians and Sassanians* (1962) favors a broader span between the first and third centuries (see below: C).

A. Assur: Andrae, op. cit., pl. LIX:b, stone relief of standing male figure in niche; stone badly eroded and pitted, but suggestion of higher relief where belt crosses over sword scabbard; no garment belt.

B. Hatra: Fukai, op. cit., p. 142, fig. 2, standing male figure in round; garment belt with plaques and plain sword belt (Fukai, p. 143, confuses the two belts); Mosul Museum; ascribed to first century. See also Ghirshman, op. cit., p. 89, fig. 100, who ascribes the figure to the second century B.C. (error for A.D.).

C. Hatra: Fukai, op. cit., p. 147, fig. 8, standing male figure in round; garment belt with plaques and plain sword belt; Iraq Museum, Baghdad; ascribed to first century. See also Ghirshman, op. cit., p. 99, fig. 110, who dates the figure first to third centuries after Christ.

D. Hatra: Fukai, op. cit., p. 152, fig. 13, standing male figure in round; image of god; garment belt of circular plaques with plain sword belt below; Mosul Museum. The scabbard slide, if present, is not visible.

E. Hatra: Downey, “Stèle de Hatra” (204) p. 106, stèle from cella of Temple 8; standing deity at upper left; thin garment belt and broad sword belt crossing body diagonally below garment belt to sword at

left hip; scabbard slide presumed from position and form of sword belt.

328. Fukai, op. cit., p. 146 f. "In that part of the long sword where the leather belt comes through, there are animal ornaments just as in the case of King Uthal [B here]. Although the head parts of these animals are missing, they are probably lions, from the shape of their bodies and hind legs."

329. Fukai, op. cit., p. 152, describes the sword belt as "Persian-looking."

330. Seyrig, "Armes et costumes iraniens" (1937); Widengren, "Riding Costume among Iranian Peoples" (1956); Rostovtsev, "Dura and the Problem of Parthian Art" (1935), especially p. 238; Cumont, *Fouilles de Doura-Europas* (1926), especially p. 272.

331. "Descendants non-méditerranéens" (1960).

332. "Riding Costume among Iranian Peoples" (1956), p. 230 and passim.

333A. Seyrig, "Armes et costumes iraniens" (1937), pl. V, left, standing male figure; relief damaged and juncture of belt and scabbard partly obscured by left hand of figure; circular clasp fastening on sword belt. Seyrig, p. 27, assumes that the belt passes through a scabbard slide "à la mode iranienne," and that the sword belt is fastened by some means to the tunic at the right side. While he is probably correct in his first supposition, at least as regards the slide at Palmyra; in his second, he is almost certainly incorrect.

B. Rostovtsev, "Dura and the Problem of Parthian Art" (1935), fig. 51; Ghirshman, *Parthians and Sassanians* (1962), p. 79, fig. 91, fragmentary relief depicting two standing soldiers; sword thrust behind left side in both cases, so that the slide is not actually seen, but typical sword belt with round clasp fastening is worn by left-hand figure while no such belt appears on right figure; ascribed to second century after Christ.

C. Seyrig, op. cit., pl. IV; Ghirshman, op. cit., p. 78, fig. 90, trichinium of Maqqai, dated A.D. 229; relief depicting a group of standing men wearing swords on sword belts and scabbard slides; slide distinctly seen on scabbard belonging to figure seen obliquely at extreme right (see detail on Figure 65 here); belt clasps shown on some belts.

334. See for example, the scabbard slide worn by the warrior depicted on Trajan's Column in Rome; Lehmann-Hartleben, *Die Trajanssäule* (1926), vol. 2, pl. XX:37; Ginters, *Das Schwert der Skythen und Sarmaten* (1928), pl. XXXIII:b, scabbard slide with sword belt passing through it, relief panel from base of Trajan's Column depicting weapons; Watson, *The Roman soldier* (1969), pl. VI, probable representations of slide on swords carried on baldrics and worn by Roman auxiliary cavalry attacking mailed horsemen. See also *S.I and S.2*.

335. Parthian: Fukai, "Artifacts of Hatra" (1960), p. 157, fig. 18; Ghirshman, op. cit., p. 86, fig. 98, stone relief image of Nergal, god of the underworld, and his consort, Baghdad Museum; dated before A.D. 100 by Fukai, second century by Ghirshman. Palmyrene: Ghirshman, op. cit., pp. 71-72, fig. 84, relief depicting the Palmyrene triad, Louvre; ascribed to the first century after Christ.

336. E.g., the costume worn by the Scythians in the horse-breaking scene from the celebrated fourth-century-B.C. Chertomlyk electrum vase, with decorative bands down the center back of the tunic and broad ornamented borders where it closes at the front: St. Petersburg, Commission impériale archéologique, *Compte-rendu*, 1864, Atlas, pl. III; Seyrig "Armes et costumes iraniens" (1937), p. 23 f.

337. "Riding Costume among Iranian Peoples" (1956), p. 230: "In the history of costume, the development of leather dress is confined to arctic and subarctic regions."

338. "Crenelated Mane and Scabbard Slide" [1957], p. 115.

339. Herzfeld, *Kushano-Sasanian Coins* (1930), pl. II:9 (a and b), 15 (a-d); Paruck, *Sāsānian Coins* (1924), pl. V; Pope, *Survey of Persian Art* (1938), vol. 4, pl. CCLI:F.

340. Herzfeld, *Iran in the Ancient East* (1941), pl. CVIII: lower,

investiture, Naqsh-i Rajab, badly weathered; two figures standing behind king with swords in vertical central position, round belt clasp (with pendant belt ends) to left proper of slide, thus emphasizing non-functional position of swords at rest and serving as staffs on which the men rest their folded arms; *ibid.*, pl. CVIII: upper, investiture, Tang-i Ab, Firuzabad, badly weathered; two figures behind king carry swords on belts similar to above.

341. A. King and attendants, Naqsh-i Rajab, swords of attendants in analogous position to those in n. 340, but clasp (with pendant belt end) to right proper of sword: Pope, *Survey of Persian Art* (1938), vol. 4, pl. CLIV:B; Herzfeld, *Iran in the Ancient East* (1941), pl. CXII:left.

B. Triumph over Valerian, Naqsh-i Rostam; sword worn by king on horseback: Pope, op. cit., vol. 4, pl. CLV:A; Bivar, "Details and Devices" (1959), p. 14, fig. 6.

C. Triple victory of Shapur I. Bishapur; Roman prisoners carrying swords on baldrics passing through slides on sheaths: Herzfeld, op. cit., pl. CXVII:upper (detail); Ghirshman, *Parthians and Sassanians* (1962), p. 158, fig. 200 (overall view).

D. Triumph over Gordion III, Philip the Arab, and Valerian (according to Macdermot, "Roman Emperors" [1954]), Bishapur; several figures of Persian warriors wearing sword belts and swords on slides, the defeated Philip and Valerian wear baldrics which pass through slides: Ghirshman, op. cit., p. 156, fig. 197; Herzfeld, op. cit., pl. CXVI: lower (detail of central portion); Osten, *Die Welt der Perser* (1956), pl. XCVII:lower (detail of central portion).

342. Investiture, Bishapur, badly weathered, but by analogy with n. 341, item B, it is assumed that the sword belt passed through a slide on the scabbard: Ghirshman, op. cit., pp. 167-168, fig. 211; Herzfeld, op. cit., pl. CXII, lower; Pope, op. cit., vol. 4, pl. CLVI:A.

343. A. Badly damaged relief at Bishapur; man standing before king on horseback holds sword vertically before his body, the belt clasp with pendant strap ends and slide clearly shown: Pope, op. cit., vol. 4, pl. CLVI:B; Herzfeld, op. cit., pl. CXXII.

B. Badly weathered relief at Barm-i Dilak, near Shiraz; belt and sword position imply use of slide, but section too eroded for confirmation: Berghe, *Archéologie de l'Iran ancien* (1959), pl. LXXIII:a and b.

C. Badly weathered relief at Naqsh-i Bahram; royal attendants to either side of king wear swords vertically before, or at left side, suspended by sword belts and scabbard slides: Berghe, op. cit., pl. LXXXI:a; Ghirshman, op. cit., p. 172, fig. 214.

D. Badly effaced relief at Guyum; belt and sword position imply use of slide: Berghe, op. cit., pl. LXXXIII.

E. King and members of royal family, Naqsh-i Rostam; the king (the only figure portrayed full length) holds sword suspended by slide on sword belt vertically before himself: Ghirshman, op. cit., pp. 169-170, fig. 212.

344. Investiture, Naqsh-i Rostam, badly weathered; child between king and Anahita, and figure to left of king, wear swords at left side on belts, position implying use of slide: Berghe, op. cit., pl. XXX:C; Ghirshman, op. cit., p. 176, fig. 218; *idem*, "A propos des bas-reliefs rupestres sassanides" (1950), p. 87, fig. 1.

345. Shapur I: Ghirshman, *Parthians and Sassanians* (1962), p. 152, fig. 195, intaglio depicting conflict between Shapur and Valerian, the king wearing waist sword belt with curious pendant rectangles, the emperor wearing baldric; Hanfmann, *Ancient Coins* (1956), fig. 25, silver drachm, slide not observable; Pope, *Survey of Persian Art* (1938), vol. 4, pl. CCLIII:E, silver coin, slide clearly visible; Orbeli and Trever, *Sasanidskiĭ metall* (1935), pl. I, third row center, silver coin, slide faintly visible. Bahram I: Herzfeld, *Kushano-Sasanian Coins* (1930), pls. I: 7, b, III: 18,a and 19,b, silver coins, slide not observable; Pope, op. cit., vol. 4, pls. CCLI:G and CCLII:A, silver coins, slides not observable. Bahram II: Pope, op. cit., vol. 4, pls. CCLI:J and CCLIV:D, silver coins, slide not observable; Orbeli and Trever, op. cit. pl. II: top left, silver coin, slide not observable.



346. On the long and short swords, and daggers, carried by the Sasanians, see especially Tiratsyan, "Utochenie nekotorykh detalej sasanidskogo vooruzheniya" (1960).

347. Herzfeld *Iran in the Ancient East* (1941), pl. CVIII: lower, relief of Ardashir I at Naqsh-i Rajab (supra, n. 340).

348. See also Tiratsyan, "Utochenie nekotorykh detalej sasanidskogo vooruzheniya" (1960), p. 477, fig. 1; Ghirshman, *Parthians and Sassanians* (1962), p. 208, fig. 248.

349. Bivar, "Details and Devices" (1959), p. 13, fig. 3, trace of Shapur I's horse, relief at Naqsh-i Rajab; Herzfeld, *Iran in the Ancient East* (1941), pl. CXVIII; upper, trace and crupper of Shapur I's horse, relief at Bishapur.

350. Cotteveuille-Giraudet, "Coupes et camées sassanides" (1938), pl. XXXII:a; Kinzhalov, *Pamyatniki kul'tury sasanidskogo Irana* (1960), pls. IV and V.

351. Herzfeld, "La sculpture rupestre de la Perse sassanide" (1928), p. 139.

352. "A propos des bas-reliefs rupestre sassanides" (1950), pp. 92 ff.

353. Pope, *Survey of Persian Art* (1938), vol. 4, pl. CLVII:A; Herzfeld, op. cit., p. 135, fig. 11; idem, *Iran in the Ancient East* (1941), pl. CXIX: left; Ghirshman, *Parthians and Sassanians* (1962), p. 184, figs. 225 and 226. The relief is badly weathered, but scabbard of one figure to left proper of king in upper register shows a slide, and several figures at left in lower register also have slides.

354. Erdmann, *Die Kunst Irans* (1943), pl. LXI; Pope, op. cit., vol. 4, pl. CCX; Kinzhalov, *Pamyatniki kul'tury sasanidskogo Irana* (1960), pl. V; Lukonin, *Iran* (1961), pl. XX; Ghirshman, op. cit., p. 213, fig. 253.

355. Fajans, "Newly Found Middle Eastern Metal Work" (1957), pl. VII, fig. 16. The author (p. 67) believes the plate may belong to the reign of Yazdegerd II (A.D. 438-457). Voshchinina, "Osvyazyakh Priural'ya s Vostokov" (1953), p. 189, fig. 5, believes the king represented is Hormizd IV (A.D. 579-590).

356. Le Coq, *Bilderratlas* (1925), p. 40, fig. 9 and p. 41, fig. 11. The sixth- or seventh-century date of these wall paintings suggests that the later date for the Sasanian silver plate may be the more nearly correct.

357. Ghirshman, op. cit., p. 206, fig. 245; Pope, op. cit., vol. 4, pl. CCXXXIX:A; Kinzhalov, op. cit., pl. IX; Orbeli and Trever, *Sasanidskiĭ metall* (1935), pl. XIII.

358. Erdmann, op. cit., pl. LXIX; Ghirshman, op. cit., p. 218, fig. 259.

359. Herzfeld, "Sculpture rupestre de la Perse sassanide" (1928), fig. 21.

360. Erdmann, "Tāk-i Bustān" (1937).

361. Herzfeld, "Tāk-i Vastān" (1938).

362. Pope, op. cit., vol. 4, pl. CLX:B.

363. A silver plate in the Cleveland Museum of Art, presently ascribed to Hormizd II (A.D. 303-309), has a similar rosette "slide" on the equestrian's sword; Shepherd, "Sassanian Art in Cleveland" (1961), fig. 11. The plate is probably from a later time. The scabbard slide is clearly indicated on a monument of his predecessor, Narse, and on those of his successor, Shapur II. Unusual also in the early fourth century would be the bow seen projecting to the right from behind the horseman. I know of no such representation of a bow until considerably later; it certainly does not appear on any of the plates to which the Cleveland piece is compared (fig. 15). I am inclined to believe the plate is to be dated subsequent to the reign of Shapur II.

364. Pope, op. cit., vol. 4, pl. CLXVI. At the left of the same relief, several figures rendered in smaller scale and riding upon elephants, have similar belts. See also Peck, "Costums of Taq-i-Bustan" (1969), pls. XIII, XVI, XVII, XVIII, XIX.

365. The best detail of this figure, and the one from which our Figure here is taken, is published in Herzfeld, *Am Tor von Asien* (1920), pl. II: right. See also Peck, op. cit., pl. IX:a.

366. "The Origin of *yamagata*" (1961). The relationship between

the two-point suspension system which replaced the scabbard slide and a much earlier analogous system used with some short swords from South Russian Scythian territories in the fifth to third century B.C. is unknown. See Artamonov, *Treasures from Scythian Tombs* (1969), pl. CXLV, gold scabbard for short sword, from Salokha. It is doubtful that this early two-point suspension is directly related to that which appeared over most of Asia and Europe nearly a thousand years later. See also Melyukhova, "Kamennaya figura Skifa-voina" (1952), p. 126, fig. 39, fragmentary stone sculpture of a Scythian warrior equipped with axe, *gorytus*, and *akinakes* with two-point suspension; dated by the author fifth to third century B.C.

367. "On the Nationality of the Ephthalites" (1959). See also Konow, "The White Huns" (1947); Ghirshman, *Les Chionites-Hephthalites* (1948). Phillips, *The Royal Hordes* (1965), p. 114, believes the Hephthalites spoke a Turkish language.

368. Ghirshman, "Trois épées sassanides" (1963), p. 296. The British Museum and the museum in Frankfurt, Germany, possess similar recently acquired swords.

369. The hilt of the sword with silver sheath is here incorrectly restored. The upper portion of the hilt should be turned so that the lateral protuberance of the pommel faces the side with the concave finger grip. The hilt as shown in Ghirshman, op. cit., fig. 3, has been correctly assembled.

370. The sword illustrated in Figure 80 (left) is 41.54 inches; the one illustrated in Figure 80 (right) is 40.04 inches; a third sword, illustrated by Ghirshman, op. cit., fig. 2, is 41.73 inches.

371. Shishkin, *Varakhshah* (1963), pl. XIV; Yakubovskii, *Zhivopis' drevnego Pyandzhikenta* (1954), pls. V and XII.

372. Panjikent: e.g., Yakubovskii, op. cit., pls. V, IX, X, XII; Balalyk Tepe: Al'baum, *Balalyk-tepe* (1960), figs. 102, 114, 116, 118, 123; Varakhshah: Shishkin, op. cit., pl. XIV:right; idem, "Varakhshah" (1955), p. 111, fig. 6; Belenitskii, *Central Asia* (1969), pl. CXXXVII.

373. Yakubovskii, op. cit., pl. XXXVII; Belenitskii, *Skulptura i zhivopis' drevnego Pyandzhikenta* (1959), pls. III, IV, VII:a and r, XXIII.

374. Belenitskii, op. cit., pl. III; Yakubovskii, op. cit., pls. V, XXXV. Belenitskii, *Central Asia* (1969), pl. CXXXVII.

375. Ghirshman, *Parthians and Sassanians* (1962), p. 192, fig. 235.

376. Chavannes, *Mission archéologique* (1909-1915), vol. 2, pl. CCLXXXVIII, relief from the tomb of the seventh-century T'ang 唐 emperor T'ai Tsung 太宗 (pistol-grip sword hilt); Sickman, *Art and Architecture of China* (1960), pl. XL:A, relief in the Museum of Fine Arts, Boston, nos. 12,588 and 12,589, from tomb of Northern Ch'i 北齊 (A.D. 550-577) dynasty representing travels of an official (in retinue, young men wearing armbands, a Turkish custom, and with facial features suggestive of Turkish origin, wear swords slung from two lockets on the scabbard); *I-nan ku hua-hsiang* (1956), pl. LVI:upper left, third to fourth century (sword suspended from belt by straps to lockets on scabbard). I-nan is the transitional site for China as Taq-i Bustan is for Iran. Improbable fastenings related to the scabbard slide (ibid., pl. LV) are depicted alongside two-point suspension, suggesting that the latter was by this time current, the former representing an attempt to reproduce a more archaic type. Note also that the sword on the I-nan relief first cited appears to have no guard. It may, thus, conform to swords from Soviet Central Asia, to those from Iran (Figures 80, 81), and certain types from South Russia and the Volga-Ural steppe to be examined later. See also p. 49 f., on the conventional slide representations from this site. See also Trubner, "An Unusual Chinese Tomb Figure" (1962), p. 100, figs. 1 and 2 (small curved dagger suspended in front from belt to two lockets on sheath; comparable to representations from Balalyk Tepe and Panjikent). On the date of this figure, see n. 380. In a painting attributed to Li Kung-lin 李公麟 (d. 1106), an Uigur emissary wears such a sword: *Chinese Art Treasures* (1961), no. 29. As a suspension device the scabbard locket was known to the Chinese at a much earlier date. Single lockets

appear on bronze dagger sheaths from Middle or early Eastern Chou. The device was not, however, employed for the suspension of swords until a thousand years later. See New York, Chinese Art Society of America, *Art of Eastern Chou* (1962), p. 13, no. 4 and p. 14, no. 9; Loehr, "Ordos Daggers and Knives" (1949-1951), p. 55; Umehara, *Shina kodō seika* (1933-1935), pt. 3, vol. 2, pl. CV:right. The form was, at this date, received from Ordos or south Siberian cultures. The function of the scabbard slide proposed by Na Chih-liang (Figure 19) can be explained as a misunderstanding of the position of the slide relative to the sword scabbard and an attempt to combine this object with the two-point suspension apparatus. The ends of the chain hung over the slide attached to the garment belt could only have been fastened to lockets on the scabbard edge, a system which had nothing to do with the scabbard slide.

377. Evtyukhova, "Kamennye izvayaniya," (1952), p. 74, fig. 3:2, p. 75, fig. 4, p. 76, fig. 5 (Altai region, curved sabers with pistol-grip hilts suspended from belt of plaques); p. 79, fig. 12, p. 81, fig. 17:2, p. 82, fig. 18 (Tuva); p. 98, fig. 47:1 (Mongolia); p. 111, fig. 67, illustrating sword types and suspension device; Grach, *Drevnetyurskie izvayaniya Tuvy* (1961), figs. 3, 14, 27, 29, 79-80 (see also his appendix chart, nos. 1, 6, 12-13, 14); Korzukhina "Drevnerusskogo oruzhiya XI veka" (1950), pls. II-IV, curved sabers, some with pistol-grips (Volga and East European steppe); Iessen, "Raskopki Uch-tepe" (1965), p. 174, fig. 25 and p. 175, fig. 26:1 (Azerbaijan, early seventh century). See also Merpert, "Iz istorii oruzhiya plemen" (1955), and Krupnov, "Severnogo Kavkaza" (1960), for later history of the long sword and two-point suspension in central and west Russian steppe and Caucasus. Rybakov ascribes to the fourth century an iron sword excavated from a South Russian tomb; the scabbard had wholly decayed, but its two lockets were found near the blade: "Drevnie Rusy" (1963), p. 51, fig. 5:1.

378. Le Coq, *Bilderatlas* (1925), figs. 7, 11:right, 40, 93. The two ring pommels shown in fig. 86 are based on Eastern Han Chinese types. Note also in fig. 11, third figure from right, the transitional suspension similar to that at Taq-i Bustan where the sword belt ends merely cross at that point on the scabbard where the slide was formerly situated. Le Coq, *Chotscho* (1913), pls. XXXI and XXXIII, locket suspension and scabbard chape reinforcement of metal band analogous to the Eastern Han Chinese example (see n. 206); Stein, *Ancient Kholan* (1907), pls. LIX:right, LXI, LXII.

379. Smirnov, *Vostochnoe serebro* (1909), pl. XXIII; Orbeli and Trever, *Sasanijskii metall* (1935), pls. XX and XXI.

380. E.g., Le Coq, *Bilderatlas* (1925), fig. 94; Waldschmidt, *Gandhara, Kutscha, Turfan* (1925), pls. XIX:a, XX:b; Le Coq, *Die buddhistische Spätantike* (1922-1933), vol. 3, pls. XIV, XV, XVII; vol. 7, pl. XXV; Trubner, "An Unusual Chinese Tomb Figure" (1962), p. 100, figs. 1 and 2. The author (p. 101) feels that the figure might be as late as the Liao 辽 dynasty (A.D. 907-1125), but calls our attention to a similar figure recently recovered from a tomb at Ch'ang-an 長安 dated A.D. 667. The seventh-century date is preferable. Note also the tooled lines along the edges of the leather belt and the clasp which is identical to that used on the former scabbard-slide sword belt. This feature also suggests a date closer to the period of the scabbard slide. *Masterpieces of Korean Art* (1957), belt from the Gold Crown Tomb, Silla dynasty, fifth-sixth centuries, fashioned of gold, jade, and glass, with some surface designs imitating leather tooling. Iessen, "Raskopki Uch-tepe" (1965), p. 176, fig. 28; Polesskikh, "Boevoe oruzhie i maryazhenie" (1968), 108 burials in the vicinity of Saratov on the lower Volga, belongs to the fifth and sixth centuries (p. 205) and contains large numbers of iron sabers and rapiers ranging in length from 24.63 to 34.84 inches, associated with numerous small metal buckles, plaques and strap-end sheathing (e.g., p. 204, fig. 5, p. 204 f, cites finds of similar belts in South Russian, Caucasus, and Volga-Ural steppe); Zasetkaya, "O khronologii pogrebenii epokhi pereseleniya narodov" (1968), lower Volga; Rybakov, "Drevnie Rusy"

(1963), p. 55, fig. 72, and p. 56, fig. 76, South Russia, sixth or seventh century. For a detailed study of this belt form see Raspopova, "Poyasnoi nabor Sogda VII-VIII vv" (1965).

381. Werner, *Archäologie des Attila-Reiches* (1956), p. 83; Lázló, *Société des Avars* (1955), p. 291. See also Fettich, "Symbolisches Gürtel aus der Awarenzeit" (1963).

382. Ettinghausen, "Turkish Elements on Silver Objects" (1961); Gray, "A Seljuq Hoard" (1939); Schlumberger, "Lashkari Bazar" (1952); Raspopova, "Poyasnoi nabor Sogda VII-VIII vv." (1965). See also Peck, "Costumes of Taq-i Bustan" (1969) pp. 117-120, for a discussion of this belt type.

383. In a review in *Artibus Asiae* (1963b), p. 176.

384. The royal equestrian on the silver plate in the Bibliothèque Nationale wears a dagger suspended from two lockets to a plain garment belt. This plate has tentatively been assigned to the reign of Peroz: Erdmann, *Die Kunst Irans* (1943), pl. LXIV; excellent detail in Cotteville-Giraudet, "Coupes at camées sassanides" (1938).

385. Morden, "By Coolie and Caravan" (1927), p. 425 (Mongolia); Lattimore, "The Desert Road to Turkestan" (1929), p. 679, right, single locket only (Kirghiz soldier; probably Chinese saber); *Wen-wu* 1962 (10), color frontispiece (Chinese ceremonial sword, late nineteenth century); Swann, *Chinese Monumental Art* (1963), pl. CXXXII (stone guardian figure at tomb of Ming 明 dynasty emperor Yung-lo 永樂 [A.D. 1403-1424] near Nanking); Kozlov, *Mongoliya i Amdo* (1923), p. 425 (East Turkistan); Goya, *Disasters of War* (1956), pls. XXXIII and XXXVIII (Europe); Lebedev, *Vereshchagin* (1958), pls. facing pp. 104, 250, 281 (Russia in Europe and Asia); Horan, *Mathew Brady* (1955), pls. CLXXII, CLXXVII, CLXXIX, CLXXXII (United States); Wilkinson, *Militaria* (1969), pp. 126, 135, 136 (Europe); Wiley and Milhollen, *They Who Fought Here* (1959), p. 78 (United States). Though the position and basic carriage of the sword remain relatively constant over this entire geographical area, specific variations do occur, as noted by Lieutenant Colonel Shiel with respect to the manner in which the sword was worn in Kurdistan at the time of his visit in 1836; "Notes on a Journey from Tabriz" (1838), p. 75. "In Kurdistan, the sword is worn with the edge to the rear, which the Kurds contend is the best method for drawing the weapon."

386. Rostovtsev; "Dura and the Problem of Parthian Art" (1935), p. 222; Du Mesnil du Buisson, in *Dura-Europos*, Prelim. Report Sixth Season (1936), p. 192 and p. 193, fig. 16. Rostovtsev identifies the stone piece as Chinese jade; Du Mesnil du Buisson (p. 194) states simply that the stone "appears" to have come from Chinese Turkestan." Apparently among the bodies was a second long sword, well preserved with "its pommel of rock crystal": Du Mesnil du Buisson, p. 195. Rostovtsev (p. 194) reports that another sword with jade pommel was found the same season (1932-33) in a private house.

387. Du Mesnil du Buisson, op. cit., p. 197.

388. Masuda, "Sword Guards of *shitogi* Form" (1965), p. 7, fig. 9:a.

389. Ibid., p. 7, fig. 9:b.

390. Kieseritzky and Watzinger, *Griechische Grabreliefs* (1909), nos. 633, 639, 647. The slides on these worn reliefs appear as simple rectangles, fully as wide as the scabbards. The swords appear to be attached to the bow cases. No belts can be seen on these examples, but baldrics are visible on two others: nos. 232, 669.

391. Maenchen-Helfen, "Crenelated Mane and Scabbard Slide" (1959), p. 93, errs in stating some are carved from jadeite.

392. Stone: SR.2, SR.4, SR.6, SR.7, SR.10; gold: SR.3, SR.8, SR.9.

393. Sokol'skiĭ, "Bosporskie mechi" (1954), p. 160, earlier hypothesized the existence of wooden scabbard slides in South Russia, though he presumed their form to have been analogous to the stone examples.

394. Sokol'skiĭ, "Bosporskie mechi" (1954), is by far the most thorough study of South Russian swords. See also Merpert, "Iz istorii oruzhiya plemen" (1955); Kritsova-Grakova, *Stepnoe Povolzh'e i Prichernomor'e* (1955); Smirnov, "Meoto-sarmatskoĭ kul'tury" (1952a); idem, "O nekotorykh itogakh issledovaniya mogil'nikov meotskoĭ"

(1951); idem, "Itogi i ocheredyne zadachi izucheniya sarmatskikh plemen" (1953).

395. Kusheva-Grozevskaya, "Odin iz tipov sarmatskogo mecha" (1929); Ebert, in Obermaier, "Südrußland" (1928-1929), section 91; Rau, *Prähistorische Ausgrabungen auf der Steppenseite* (1927).

396. See review of Roman references in Syme, "The *Argonautica* of Valerius Flaccus" (1929), pp. 130 ff.

397. *Das Schwert der Skythen und Sarmaten* (1928), p. 73.

398. Kieseritzky and Watzinger, *Griechische Grabreliefs* (1909), nos. 599, 600, 606, 619, 627, 657, 675, passim.

399. Sokol'skiĭ, op. cit., p. 151, reports that of approximately forty swords of this type known, more than twenty are from the Volga, about ten from the Kuban region.

400. Sokol'skiĭ, op. cit., p. 152.

401. Anfimov, "Meoto-sarmatskoĭ mogil'nik" (1951), p. 202.

402. Sokol'skiĭ, op. cit., p. 155.

403. Kieseritzky and Watzinger, *Griechische Grabreliefs* (1909) nos. 631, 633, 634, 639, 640, 642, 647, 669, 670, 683, 686, 705, 725.

404. See n. 403. See also Sokol'skiĭ, op. cit., p. 159.

405. Merpert, "Iz istorii oruzhiya plemen" (1955), p. 158; Rostovtsev, *Kurgannyya nakhodka Orenburgskoi oblasti* (1918), p. 52, fig. 31 and pl. III.5; Gajdukevich, *Bosporskoe tsarstvo* (1949), p. 411, fig. 71; Sokol'skiĭ, op. cit., pp. 154 ff. See also *SR.2* and *SR.9*.

406. Merpert, op. cit., p. 156.

407. Smirnov, "O nekotorykh itogakh issledovaniya mogil'nikov meotskoĭ" (1951), p. 153 and p. 152, fig. 48:3.

408. Sokol'skiĭ, op. cit., p. 161; Anfimov, "Meoto-sarmatskiĭ mogil'nik" (1951), p. 202 f; Merpert, op. cit., p. 157; Smirnov, "Meoto-sarmatskoĭ kul'tury" (1952a), p. 16 f., finds no clear evidence of extensive Sarmatian influence in the Prikuban before the first century after Christ.

409. Sokol'skiĭ, loc. cit.

410. Sokol'skiĭ, loc. cit.; Merpert, op. cit., p. 158.

411. Kusheva-Grozevskaya, "Odin iz tipov sarmatskogo mecha" (1929), p. 165 f.; Ginters, *Das Schwert der Skythen und Sarmaten* (1928), p. 73. These authors believed, however, that the scabbard slide in China was also derived from Iran. Pelliot, "Quelques réflexions sur l'art sibérien et l'art chinois" (1929), p. 20, recognized that the scabbard slides in South Russia were likely imports, but their precise relationship to those from China was unknown to him.

412. "Yüeh-chih Problem" (1945b), p. 78.

413. "Bosporskie mechi" (1954), p. 160.

414. Sokol'skiĭ, op. cit., p. 148, expresses the opinion that it may already in the third or second century B.C. have been pressure from the Huns that forced the Sarmatians toward the west.

415. E.g., Rhé, *Jutas und Öskü* (1931), pl. III:5, chalcedony pommel button from Jutas Grab, Hungary, belonging to the seventh century. I cannot agree with Werner, *Archäologie des Attila-Reiches* (1956), p. 37, that the stone pommel button originated in Iran and that it was passed into middle Europe by the Huns in the fifth century. Nor am I convinced, as he maintains, that it had a magical significance among the people who decorated their swords with it. See also Kuznetsov, "Alany v zapadnoi Evrope" (1961) for a discussion of the Alan migration which brought these people through the area of Germany and France where scabbard slides have been found. It is clear from Alan burials of the fifth and sixth centuries in the Volga-Ural steppe that those who remained in this region had adopted the two-point suspension system and its associated belt with lappets (Polesskikh, "Boevoe oruzhie i snaryazhenie" [1968], p. 204).

416. Bulgaria (*E.35*); Denmark (*E.1-5*, 8, 9, 20, 22, 23, 26-28, 30-33); Germany (*E.11*, 13-16, 18); France (*E.10*, 12); Switzerland (*E.17*, 19); England (*E.6*, 7); Sweden (*E.21*, 24, 34); Norway (*E.25*); Finland (*E.29*).

417. A rather crudely cut lapis-lazuli sword guard, unmistakably

imitating Han-dynasty bronze types with rounded shoulders to either side of the perforation for the tang was found in a fifth or sixth century burial at Altlußheim, North Baden, Germany; Werner, op. cit., pt. B, pl. III:1c and pl. LVIII:4. This guard was probably carved centuries earlier in central Asia and may have reached Germany by way of Iran and South Russia, or it may have come with the Sarmatians as they moved westward from the Caspian.

418. "Bosporskie mechi" (1954), p. 162.

419. Janse, "Notes sur quelques épées anciennes" (1930), p. 81, and Salin, *Die altgermanische Thierornamentik* (1904), p. 193, derive all of the European slides from those of South Russia.

420. Normally the Roman soldier carried his sword at his right side. In the Near East, some Roman troops must have worn their swords at the left side, in the Asian manner. Surely locally recruited auxiliaries, which constituted a substantial force within the Roman army in the Near East, would have worn their swords in the manner habitual with them. In this excursus on the Roman army, the first-century writer Josephus (*The Jewish War* [trans., 1959] p. 379) refers to Roman infantry carrying a long sword at the left, a shorter blade at the right. Josephus was doubtless describing Roman military equipment as he had seen it employed in Palestine.

421. Burgess, "The Gandhara Sculptures" (1900), pl. XI:1; Marshall, *Buddhist Art of Gandhāra* (1960), pl. LXXVIII; Barthoux *Fouilles de Hadda* (1930), pl. CX.

422. Watson, *The Roman Soldier* (1969), pl. VI; Chichorius, *Die Reliefs der Traiansäule* (1900), pl. XXVIII:93. Elsewhere on these reliefs the suspension system of the Roman swords is clearly not the scabbard slide, though in most cases the device is not shown. In a few cases it consists of a ring attached to opposing scabbard edges, one end of the baldric attached to each ring; e.g., Chichorius, pl. XCVI:346.

423. I have reported the Denmark and Syria slides in "Possible Roman Jade" (1969), and the discussion here is based on this article. I was not then aware of the scabbard slide from Bulgaria, nor of the correct orientation of *S.I* owing to an inaccurate reconstruction of the sword and scabbard parts in the National Museum, Damascus. I am indebted to Mr. Bachir Zouhdi of the National Museum for an opportunity to examine this sword and scabbard and to have the reconstructed parts photographed.

424. Volbach and Hirmer, *Early Christian Art* (1961), p. 324 and pl. LXIII.

425. Oxenstierna, *Die Nordgermanen* (1957), pl. LXXIII; Holmqvist, *Germanic Art* (1955), pl. XXXIII:82 and p. 50 f. bronze mold for casting helmet bosses, probably seventh century.

426. V. P. Shilov informed me (Leningrad, 1959) that there are two others, both similar to *V.1* and *V.2*, in the museum at Saratov, one presented to the museum by A. M. Tallgren. See also preliminary note to Perm slides in Catalog.

427. Maenchen-Helfen's statement ("A Chinese Bronze with Central-Asiatic Motives" [1958], p. 169) that Chinese scabbard slides have been found in tombs on the lower Volga is erroneous.

428. "Odin iz tipov sarmatskogo mecha" (1929), p. 165.

429. Kusheva-Grozevskaya, loc. cit., considered that slippage may have been prevented by the entire slide being set into a shallow socket. The rounded upper ends militate against this hypothesis.

430. "Une trouvaille de l'époque gréco-sarmate de Kerch (1923).

431. *Prähistorische Ausgrabungen auf der Steppenseite* (1927).

432. "Odin iz tipov sarmatskogo mecha" (1929), p. 165.

433. Smirnov, "Zheleznyi vek Bashkirii" (1957), p. 37; Tallgren, *L'Orient et l'Occident dans l'âge du fer finno-ougrien* (1924), p. 24, n. 17. Relations between the Priural zone and the Pontic steppe were not restricted to the northward migration of the late Sarmatians. Current research on the earlier Ananino Culture of this region reveals the existence of strong influence from the Pontic steppe; Zbrueva,

- "Istoriya naseleniya Prikam'ya" (1952), especially pp. 88 ff., and 164 ff. See also Sinitsyn, "K materialam po sarmatskoj kul'ture" (1946), who reports analogies between the lower Volga and the Kam and Ural-Orenburg steppe zones from the third century B.C. through the second century after Christ. The still earlier relations between the Priural and Iran reported by Iessen have nothing to do with the scabbard slide: "Rannie svyazi Priural'ya s Iranom" (1952).
434. Rau, op. cit.; Sinitsyn, "Pozdne-sarmatskie pogrebeniya" (1936). See also Schmidt (Shmit), "Kačka" (1927), pp. 30-33.
435. Smirnov, loc. cit.; Tallgren, op. cit., p. 6.
436. Tallgren, op. cit., p. 23, fig. 11:9, stone pommel disk from Kazan; idem, *Collection Zaoussailov* (1916), vol. 2, pl. 1:4-5, stone pommel disks from Perm region; Aspelin, *Antiquités du nord finno-ougrien* (1877), p. 172, no. 797, chalcedony pommel disk from Vyatka region of Perm, and p. 172, no. 798, chalcedony pommel disk from Perm; Smirnov, "Sarmatskie pogrebeniya yuzhnogo Priural'ya" (1948), p. 86, fig. 30:1, tanged rapier 41.73 inches long from kurgan 3 at Bis-oba, late third to early fourth century; Sal'nikov, "Sarmatskie pogrebeniya v raone Magnitogorska" (1950), p. 119, fragmentary double-edged iron sword with chalcedony pommel disk; Rykhov, "Suslovskij kurgannyj mogil'nik" (1925), p. 36; Arzyutov, "Atkarskij kurgannyj mogil'nik" (1936); Smirnov, "Voprosy izucheniya sarmatskikh plemen" (1952b), p. 198 f.; Max Ebert, in Obermaier, "Südrussland" (1928-1929), p. 105.
437. *Yūrashia kodai hoppō bunka* (1948), p. 374; Tallgren, *L'Orient et l'Occident dans l'âge du fer finno-ougrien* (1924), p. 23, n. 13, believed also that the scabbard slides (identified as sword guards) and stone disk pommels in the Priural suggest the area felt an early wave of the Hunnish invasion. Smirnov, "Voprosy izucheniya sarmatskikh plemen" (1952b), p. 204, discusses the early Hunnish burials in the Volga steppe. See also Smirnov, "Rabota Stalingradskoj ekspeditsii" (1959), p. 74.
438. *Histoire générale des Huns* (1756-1758). For a bibliography of recent Japanese works on this problem, see Okamoto, "Studies of the History of Manchuria and Mongolia" (1960), pp. 459-461. The opposing sides of the identity question have recently been presented by Jettmar, "Hunnen und Hsiung-nu" (1951-1952); Maenchen-Helfen, "Huns and Hsiung-nu" (1944-1945a); idem, "The Ethnic Name Hun" (1959). See also Gumilev, *Khunnu* (1960).
439. Egami, op. cit., p. 288, shows distribution of these mirrors in southern Siberia, the Caucasus, and lower Volga regions. Since Egami published his study of north Eurasian cultures many more of these mirrors have been discovered by Soviet archeologists, e.g., Kozhomberdiev, "Katakombnye pamyatniki Talasskoj doliny" (1963), p. 40, fig. 6:1, mirror from grave of a woman at Kenkol which the author ascribes to the first or second century and to the Central Asian Huns. The whole problem of Chinese mirrors in the Soviet Union is presently being studied by E. I. Lubo-Lesnichenko of the Hermitage Museum, Leningrad. See preliminary summary of his findings: "Importnye zerkala Minusinskoj kotloviny" (1965).
440. Sinitsyn, "K materialam po sarmatskoj kul'ture" (1946), p. 92, fig. 26, excavated in 1927 by P. Rau. Kurgan E-25, grave 19, from which the mirror came, has an inventory typical of the first and second centuries.
441. Genig, "Udmurtskaya arkhologicheskaya ekspeditsiya" (1959), p. 95, fig. 42:15, first to second century.
442. Smirnov, "Voprosy izucheniya sarmatskikh plemen" (1952b), p. 204. Evidence of skull deformation is revealed in 83 percent of the burials. See also distribution in Bers, "Arkhologicheskaya karta" (1951).
443. Smirnov, "Sarmatskie plmena severnogo Prikaspiya" (1950), p. 112 f.
444. Ammianus Marcellinus (1939), XXXI.2:17.
445. Smirnov, "Itogi i ocherednye zadachi izucheniya sarmatskikh plemen" (1953), p. 145.
446. Maenchen-Helfen, "The Yüeh-chih Problem" (1945b), p. 78; Teggart, *Rome and China* (1939), p. 159.
447. Maenchen-Helfen, loc. cit.; Tolstov, *Altchoresmischen Kultur* (1948), p. 156, represents the Aorsi-Alan territory in the first century B.C. as spreading from the western side of Lake Aral, across the upper end of the Caspian, and reaching nearly to the Sea of Azov. They extended as well several hundred miles to the northwest of the Caspian.
448. Smirnov, "Voprosy izucheniya sarmatskikh plemen" (1952b), p. 204.
449. "Tujskij vsadnik" (1925), p. 431.
450. "A Chinese Bronze with Central-Asiatic Motives" (1958), pp. 196 ff.
451. Max Ebert, in Obermaier, "Südrussland" (1928-1929), p. 105.
452. E.g., Gaǰdukevich, "Mogil'nik bliz Shirin-saya" (1952), p. 335, fig. 4.
453. V. Elisséeff, in J. Hackin, *Nouvelles recherches archéologiques à Begram* (1954), pp. 151-155 and figs. 243-249.
454. Maenchen-Helfen, "From China to Palmyra" (1943).
455. Toll, "Zametki o kitajskom shelke" (1927); Rostovtsev, *Skythien und der Bosphorus* (1931), p. 153.
456. The recent work by Lozinski, *The Original Homeland of the Parthians* (1959), does not advance our knowledge on this point.
457. Masson, "O severo-vostochnykh predelakh parfyanskogo gosudarstva" (1951).
458. Smirnov, "Voprosy izucheniya sarmatskikh plemen" (1952b), p. 199; idem, *Savromaty* (1964). See Smirnov and Petrenko, *Savromaty Povolzh'ya i yuzhnogo Priural'ya* (1963), fig. 1, distribution of Sauromatae sites, seventh to fourth centuries B.C.
459. Glazkova and Chtetsov, "Paleoantropologicheskoe materialy Nizhnevolzhskogo" (1960). Smirnov, "Voprosy izucheniya sarmatskikh plemen" (1952b), p. 197, writes: "Archaeological monuments and anthropological materials from the territories of the Volga, southern Priural and western Kazakhstan allow [us] to discern a genetic connection between the Sarmatians and the bearers of the Andronovo and Srubno-khvalynsk cultures of the bronze epoch . . ." See also Smirnov and Petrenko, op. cit., p. 5, and Jettmar, "Indogermanen in Zentralasien" (1952), p. 239.
460. Gimbutas, "Timber Graves in Southern Russia" (1961), p. 16.
461. Gimbutas, op. cit., p. 15; Piggott, "Heads and Hoofs" (1962), p. 113 f.
462. Gimbutas, op. cit., p. 14; Piggott, loc. cit.
463. See Mellaart, "Royal Treasure of Dorak" (1959), p. 754, iron sword ascribed to the middle of the third millennium B.C.
464. Piotrovskij *Kavmir-Blur III* (1955), p. 41 f. The double-edged iron blade with bronze hilt is 73 cm. long. "By the sword was a collection of metal parts of the porte-épée—a ring 2.5 cm. in diameter and twelve studs with hemispherical heads which had ornamented the belt." A similar sword, also 73 cm. long, was found earlier at the same site: *ibid.*, p. 39, fig. 19.
465. Smirnov, "Voprosy izucheniya sarmatskikh plemen" (1952b), p. 200.
466. Smirnov, *Vooruzhenie Savromatov* (1961), p. 29. The underside of the arched guard is curved, resembling the wings of a butterfly. See also Sokol'skij, "Bosporskie mechi" (1954), p. 161.
467. *Ibid.*, p. 30. See also Berkhin-Zasetskaya and Malovitskaya "Bogatoe savromatskoe pogrebenie" (1965), p. 146, fig. 3, and pp. 148-149, an iron sword with cast "butterfly-shaped" guard, hilt, and oval pommel from a fifth-century B.C. burial near Astrakhan. The authors suggest such swords represent a type intermediate between the earlier tanged Sauromatae swords and Meot swords in the north Caucasus and Prikuban.
468. Smirnov, *Vooruzhenie Savromatov* (1961), p. 29, and preceding note.
469. *Ibid.*, p. 22, and fig. 5:1 and 2; Smirnov and Petrenko, *Savromaty*

*Povolzh'ya i yuzhnogo Priural'ya* (1963), pl. XI:26 and 27. One of these swords has a blade 46.06 inches long.

470. Smirnov, *Vooruzhenie Savromatov* (1961), p. 30. See Sinitsyn, "Arkhologicheskie issledovaniya v Saratovskoi oblasti i zapadnom Kazakhstane" (1951), p. 67, fig. 27:5, a typical Prokhorovka iron sword 41.34 inches long, with straight guard and crescent-shaped pommel. The round grip of the sword had been wrapped with leather strips. There were remains of a wooden scabbard. The sword was found on the left bank of the Malyi Uzen' in western Kazakhstan.

471. These excavations were reported by Rostovtsev and Rudenko, *Kurgannyya nakhodka Orenburgskoi oblasti* (1918). Obel'chenko, "Lyavandakskii mogil'nik" (1961), p. 127, assigns this period to the fourth to first centuries B.C. in western Uzbekistan. In the lower Volga, it falls mainly in the third and second centuries. We discern, therefore, a gradual southern extension of the Prokhorovka Culture. For a recent survey of the Prokhorovka Culture, see Moshkova, *Pamyatniki prokhorovskoi kul'tury* (1963).

472. Rostovtsev and Rudenko, op. cit., p. 61.

473. Smirnov, *Vooruzhenie Savromatov* (1961), p. 30. See also Krupnov and Sinitsyn, "Drevnee naselenie nizhnego Povolzh'ya" (1954), p. 87.

474. Smirnov, "Voprosy izucheniya sarmatskikh plemen" (1952b), p. 201.

475. Ibid., p. 203.

476. Sinitsyn, "Arkhologicheskie issledovaniya v nizhnem Povolzh'e i zapadnom Kazakhstane" (1951), p. 102; Sadykova, "Sarmatskie pamyatniki Bashkirii" (1962), p. 253 f., p. 264, fig. 2; Smirnov and Petrenko, *Savromaty Povolzh'ya i yuzhnogo Priural'ya* (1963), p. 5.

477. Smirnov, "Voprosy izucheniya sarmatskikh plemen" (1952b), p. 200; idem, *Vooruzhenie Savromatov* (1961), p. 24. I have not seen the publication of these Khorozm swords.

478. Sokol'skii, "Bosporskie mechi" (1954), p. 168.

479. Smirnov, *Vooruzhenie Savromatov* (1961), p. 24.

480. Smirnov and Petrenko, *Savromaty Povolzh'ya i yuzhnogo Priural'ya* (1963), pl. XV:2 (bronze), 14 and 35 (gold).

481. Smirnov, *Vooruzhenie Savromatov* (1961), p. 107, fig. 8:9-13.

482. Ibid., p. 28 f.

483. Moshkova, *Pamyatniki prokhorovskoi kul'tury* (1963), p. 35 f. classifies some similar objects of bronze and bone as ornaments from the sword belt. Since we do not know what the early Sarmatian sword belt looked like, this hypothesis cannot be excluded. Clearly some objects of this type could not have been pommel sockets; they were found lying near the guard or grip of swords with crescent-shaped guards which could not take such pommel sockets: Smirnov, *Savromaty* (1964), p. 319, fig. 26; Moshkova, op. cit., pl. XX:11-14. The possibility that they form part of the sword belt clasp should also be considered.

484. Sokol'skii, op. cit., p. 189, Taman 2.

485. In the southern Ural region the Prokhorovka type sword is found still in late Sarmatian graves. At times, the crescent-shaped pommel has been adapted to accommodate a decorative pommel disk similar to those in use in South Russia, the lower Volga, and Priural zones at this time. See Sal'nikov, "Sarmatskie kurgany bliz g. Orska" (1940), p. 126, fig. 5, double-edged iron sword 44.49 inches long belonging to the second to fourth centuries.

486. Smirnov and Petrenko, op. cit., pl. XV:1, 17-33; Smirnov, *Savromaty* (1964), pp. 300-327, figs. 8, 21, 23, 26, 34; Moshkova, *Pamyatniki prokhorovskoi kul'tury* (1963), pl. XX.

487. *Drevnyaya istoriya yuzhnoi Sibiri* (1951), p. 214.

488. "Raskopki Kalinovskogo kurgannogo mogil'nika" (1955), p. 123 and p. 124, fig. 51.

489. "Meoto-sarmatskii mogil'nik" (1955), p. 197.

490. "Mogil'nik vremeni rannikh kochevnikov" (1961), p. 99.

491. Shilov, Kalinovskii kurgannii mogil'nik" (1959), p. 352; Smirnov and Petrenko, op. cit., notes on pl. XV.

492. A similar hook was acquired by S. H. Hansford at An-yang: "Visit to An-yang" (1948-1949), pl. V:a. It is reputed to have been found with other artifacts of Shang age, but it is surely later than this. Hansford thinks it might be an archaic belt hook.

493. Smirnov and Petrenko, op. cit., pl. XV:40-44.

494. "Kalinovskii kurgannii mogil'nik" (1959), p. 432.

495. "Bosporskie mechi" (1954), p. 160. Of the 32 burials belonging to the first century B.C. to second century after Christ, where sword position could be determined, 19 swords lay at the left, 13 at the right.

496. Ritual incapacitation of the deceased was fairly common in ancient and medieval societies. In our own society, the folding of the deceased's arms and the closing of his eyes represent survivals from an earlier time when the wrists were tied, the eyes closed to guard against malevolent acts and the "evil eye." See Panofsky, *Tomb Sculpture* (1964), p. 9 f.

497. Sokol'skii, op. cit., p. 166, notes this gradual disappearance of the ritual among the late Sarmatians of the third and fourth centuries.

498. Obel'chenko, "Lyavandakskii mogil'nik" (1961) reports on over 100 kurgans near Ashkhabad, Turkmen SSR, excavated in 1953. Only 10 of the kurgans are systematically reported. Three swords are listed. All are double-edged iron types (p. 131, fig. 8) with straight guards. They lie at the left side of the skeletons. Only one is preserved in its full length of one meter. The preserved portions of the others, lacking pommels and blade tips, are 29.53 and 33.46 inches. Remains of wooden scabbards and grips were found with each sword. The author points to the close relationship between these swords and late Prokhorovka types from the lower Volga which in turn are related to earlier types farther north. Similar swords from the lower Volga were assigned to the second century B.C. by Smirnov, "Kurgany u sel. Ilovatka i Politatdel'skoe" (1959), p. 270 and p. 271, figs. 25-26. Two of the Lyavandak swords are ascribed to the second to first century B.C., while the third is placed in the late-first century B.C. or early first century after Christ (p. 162 f.). Several swords of a similar type were found at Kuyu-mazar in southern Turkmenistan: Obel'chenko, p. 132 and p. 140, fig. 10, nos. 17-19. One of these swords is a meter long. The hilt and guard of a sword of typical Prokhorovka form was found in kurgan four at Akdzhartepe in the Samarkand district farther to the east: Obel'chenko, "Mogil'nik Akdzhartepe" (1962), p. 64, fig. 4: right. The author considers the appearance of this sword here to be necessarily later than similar types from the southern Urals and ascribes the burial to the second to first centuries B.C. (p. 65). Tolstov reports on long iron swords of the fifth century B.C. at Chirik-rabat to the east of the Aral Sea, pointing to parallels from the south Volga region: "Scythians of the Aral Sea Area" (1963), p. 158. Elsewhere, Tolstov and Itina have published several long iron swords with butterfly-shaped guards from Saka burials at Tagisten on the Syrdarya: "Saka nizov'ev Syr-dari" (1966). The long iron swords belonging to the Dzhunskaya Culture (first to fourth centuries after Christ) in the Tashkent-Samarkand region of Uzbekistan are related to lower Volga, late-Sarmatian swords of the second to fourth centuries: Terenozhkin, "Sogd i Chach" (1950), p. 159; Oboldueva, "Kurgany kaunchinskoi i dzhunskoi kul'tur" (1948), p. 102.

499. Masson, "Nekotorye novye dannye po istorii Parfi" (1950).

500. Bernshtam, *Istoriko-arkheologicheskie ocherki* (1952), pp. 321, 325, and p. 306, fig. 132:5.

501. Devlet, "Iz istorii osvoeniya metallurgii zhelza na srednem Enisee" (1968), p. 38.

502. Oral communication cited by Maenchen-Helfen in "Crenelated Mane and Scabbard Slide" [1957], p. 135.

503. Rudenko, *Kul'tura naseleniya gornogo Altaya* (1953), p. 139, fig. 82; and pl. XCV.

504. "Crenelated Mane and Scabbard Slide" [1957].

505. Haskins, "Targhyn—the Hero" (1961), p. 165.

506. Azarpay "Some Classical and Near Eastern Motifs" (1959);

Roes, "Achaemenid Influences" (1952); Rudenko, *Iskusstvo Altaya i Perednej Azii* (1961).

507. Rostovtsev, "L'art gréco-iranien" (1931-1932), pl. LXV:b; idem, *Sredinnaya Aziya* (1929b), pl. X; idem, "The Great Hero of Middle Asia" (1930-1932), p. 109, fig. 2; Rudenko, *Sibirskaya kolleksiya Petra I* (1962b), pl. I:5. Ghirshman, *Parthians and Sassanians* (1962), p. 267, fig. 345. Ghirshman's date of first century B.C. to first century after Christ is certainly too late.

508. Haskins, "Targhyn—the Hero" (1961), p. 169, ascribes this plaque and others related to it to the fifth to third centuries B.C.

509. Rostovtsev, *Sredinnaya Aziya* (1929b), p. 22; idem, *The Animal Style in South Russia and China* (1929a), p. 53.

510. Haskins, op. cit., pp. 159 ff., in his own study of the relationship of these plaques to Pazyryk, has summarized earlier opinions.

511. Fukai, "Artifacts of Hatra" (1960), p. 147, fig. 8; Pugachenkova, *Khalchayan* (1966) frontispiece and pls. XXII-XXIV, XXX, XXXI.

512. Haskins, op. cit., pl. I, fig. 2, the so-called "pastoral plaque."

513. Haskins, op. cit., p. 164 f. Maenchen-Helfen, op. cit., p. 137, thinks the men of the Siberian plaque and the Issyk altar have Mongol features distinct from those of the Pazyryk equestrian and the horseman on the Siberian hunting plaque (Figure 42). The people are the same; the difference is only that of frontal and profile representation. The costumes also are identical as are, insofar as it is possible to tell, the trappings of the horses.

514. Haskins, loc. cit.

515. "Crenelated Mane and Scabbard Slide" [1957], p. 137.

516. If Tolstov's theory that the Yüeh-chih are a splinter group of the Messagetae which moved from the southern Kazakhstan steppe to the north borders of China during the sixth century B.C. is correct, the case for the Yüeh-chih as bearers of the scabbard slide would be firm: "Osnovnye voprosy drevnej istorii Srednej Azii" (1938).

# Literature Cited

## ABBREVIATIONS

KK	See <i>K'ao-ku t'ung-hsün</i> .
KKHP	See <i>K'ao-ku hsüeh-pao</i> .
KKTH	See <i>K'ao-ku t'ung-hsün</i> .
KSIA, ANSSSR	<i>Kratkie soobshcheniya o dokladakh i polevykh issledovaniyakh Instituta arkheologii</i> , Akademiya nauk sssr, Moscow (number 82 to present; continuation of KSIIMK, ANSSSR).
KSIIMK, ANSSSR	<i>Kratkie soobshcheniya o dokladakh i polevykh issledovaniyakh Instituta istorii material'noi kul'tury</i> , Akademiya nauk sssr (numbers 1, 1939-81, 1961; continued as KSIA, ANSSSR).
MIA	<i>Materialy i issledovaniya po arkheologii sssr</i> .
SA	<i>Sovetskaya Arkheologiya</i> .
WW	See <i>Wen-wu ts'an-k'ao tzu-liao</i> .
WVTKTL	See <i>Wen-wu ts'an-k'ao tzu-liao</i> .

## CHINESE AND JAPANESE SOURCES

- An-hui sheng po-wu-kuan 安徽省博物館 (Anhui Provincial Museum).  
1956. Ho-fei hsi chiao Wu-kuei-tun ku mu ch'ing-li chien-pao 合肥西郊烏龜墩古墓清理簡報 (Brief report on the excavations at Black Tortoise mound in the western suburbs of Ho-fei). WVTKTL, 2:46-51.
- Chang Hsin-ju 張欣如  
1956. Ch'ang-sha nan chiao Sha-tzu-t'ang Han mu 長沙南郊砂子塘漢墓 (Excavations of the Han tombs at Sha-tzu-t'ang in the southern suburb of Ch'ang-sha.) KK, 3:116-118.
- Chang Hung-chao 章鴻釗  
*Chung-kuo t'ung ch'i shih-tai yeh t'ieh k'ao* 中國銅器時代古鐵考 (A study of the development of the bronze and iron periods in China). [Not seen; findings summarized in Yang K'uan, 1956.]
- Chang Mo-chün 張默君  
n.d. *Chung-kuo ku yü li-tai wen-hua chih shan chin* 中國古玉與歷代文化之嬗習 (Chinese ancient jade and culture). Taipei [1957?].
- Ch'ang-sha fa-chüeh pao-kao*  
1957. *Chang-sha fa-chüeh pao-kao* 長沙發掘報告 (Report of excavations at Ch'ang-sha. *Chung-kuo t'ien-yeh k'ao-ku pao-kao chi* 中國田野考古報告集 (Chinese field archaeology reports). K'ao-ku hsüeh-chuan k'an 考古學專刊 (Special archaeological studies). Series 4, 2, Peking.
- Che-chiang sheng  
1957. Che-chiang sheng wen-wu kuan-li wei-yüan-hui 浙江省文物管理委員會 (Commission for Preservation of Cultural Properties, Chekiang Province), *Che-chiang Shao-hsing Li-chu Tung-Han mu fa-chüeh chien-pao* 浙江紹興漢唐東漢墓發掘簡報 (Preliminary report on the excavations at Li-chu, Shao-hsing, Chekiang Province). KKTH 2:6-12.
- Ch'en Jen-t'ao 陳仁壽  
1952. *Ch'ing-kuei lun ku ch'u chi* 金輿論古初集 (Essays on Chinese antiquities; the first album of King-Kwei's collection with explanations). Hong Kong.
- Ch'eng Ying-lin 程應麟  
1957. Chiang-hsi-ti Han mu yü Liu-ch'ao mu tsang 江西的漢墓與六朝墓葬 (Ancient graves of the Han and Six Dynasties discovered in Kiangsi Province). KKHP, 1:163-168.
- Chiang Jo-shih 蔣若思  
1957. Lo-yang ku mu chung-ti t'ieh chih sheng-ch'an kung-chü 洛陽古墓中的鐵製生產工具 (Manufactured ironwork implements from ancient Lo-yang tombs). KKTH, 2:81-85.
- Chiang-su sheng Su-chou  
1965. Chiang-su sheng Su-chou po-wu-kuan 江蘇省蘇州博物館 (Soochow Provincial Museum, Kiangsu Province), *Su-chou Wu Chang Shih-ch'eng mu Ts'ao shih mu ch'ing-li chien-pao* 蘇州吳張上臧母曹氏墓清理簡報 (Excavation of the tomb of Chang Shih-ch'eng's mother, née Ts'ao, at Soochou), edited by Wang Te-ch'ing 王德慶. KK, 6:289-300.
- Chiang-su sheng wen-wu  
1959. Chiang-su sheng wen-wu kuan-li wei-yüan-hui 江蘇省文物管理委員會 (Commission for Preservation of Cultural Properties, Kiangsu Province), *Chiang-su Hsü-chou Han hua-hsiang shih* 江蘇徐州漢畫象石 (Han dynasty stone reliefs from Hsü-chou, Kiangsu Province). *Chung-kuo t'ien-yeh k'ao-ku pao-kao chi* 中國田野考古報告集 (Chinese field archeology reports). K'ao-ku hsüeh-chuan k'an 考古學專刊 (Special archeological studies). Series 2, 10, Peking.
- Chiang Yüan-i 蔣玄佑  
1949-1950. *Ch'ang-sha Ch'u min-tsu chi ch'i i-shu* 長沙楚民族及其藝術 (Ch'ang-sha, the Ch'u tribe and its art). 2 volumes. Shanghai.
- Ch'u wen-wu*  
1954. *Ch'u wen-wu chan-lan t'u-lu* 楚文物展覽圖錄 (An exhibition of cultural objects from Ch'u). Peking

*Chüan kuo chi pen chien she*

1955. *Ch'uan kuo chi pen chien she kung-ch'eng-chung ch'u-t'u wen-wu chan-lan l'u-lu* 全國基本建設工程中出土文物展覽圖錄 (A pictorial record of the profusion of historical material displayed through excavations resulting from the construction of public works projects all over the country), edited by Cheng Chen-to 鄭振鐸. 2 volumes. Shanghai.

## Chung-kuo k'o-hsüeh yüan

1963. Chung-kuo k'o-hsüeh yüan 中國科學院 (Chinese Academy of Sciences), K'ao-ku yen-chiu so 考古研究所 (Institute of Archeology), Lo-yang fa-chüeh tui 洛陽發掘隊 (Lo-yang archeological team), Lo-yang hsi chiaio Han mu fa-chüeh pao-kao 洛陽西郊漢墓發掘報告 (Excavations of Han tombs in the western suburbs of Lo-yang). ККНР, 2:1-58.

*Chung-kuo ku tai kung-i*

1960. *Chung-kuo ku tai kung-i t'u-an* 中國古代工藝圖案 (Ancient Chinese designs of crafts and arts), compiled by T'ang Tan-feng 唐丹鳳 Hong-Kong.

*Chung-kuo ku tai shih-k'e hua*

1957. *Chung-kuo ku tai shih-k'e hua hsüan-chi* 中國古代石刻畫選集 (Collection of ancient Chinese stone-engraved pictures), edited by Wang Tzu-yün 王子雲. Peking.

*Chung-kuo ku wen-wu*

1962. *Chung-kuo ku wen-wu* 中國古文物 (Ancient relics of China), edited by Chan Hui-chüan 詹惠娟. Photographs by W. and B. Forman. Peking: The People's Art Publishing House.

## Egami Namio 江上波夫

1948. *Yûrashia kodai hoppô bunka, kyôdo bunka ronkô* ユラシア古代北方文化匈奴文化論考 (North Eurasian culture in ancient times, an inquiry into the culture of the Hsiung-nu). Tôkyô.

## Egami Namio and Mizuno Seiichi 水野清

1935. *Inner Mongolia and the Region of the Great Wall*. Archaeologia Orientalis, B series, 1, Tôa kôkogaku kai 東亞考古學會 (Far Eastern Archaeological Society). Tôkyô and Kyôto.

## Hamada Kôsaku 濱田耕作

1925. *Yûchikusaizô kogyokufu* 有竹齋藏古玉譜 (Early Chinese jades in the collection of the late Seiichi Ueno). 2 volumes. [Tôkyô.]

1929. *P'i-tzu-wo* 窩子窰; Prehistoric Sites by the River Pi-liu-ho 碧流河, South Manchuria, Archaeologia Orientalis, A series, 1, Tôa kôkogaku kai 東亞考古學會 (Far Eastern Archaeological Society). Tôkyô and Kyôto.

## Hamada Kôsaku and others

1934. *Rakurô saikyô-zuka* 樂浪彩鏡塚 (The tomb of the Painted Basket of Lo-lang), Detailed Report of Archaeological Research, volume 1, Chôsen koseki kenkyû-kai 朝鮮古蹟研究會 (Society for the Study of Korean Antiquities). Keijô.

## Hamada Kôsaku and Umehara Sueji 梅原未治

1934. *Senoku seishô* 泉屋清賞 (The collection of old bronzes of Baron Sumitomo). New edition, revised. Kyôto.

## Harada Yoshito 原田淑人

1925. *Saiiki hakken no kaiga ni mietaru fukushoku no kenkyû* 西域發見の繪畫に見たる服飾の研究 (Studies of costumes as observed in the paintings discovered in Chinese Turkestan). The Tôyô Bunko Publications, series A, 4. Tôkyô.

1937. *Kan Rikuchô no fukushoku* 漢六朝の服飾 (Chinese dress and personal ornaments in the Han and Six Dynasties). The Tôyô Bunko Publications, series A, 23. Tôkyô.

1944. *Tôa kobunka kenkyû* 東亞古文化研究 (Study of the early civilization of East Asia). Tôkyô. [1940, 3rd edition, Tôkyô.]

## Harada Yoshito and Komai Kazuchika 駒井和愛

1931. *Bokuyôjô: Minami Manshû Rôketsu sanroku oyobi Kan izen iseki* 牧羊城南滿州老鐵山麓及漢以前遺蹟 (Mu-yang-ch'eng: Han and pre-Han sites at the foot of Mount Lao-t'ieh, South Manchuria). Archaeologia Orientalis, A series, 2, Tôa kôkogaku

kai 東亞考古學會 (Far Eastern Archaeological Society). Tôkyô and Kyôto.

- Ho-nan sheng wen-hua chü wen-wu kung-tso tui 河南省文化局文物工作隊 (The archeological team, Bureau of Culture, Honan Province).

- 1959a. Ho-nan Yü-hsien Pai-sha Han mu fa-chüeh pao-kao 河南禹縣白沙漢墓發掘報告 (Excavations of the Han tombs at Pai-sha, Yü-hsien, Honan Province). ККНР, 1:61-84.

- 1959b. Ho-nan Hsin-an T'ieh-men-chen Hsi-Han mu tsang fa-chüeh pao-kao 河南新安鐵門鎮西漢墓發掘報告 (Excavations of Western Han tombs at T'ieh-men-chen, Hsin-an, Honan Province). ККНР, 2:57-73.

*Hsin Chung-kuo-ti k'ao-ku*

1961. *Hsin Chung-kuo-ti k'ao-ku shou-huo* 新中國的考古收穫 (Archeology in new China). K'ao-ku hsieh-chuan k'an (Special archeological studies). Series 1, 6. Peking.

*Hsü k'ao-ku t'u*

1887. *Hsü k'ao-ku t'u* 續考古圖 (Supplement to antiquities illustrated), compiled by Chao Chiu-ch'eng 趙九城, 12th century. [Ed. cit., n. p. preface dated 1887.]

*Hsüeh-t'ang so ts'ang*

1923. *Hsüeh-t'ang so ts'ang ku ch'i wu t'u* 雪堂所藏古器物圖 (Illustrations of ancient objects in the collection of Lo Chen-yü), compiled by Lo Chen-yü 羅振玉 [N. p., preface dated 1923.]

## Hua Chüeh-ming 華覺明 and others

1960. Chan-kuo liang Han t'ieh ch'i-ti chin-hsiang hsüeh-k'ao ch'a ch'u-pu pao-kao 戰國兩漢鐵器的金相學考查初步報告 (Preliminary reports on the metallographical studies of the Warring States and Han iron implements). ККНР, 1:73-87.

## Huang Chün 黃楫

1935. *Heng-chai ts'ang chien ku yü t'u* 衡齋藏見古玉圖 (Ancient jades collected and seen at the Heng-chai studio). Peking. [Scale of illustrated objects uncertain.]

1939. *Ku yü tu-lu ch'u chi* 古玉圖錄初集 (Illustrations of ancient jade). Peking.

## Huang-ho shui-ku

1965. Huang-ho shui-ku k'ao-ku kung-tso tui 黃河水庫考古工作隊 (Yellow River Reservoirs Archeological Team), Ho-nan Shan-hsien Liu-chia-ch'ü Han mu 河南陝縣劉家渠漢墓 (Excavations of the Han tombs at Liu Chia Ch'ü, Shanhsien). ККНР, 1:107-167.

## Hu-nan sheng po-wu-kuan 湖南省博物館 (Hunan Provincial Museum)

1959. Ch'ang-sha Ch'u mu 長沙楚墓 (The Ch'u tombs at Ch'ang-sha). ККНР, 1:41-58.

1960. Ch'ang-sha Wu-li-p'ai ku mu tsang ch'ing-li chien-pao 長沙五里牌古墓葬清理簡報 (Summary report on ancient burials at Wu-li-p'ai, Ch'ang-sha). ww, 3:38-49.

## Hu-nan sheng wen-wu kuan-li wei-yüan-hui 湖南省文物管理委員會 (Commission for Preservation of Cultural Properties of Hunan Province).

1956. Pei tao chüeh-kuo-ti ku mu tsang shih fou hai chih-te ch'ing-li? 被盜掘過的古墓是否還值得清理? (Is it still worth examining ancient tombs rifled by bandits?). wwtktl, 10:37-41.

1957. C'ang-sha Yang-t'ien-hu ti-25-hao mu kuo mu 長沙仰天湖第25號木槨墓 (Tomb no. 25 with wooden chambers excavated at Yang-t'ien-hu, Ch'ang-sha, Hunan). ККНР, 2:85-94.

- 1957b. Hu-nan Ch'ang-sha Hsi-Han mu ch'ing-li chien-pao 湖南長沙西漢墓清理簡報 (Summary report on a Western Han tomb at Ch'ang-sha, Hunan Province). ККНН, 4:30-32.

*Hui-hsien fa-chüeh pao-kao*

1956. *Hui-hsien fa-chüeh pao-kao* 輝縣發掘報告 (Report on the excavations at Hui-hsien). Chung-kuo t'ien-yeh k'ao-ku pao-kao chi 中國田野考古報告集 (Chinese field archeology reports), volume 1, Chung-kuo k'o-hsüeh yüan 中國科學院 (Chinese



- Academy of Sciences), K'ao-ku yen-chiu so 考古研究所 (Institute of Archeology). Peking.
- I-nan ku hua-hsiang*  
1956. *I-nan ku hua-hsiang shih mu fa-chüeh pao-kao* 沂南古畫像石墓發掘報告 (A report on the ancient stone engravings found in a tomb at I-nan). Compiled by Tseng Chao-yu 曾昭燏 and others. Shanghai.
- Indo Tōnan Ajia*  
1953. *Indo Tōnan Ajia* インド東南アジア (Art of India and Southwest Asia). Sekai bijutsu zenshū 世界美術全集 (Corpus of world art). Volume 11. Tōkyō.
- Jung Keng 容庚  
1929. *Ku wu ch'en-lieh so* 古物陳列所 *Pao-yün lou i ch'i t'u-lu* 寶壙樓彝器圖錄 (Illustrated catalog of bronze sacrificial vessels in the Pao-yün lou of the Ku wu ch'en-lieh so). Peking.  
1934. *Ku wu ch'en-lieh so* 古物陳列所 *Wu-ying tien i ch'i t'u-lu* 武英殿彝器圖錄 (Catalog of ancient bronzes formerly in Imperial collection at Jehol, now in the Wu-ying Palace of the Ku wu ch'en-lieh so). Peking.  
1941. *Shang Chou i ch'i t'ung-k'ao* 商周彝器通考 (The bronzes of Shang and Chou). Yen-ching Journal of Chinese Studies, monograph series, number 17, 2 volumes. Peking.
- K'ao-ku hsüeh-pao*  
*K'ao-ku hsüeh-pao* 考古學報 (Chinese Journal of Archeology), published by K'ao-ku yen-chiu so 考古研究所 (Institute of Archeology), Chung-kuo k'o-hsüeh yüan 中國科學院 (Chinese Academy of Sciences). Peking. [Published irregularly, 1936-1955; quarterly, 1956 to 1967.]
- K'ao-ku t'u*  
1752. *K'ao-ku t'u* 考古圖 (Archeological illustrations), compiled by Lü Ta-lin 呂大臨 (fl. 11th century). [First published in 1092; reprinted 1752.]
- K'ao-ku t'ung-hsün*  
*K'ao-ku t'ung-hsün* 考古通訊 (Archeological Reports), published by K'o-hsüeh ch'u-pan-she 科學出版社 (Science press). Peking. [Monthly; title changed to *K'ao-ku* (Kaogu) 考古 (Archeology) beginning 1959.]
- Kōbe, Hakutsuru Bijutsukan 神戸市立美術館 (Hakutsuru Museum).  
1954. *Chūgoku kogyoku-ten* 中國古物展 (Exhibition of ancient Chinese jade belonging to Mr. J. T. Chen), May 5-23.
- Komai Kazuchika 駒井和愛  
1953. *Chūgoku kokyō no kenkyū* 中國古鏡の研究 (A study on the Chinese mirrors of the pre-Six Dynasties period). Tōkyō.
- Ku-kung  
*Ku-kung* 故宮 (Palace Museum Monthly). Peking, Imperial Palace Museum. [Published numbers 1-43, September 1929-December 1932.]
- Ku-kung chou-k'an*  
*Ku-kung chou-k'an* 故宮週刊 (Palace Museum Weekly). Peking, Imperial Palace Museum. [Published volumes 1, 1-21, 510, October 10, 1930-April 25, 1937.]
- Ku ming-ch'i t'u-lu*  
1916. *Ku ming-ch'i t'u-lu* 古明器圖錄 (Illustrations of ancient tomb objects), compiled by Lo Chen-yü 羅振玉. [Privately printed.]
- Ku yü t'u*  
1752. *Ku yü t'u* 古玉圖 (Illustrations of ancient jade), compiled by Chu Te-jun 朱德潤. [Preface dated 1341; republished 1752, bound with *K'ao-ku t'u* (1752).]
- Ku yü t'u-lu*  
*Ku yü t'u-lu* 古玉圖錄 (Illustrated record of ancient jade), compiled by Ch'ü Chung-jung 瞿中溶. [Published ca. 1890 (not seen).]
- Ku yü t'u p'u*  
1779. *Ku yü t'u p'u* 古玉圖譜 (Illustrated treatise on ancient jade). [Supposedly first published in 1176; See page 219 for discussion of this work.]
- Kuang-chou shih  
1956. Kuang-chou shih wen-wu kuan-li wei-yüan-hui 廣州市文物管理委員會 (Commission for Preservation of Cultural Properties, Canton Administrative District), San-nien-lai Kuang-chou shih ku mu tsang-ti ch'ing-li ho fa-hsien 三年來廣州市古墓葬的清理和發現 (Reports on ancient tombs discovered during the last three years in the Canton Administrative District). WWTKL, 5:21-32.
- Kuei-chou sheng po-wu-kuan 貴州省博物館 (Kueichow Provincial Museum)  
1959. Kuei-chou Ch'ing-chen P'ing-pa Han mu fa-chüeh pao-kao 貴州清鎮平場漢墓發掘報告 (The excavation of the Han tombs at P'ing-pa, Ch'ing-chen, Kueichow Province), ККНР, 1:85-103.
- Kuo Pao-chün 郭寶鈞  
1956. Lo-yang Chien-pin ku wen-hua i chih chi Han mu 洛陽閿津古文化遺址及漢墓 (Early dwelling sites and Han tombs excavated at the valley of Chien River, Lo-yang). ККНР, 1:11-28.
- Li Cheng-kuang 李正光 and P'eng Ch'ing-yeh 彭青野  
1957. Ch'ang-sha Sha-hu-ch'iao i tai ku mu fa-chüeh pao-kao 長沙沙湖橋一帶古墓發掘報告 (Excavations of ancient cemeteries at Sha-hu-ch'iao, Ch'ang-sha). ККНР, 4:33-67.
- Li Chi 李濟  
1932. Yin-hsü t'ung ch'i wu chung ch'i ch'i hsiang-kuan chih wen-t'i 殷虛銅器五種及其相關之問題 (Problems related to five types of bronze weapons from Yin-hsü), *Ts'ai Yüan-p'ei hsien-sheng liu-shih-wu sui ch'ing-chu lun-wen chi* 蔡元培先生六十五歲慶祝論文集 (A collection of essays presented to Ts'ai Yüan-p'ei on his sixty-fifth anniversary). Part 1:73-104. Peking.
- Li I-yu 李逸友  
1957. Nei-meng-ku hsi pu ti ch'ü-ti Hsiung-nu ho Han-tai wen-wu 內蒙古西部地區的匈奴和漢代文物 (Artifacts of the Han dynasty and the Hsiung-nu in the western regions of Inner Mongolia). WWTKL, 4:29-32.
- Lin Shou-chin 林壽晉  
1962. Tung Chou shih t'ung chien ch'u lun 東周式銅劍初論 (On the origin of Eastern Chou sword types). ККНР, 2:75-84.
- Lo-yang Chung-chou-lu*  
1959. *Lo-yang Chung-chou-lu* 洛陽中州路 (Excavations at Chung-chou-lu, Yang). Chung-kuo t'ien-yeh k'ao-ku pao-kao chi 中國田野考古報告集 (Chinese field archeology reports), K'ao-ku hsüeh-chuan k'an 考古學專刊 (Special archeological studies), Series 4, 4. Peking.
- Lo-yang Shao-kou Han mu*  
1959. *Lo-yang Shao-kou Han mu* 洛陽燒溝漢墓 (Han tombs at Shao-kou, Lo-yang). Chung-kuo t'ien-yeh k'ao-ku pao-kao chi 中國田野考古報告集 (Chinese field archeology reports), K'ao-ku hsüeh-chuan k'an 考古學專刊 (Special archeological studies), Series 4, 6. Peking.
- Mai Ying-hao 麥英豪  
1958. Kuang-chou Hua-ch'iao hsin ts'un Hsi-Han mu 廣州華僑新村西漢墓 (Western Han graves at Hua-ch'iao hsin ts'un, Canton). ККНР, 2:39-76.
- Masuda Seiichi 增田清一  
1961. The Origin of *yamagata* 山形 Suspender Mounts of Swords. *Museum*, 126 (September): 30-32.  
1965. On Sword Guards of *shitōgi* 牽鐮 Form. *Museum*, 173 (August):2-9.
- Mizuno Seiichi 水野精一  
1959. *In Shū seidōki to gyoku* 殷周青銅器と玉 (Bronzes and jades of ancient China). Translated by J. O. Gauntlet. Tōkyō.

- Mizuno Seiichi and Kobayashi Yukio 小林行雄  
1959. *Kōkogaku jiten* 考古學辭典 (Dictionary of Archeology). Tōkyō.
- Na Chih-liang 那志良  
1960. *Yü chien shih* 玉劍飾 (Jade sword fittings). Bulletin of the Institute of History and Philology, Academia Sinica, extra volume, number 4, Studies Presented to Tung Tso-pin on His Sixty-fifth Birthday, part 1: 455-466. Taipei.  
1964. *Yü ch'f t'ung-shih* 玉器通釋 (A study of jade). Volume 1. Taipei.
- Nagahiro Tosio 長廣敏雄  
1943. *Taikō no kenkyū* 帶鉤の研究 (Researches on the belt hook). Kyōto.
- Nei-meng-ku ch'u-t'u  
1963. *Nei-meng-ku ch'u-t'u wen-wu hsüan-chi* 內蒙古出土文物選集 (Survey of antiquities from excavations in Inner Mongolia), Nei-meng-ku tzu-chih-ch'ü wen wu kung-tso tui 內蒙古自治區文物工作隊 (Archeological team of the Autonomous District of Inner Mongolia). Peking.
- Ōmura Seigai 大村西崖  
1915-1920. *Shina bijutsu-shi chōso-hen* 支那美術史 彫塑編 (History of Chinese bronzes and sculptures). Text and Atlas. Tōkyō.
- Ono Katsutoshi 小野勝年 and Hibino Takeo 日比野丈夫  
1946. *Mōkyō hōko ki* 蒙疆考古記 (Archeological notes from the Mongolian border). Kyōto.
- Sekai hōkogaku taikai 世界考古學大系 (Archeology of the world).  
1958. Volume 6, Eastern Asia, part 2: Yin and Chou periods, edited by Mizuno Seiichi 水野清一. Tōkyō.  
1959. Volume 7, Eastern Asia, part 3: Han to T'ang periods, edited by Komai Kazuchika 駒井和愛. Tōkyō.
- Sekino Takeshi 關野雄  
1956a. Chūgoku kodai no shakudo ni tsuite 中國古代の尺度について (Concerning linear measure of ancient China). *Chūgoku hōkogaku kenkyū* 中國考古學研究 (Studies in Chinese archeology). Tōkyō University, Tōyō bunka kenkyūjo 東洋文化研究所 (Institute for Oriental Culture). Pages 375-408. Tōkyō.  
1956b. Chūgoku shoki tekki-bunka no ichikōsatsu—dō tetsu kodoki no kaimei ni yosete 中國初期鐵器文化の一考察—銅鐵過渡期の解明に寄せて (A study of early iron age culture in China—the transition from bronze to iron). *Chūgoku hōkogaku kenkyū* 中國考古學研究 (Studies in Chinese archeology), Tōkyō University: Tōyō bunka kenkyūjo 東洋文化研究所 (Institute for Oriental Culture). Pages 159-231. Tōkyō.
- Sekino Tadashi 關野貞 and others  
1925-1927. *Rakurō-gun jidai no iseki* 樂浪郡時代の遺蹟 (Archeological researches on the ancient Lo-lang district). *Koseki chōsa tokubetsu hōkoku* 古蹟調査特別報告 (Special Report of the Service of Antiquities), volume 4 (2 vols. pls., 1 vol. text), Government-General of Chōsen. [See also preliminary report by Sekino published in *Koseki chōsa hōkoku* 古蹟調査報告 (Report of investigations of ancient remains), volume 2, 1917, pages 617 ff, Keijo. *Wiener Beiträge zur Kunst- und Kulturgeschichte Asiens*, 7 (Vienna, 1933) is devoted to articles on aspects of the Lo-lang excavations.]
- Shan-hsi sheng  
1957. Shan-hsi sheng wen-wu kuan-li wei-yüan-hui 山西省文物管理委員會 (Commission for Preservation of Cultural Properties, Shansi Province). Shan-hsi Ch'ang-ch'ih shih Fen-shui-ling ku mu-ti ch'ing li 山西長治市分水嶺古墓的清理 (Excavation of ancient graves at Fen-shui-ling, Ch'ang-ch'ih district, Shansi Province). ККНР, 1:103-118.
- Shang Ch'eng-tso 商承祚  
1939. *Ch'ang-sha ku wu wen chien-chi* 長沙古物聞見記 (Report on the antiquities of Ch'ang-sha). Chungking.
- Shen Chung-ch'ang  
1959. *Szu-ch'uan Chao-hua Pao-lun chen Nan-Pei-Ch'ao shih-ch'i-ti yai mu* 四川昭化寶輪鎮南北朝時期的崖墓 (The rock tombs of the Southern and Northern Dynasties at Pao-lun in Chao-hua county, Szechuan Province). ККНР, 2:109-126.
- Shen-hsi sheng  
1961. Shen-hsi sheng wen-wu kuan-li wei-yüan-hui 陝西省文物管理委員會 (Commission for Preservation of Cultural Properties, Shensi Province). T'ung-kuan Tiao-ch'iao Han tai Yang-shih mu ch'ün fa-chüeh chien-chi 潼關吊橋漢代楊氏墓發掘簡記 (Preliminary report on the excavation of the Yang family tomb group of the Han dynasty at Tiao-ch'iao, T'ung-Kuan). ww, 1:56-66.
- Shen-pei Tung-Han hua-hsiang  
1959. *Shen-pei Tung-Han hua-hsiang shih-k'e hsüan-chi* 陝北東漢畫象石刻選集 (Collection of engraved stone reliefs of Eastern Han from northern Shensi), Shen-hsi sheng po-wu-kuan 陝西省博物館 (Shensi Provincial Museum). Peking.
- Shou-hsien Ts'ai-hou mu  
1956. *Shou-hsien Ts'ai-hou mu ch'u-t'u i-wu* 壽縣蔡侯墓出土遺物 (Archeological finds at the tomb of the Marquis of Ts'ai in Shou-hsien), compiled by An hui sheng wen-wu kuan-li wei-yüan-hui 安徽省文物管理委員會 (Commission for Preservation of Cultural Properties, Anhui Province) and An-hui sheng po-wu-kuan 安徽省博物館 Anhui Provincial Museum). Chung-kuo t'ien-yeh k'au-ku pao-kao chi 中國田野考古報告集 (Chinese field archeology reports), K'ao-ku hsüeh-chuan k'an 考古學專刊 (Special archaeological studies). Series 2, 5. Peking.
- Shū Kan ihō  
1932. *Shū Kan ihō* 周漢遺寶 (Relics of Han and pre-Han dynasties), Catalog of an exhibition held in May 1932, The Imperial Household Museum, Tōkyō, compiled by Harada Yoshito 原田淑人, English resumé and notes by Jiro Harada. Tōkyō.
- Su Wen-chin 蘇文錦  
1964. Shan-tung Liang-shan Pai-mu-shan-ti i tso Tung-Han mu 山東梁山柏木山的一座東漢墓 (Eastern Han burials at Pai-mu-shan, Liang-shan, Shantung Province). КК, 9:479-480.
- Sun Shou-tao 孫守道  
1957. Hsi-ch'a-kou ku mu ch'ün pei chüeh shih-chien-ti chiao-hsün 西岔古墓羣發掘事件的教訓 (What was learned through the excavation of a group of ancient tombs at Hsi-ch'a-kou), WWTKTL, 1:53-56.  
1960. 'Hsiung-nu Hsi-ch'a-kou wen-hua' ku mu ch' ün-ti fa-hsien 匈奴西岔溝文化古墓羣的發現 (Discoveries from a group of ancient tombs of the Hsiung-nu culture at Hsi-ch'a-kou). ww, 8:25-32.
- Sun T'ing-lieh 孫廷烈  
1956. Hui-hsien ch'u-t'u-ti chi-chien t'ieh ch'i ti chin-hsiang-hsüeh k'ao-ch'a 輝縣出土的幾件鐵器底金相學考察 (Metallographical examination of some iron implements from the excavations at Hui-hsien, Honan Province). ККНР, 2:15-140.
- Szu-ch'uan sheng wen-wu kuan-li wei-yüan-hui 四川省文物管理委員會 (Commission for Preservation of Cultural Properties, Szechuan Province.)  
1956. Ch'eng-tu Yang-tzu-shan ti-172-hao mu fa-chüeh pao-kao 成都羊子山第172號墓發掘報告 (Tomb no. 172 excavated at Yang-tzu-shan, Ch'eng-tu). ККНР, 4:1-20.  
1958. Ch'eng-tu tung-pei chiao Hsi-Han mu tsang fa-chüeh chien-pao 成都東北郊西漢墓發掘簡報 (Brief report on the excavation of Western Han tombs in the northeast suburb of Ch'eng-tu). ККНР, 2:14-31.
- T'ao-chai ku yü t'u  
1936. *T'ao-chai ku yü t'u* 陶齋古玉圖 (Illustrated catalog of Tuan-fang's [端方] collection of archaic jades), compiled by Wang

- Ta-lun 王大隆. [First edition 1896; reprinted Shanghai.]  
Tōkyō, Tenri Gallery  
1965. *Exhibition of Figured Bricks and Carved Stones of Ancient China in the Collection of the Tenri University Museum*. Tenri Gallery exhibition catalog 13. Tōkyō.
- Tseng Yung 曾庸  
1959. Han tai-ti t'ieh chih kung-chū 漢代的鐵製工具 (Han dynasty iron tool industry). *ww*, 1:16-17.
- Umehara Sueji 梅原末治  
1930. Furiya bijutsukan shūzō no tōken-sōgu no nisan フリヤ美術館收藏の刀劍裝具の二三 (Some sword fittings in the collection of the Freer Gallery of Art). *Rekishi to Chiri* 歴史と地理 (History and Geography), 25, 3:259-270.  
1933-1935. *Shina kodō seika* 支那古銅精華 (Selected relics of ancient Chinese bronzes from collections in Europe and America). 7 volumes in 3 parts. Ōsaka.  
1934. Some Recently-Discovered Ch'in Mirrors. *The Bijutsu Kenkyū*, 27:123-132.  
1937. *Rakuyō Kinson kobo shūei* 洛陽金村古墓聚英 (Collection of relics from old cemeteries at Chin-ts'un, Lo-yang). Kyōto.  
1938a. *Kodai hōppō-kei bumbutsu no kenkyū* 古代北方系文物の研究 (Northern region art investigations). Ellis H. Minns Anniversary Volume. Kyōto. [See especially chapter 3: Kōkōgaku jō yori mitaru Kan dai bumbutsu no seizen 考古學上より見たる漢代文物の西漸 (Westward movement of the Han-dynasty culture as seen from the archeological viewpoint), pages 40-68, especially section 4, pages 57-65.]  
1938b. *Shinā kōkōgaku ronkō* 支那考古學論攷 (Studies in Chinese archeology). Tōkyō.  
1947. *Tōa kōkōgaku gaikan* 東亞考古學概観 (Outline of Far Eastern Archeology). Kyōto.  
1952. Ryūkin no Kan Rikuchō kyo 靈金の漢六朝鏡 (Gilt bronze mirrors of the Han and Six Dynasties). *Yamato Bunka* 大和文華 (Quarterly Journal of Eastern Arts), 6.  
1955. *Shina kogyoku zurōku* 支那古玉圖錄 (Selected specimens of achaic Chinese jade). Kyōto daigaku bungakubu kōkōgaku shiryō sōkan 京都大學文學部考古學資料叢刊 (Series of archeological relics of the Department of Literature, Kyōto University), 4. Kyōto.  
1956. Sen'goku jidai no gyokuren gyokuhai 戰國時代の玉簪玉杯 (Jade dressing cases and jade cups of the Warring States Period). *Yamato Bunka* 大和文華 (Quarterly Journal of Eastern Art), 18.  
1960. *Mōko Noin-Ula haqken no ibutsu* 蒙古ノイン・ウラ發見の遺物 (Studies of Noin-Ula finds in North Mongolia). The Tōyō Bunko Publications, series A, 27, Tōkyō.
- Umehara Sueji and Fujita Ryōsaku 藤田亮策  
1947-1948. *Chōsen kobunka sōkan* 朝鮮文化綜覧 (Outline of early Korean culture). 2 volumes. Nara.
- Wang Kuo-wei 王國維  
1923. Hu fu k'ao 胡服考 (A study of barbarian clothing), *Kuan t'ang chi lin* 觀堂集林 (Works of Wang Kuo-wei), chūan 22. [Privately printed.]  
1927. Archeology in the Sung Dynasty. Translated by Mr. C. H. Liu. *The China Journal*, 6,5:222-231.  
1928. Chinese Foot-Measures of the Post Nineteen Centuries. Translated by A. W. Hummel and Fung Yu-lan. *Journal of the North China Branch of the Royal Asiatic Society*, 59:111-123.
- Wang-tu Han mu  
1955. *Wang-tu Han mu pi-hua* 望都漢墓壁畫 (Wall paintings from the Han-dynasty tomb at Wang-tu). Pei-ching li-shih po-wu-kuan 北京歷史博物館 (Peking Historical Museum), Ho-pei sheng wen-wu kuan-li wei-yüan-hui 河北省文物管理委員會 (Commission for Preservation of Cultural Properties, Hopei Province). Peking.
- Wen-wu  
*Wen-wu ts'an-k'ao tzu-liao* 文物參考資料 (Research materials on cultural objects), Peking: Wen-wu ch'u-pan-she 文物出版社 (Cultural Objects Press). Title changes 1959 to *Wen-wu* 文物 (Cultural objects).
- Wu Hsing-han 吳興漢  
1957. Shou-hsien Su-wang hsiang fa-hsien Han Chu-wu mu 壽縣蘇王鄉發現漢涿武墓 (Excavation of the tomb of Han Chu-wu at Su-wang village, Shou-hsien). *wwTKTL*, 5:82-83.
- Wu sheng ch'u-t'u  
1958. *Wu sheng ch'u-t'u chung-yao wen-wu chan-lan t'u-lu* 五省出土重要文物展覽圖錄 (A catalog of important cultural objects excavated in five provinces). Peking.
- Wu Ta-ch'eng 吳大徵  
1889. *Ku yü t'u k'ao* 古玉圖考 (Studies on ancient jade with illustrations). Shanghai. [According to Laufer (*Jade*, 1912, page 13), the jades illustrated in this work are reproduced sevenths natural size. Extensive comparison of known types with exact measurements suggests that Laufer is in error.]
- Yang K'uan 楊寬  
1956. *Chung-kuo ku tai yeh t'ieh chi-shu-ti fa-ming ho fa-chan* 中國古代冶鐵技術的發明和發展 (The invention and development of the method of smelting iron in ancient China). Shanghai.
- Yang Tsung-jung 楊宗榮  
1957. *Chan-kuo hui-hua tzu-liao* 戰國繪畫資料 (Materials on the painting of the Warring States period). Peking.
- Yün-nan Chün-ning Shih-chai-shan  
1959. *Yün-nan Chün-ning Shih-chai-shan ku mu ch'ün fa-chüeh pao-kao* 雲南晉寧石寨山古墓群發掘報告 (Report on the excavation of a group of ancient tombs at Shih-chai-shan, Chün-ning, Yünnan Province), Yün-nan sheng po-wu-kuan 雲南省博物館 (Yünnan Provincial Museum). 2 volumes. Peking.

## WESTERN LANGUAGE SOURCES

- Al'baum, L. I.  
1960. *Balalyk-tepe; k istorii material'noi kul'tury i iskusstva Tokharistana*. Tashkent.
- Alikhova, A. E.  
1954. Muranskiĭ mogil'nik i selishche. *MIA* (Moscow), 42:259-301.
- Alikhova, A. E., and S. Prēobraženskiĭ  
1929. Sur quelques modifications chronologiques de la civilisation de Mordva-Mokcha. *Eurasia Septentrionalis Antiqua* (Helsinki), 4:332-339.
- Ammianus Marcellinus  
1939. *History*, volume 3. Loeb Classical Library. Translated by J. C. Rolfe. Cambridge, Mass.
- Ancient Jade Sword and Scabbard Parts  
1927. *The China Journal*, 6 (6):295, 3 plates.
- Andrae, W., and H. Lenzen  
1933. Die Partherstadt Assur. *Wissenschaftliche Veröffentlichung der Deutschen Orient-Gesellschaft* (Leipzig), 57.
- Andrews, F. H.  
1935. *Descriptive Catalogue of Antiquities Recovered by Sir Aurel*

- Stein . . . during His Explorations in Central Asia, Kansu and Eastern Iran. Delhi.
- Anfinov, N. V.  
1951. Meoto-sarmatskiĭ mogil'nik u stanitsy Ust'-Labinskoĭ. *MIA* (Moscow-Leningrad), 23:155-207.
- Antiquus Idiota [pseud.]  
1928. Sui and Ancient Chinese Swords. *The China Journal*, 8 (6): 299-300.
- Arnold, J.  
1933. *The Altar of the Green Jade Pagoda*. Shanghai.
- Arrian  
1946-1949. *Anabasis Alexandri and Indica*. Translated by E. I. Robson. Revised edition, 2 volumes. Loeb Classical Library. Cambridge, Mass.
- Artamonov, M. I.  
1969. *Treasures from Scythian Tombs in the Hermitage Museum, Leningrad*. Translated by V. R. Kupriyanova, with an introduction by T. Talbot Rice. London.
- Artsikhovskii, A. V.  
1949. Raskopki na Slavne v Novgorode. *MIA* (Moscow-Leningrad), 11:119-151.
- Arzyutov, N. K.  
1936. Atkarskiĭ kurgannyĭ mogil'nik raskopki 1928-30 gg. *Izvestiya Saratovskogo nizhne-volzhskogo instituta kraevedeniya imeni M. Gor'kogo* (Saratov), 7:86-101.
- Aspelin, J. R.  
1877. *Antiquités du nord finno-ougrien, II: L'âge du fer, antiquités permianes*. Translated from Finnish by G. Biaudet. Helsinki.
- Azarpay, G.  
1959. Some Classical and Near Eastern Motifs in the Art of Pazyryk. *Artibus Asiae*, 22(4):313-339.
- Bachhofer, L.  
1947. *A Short History of Chinese Art*. London.  
n.d. *Early Indian Sculpture*. 2 volumes. New York.
- Barnard, N.  
1961. Bronze Casting and Bronze Alloys in Ancient China. *Monumenta Serica Monograph*, 14. Tōkyō.
- Barthoux, J.  
1930. Les fouilles de Hadha, figures et figurines: Album photographique. *Mémoires de la Délégation archéologique française en Afghanistan*, 6. Paris.
- Basham, A. L., editor  
1968. Papers on the Date of Kaniska Submitted to the Conference on the Date of Kaniska, London, 20-22 April, 1960. *Oriental Monograph Series*, 4. Leiden: Australian National University Centre of Oriental Studies.
- Baye, Baron J. de  
1890. La bijouterie des Goths en Russie. *Mémoires de la Société Nationale des Antiquaires de France*, series 6, (1) [volume 51]: 358-372. Paris.
- Behmer, E.  
1939. *Das zweischneidige Schwert der germanischen Völkerwanderungszeit*. Stockholm.
- Belenitskiĭ (Blenitsky), A. M.  
1969. *Central Asia*. Translated from the Russian by J. Hogarth. Ancient Civilizations Series. London.
- Belenitskiĭ, A. M., and B. B. Piotrovskii, eds.  
1959. *Skul'ptura i zhivopis' drevnego Pyandzhikenta*. Moscow.
- Berghe, L. V.  
1959. Archéologie de l'Iran ancien. *Documenta et Monumenta Orientis Antiqui*, 6. Leiden.
- Bergman, F.  
1935. Lou-lan Wood-Carvings and Small Finds Discovered by Sven Hedin. *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), 7:71-144.
1936. A Note on Ancient Laminæ Armour in China. *Ethnos*, 1(5): 105-112.
1939. Archaeological Researches in Sinkiang. Volume 1 in Section VII: Archaeology. Publication 7 in *Reports from the Scientific Expedition to the North-Western Provinces of China under the Leadership of Dr. Sven Hedin*. Stockholm: Statens Etnografiska Museum.
- Berkhin-Zasetskaya, I. P., and L. Ya. Malovitskaya  
1965. Bogatoo savromatskoe pogrebenie v Astrakhanskoĭ oblasti. *SA*, 3:143-153.
- Berlin, Gesellschaft für Östasiatische Kunst  
1929. Ausstellung chinesischer Kunst. *Veranstaltet von der Gesellschaft für Östasiatische Kunst und der Preussischen Akademie der Künste, 12. Jan. bis 2. April 1929*.
- Bernshtam, A. N.  
1952. Istoriko-arkheologicheskie ocherki tsentral'nogo Tyan'-Shanya i Pamiro-Alaya. *MIA* (Moscow-Leningrad), 26.
- Bers, E. M.  
1951. Arkheologicheskaya karta g. Sverdlovskaya i ego okrestnostei. *MIA* (Moscow), 21:182-243.
- Betz, R., and P. Diels  
1928. Slaven. Pages 251-292 in volume 12 in Ebert, editor, *Reallexikon der Vorgeschichte*. Berlin.
- Biot, E.  
1851. *Le Tcheou-li ou Rites de Tcheou*. 2 volumes. Paris.
- Bird, V., and H. Hodges  
1968. A Metallurgical Examination of Two Early Iron Swords from Luristan. *Studies in Conservation*, 13(4):215-222.
- [Bishop, H. R., and others]  
1900. *Investigations and Studies in Jade*. New York.
- Bivar, A. D. H.  
1959. Details and Devices from Sassanian Sculptures. *Oriental Art*, new series, 5(1):11-14.
- Blumberg, B. S.  
1964. Goiter in Gandhara: A Representation in a Second to Third Century A.D. Frieze. *Journal of the American Medical Association*, 189:1008-1012.
- Bodde, D.  
1940. Statesman, Patriot, and General in Ancient China: Three *Shih Chi* Biographies of the Ch'in Dynasty. *American Oriental Series*, 17. New Haven: American Oriental Society.
- Böhner, K.  
1948. Das Langschwert des Frankenkönigs Childerich. *Bonner Jahrbücher* (Bonn), 148.
- Boon, G. C.  
1957. *Roman Silchester: The Archaeology of a Romano-British Town*. London.
- Borovka, G.  
1925. Kul'turno-istoricheskoe znachenie arkheologicheskikh nakhodok ekspeditsii. Pages 23-40 in P. K. Kozlov, *Kratkie otchetnye ekspeditsii po issledovaniyu severnoi Mongolii v svyazi s Mongolo-Tibetskoĭ ekspeditsieĭ P. K. Kozlova* (*Comptes-rendus des expéditions pour l'exploration du nord de Mongolie rattachées à l'expédition Mongolo-Tibétaine de P. K. Kozlov*). Leningrad.
1926. (Boroffka.) Die Funde der Expedition Koslow in der Mongolei 1924/25. *Archäologischer Anzeiger, Beiblatt zum Jahrbuch des Deutschen Archäologischen Instituts*, 3/4, columns 341-368.
- Broman, S.  
1961. Studies on the Chou Li. *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), 23:1-89.

- Bruce-Mitford, R. L. S.  
1961. *The Sutton Hoo Ship-Burial: A Provisional Guide*. 8th impression, revised. London: The British Museum.
- Buhot, J.  
1951. *Arts de la Chine*. Paris.
- Bulling, A.  
1960. The Decoration of Mirrors of the Han Period: A Chronology. *Artibus Asiae Supplementum*, 20. Ascona.  
1965. Hollow Tomb Tiles: Recent Excavations and Their Dating. *Oriental Art*, new series, 11(1):27-42.
- Burgess, J.  
1900. The Gandhara Sculptures. *Journal of Indian Art and Industry* (London), 8:23-40.
- Burling, J., and A. H. Burling  
1953. *Chinese Art*. New York.
- Cammann, S. van R.  
1958. Archaeological Evidence for Chinese Contacts with India during the Han Dynasty. *Sinologica*, 5(1):1-19.  
1962. *Substance and Symbol in Chinese Toggles: Chinese Belt Toggles from the C. F. Bieber Collection*. Philadelphia.
- Cartwright, W. A.  
1958. *Guide to Art Museums in the United States: East Coast—Washington to Miami*. New York.
- Carved Jades of Shang and Chou  
1942. *The Bulletin of the Minneapolis Institute of Arts*, 33 (December 5):113-119.
- Chang Chun-shu  
1966a. The Han Colonists and Their Settlements on the Chü-yen Frontier. *Tsing Hua Journal of Chinese Studies* (Taipei), new series, 5(2):154-266.  
1966b. Military Aspects of Han Wu-ti's Northern and Northwestern Campaigns. *Harvard Journal of Asiatic Studies*, 26:148-173.
- Chang, H. T.  
1921-1924. Iron Ores and Iron Industry of China. *Memoirs of the Geographical Survey of China*, series A, 2:297-364.
- Chang Kwang-chih  
1968. *The Archaeology of Ancient China*. 2nd edition. New Haven.
- Chavannes, E.  
1895-1905. *Les mémoires historiques de Se-ma Ts'ien*. Traduits et annotés par E. Chavannes. 5 volumes. Paris.  
1909-1915. Mission archéologique dans la Chine septentrionale. *Publications de l'Ecole française d'Extrême-Orient*, 13. Paris. [Two parts in 4 volumes.]  
1913. *Les documents chinois découverts par Aurel Stein dans les sables du Turkestan Oriental*. Publiés et traduits par E. Chavannes. Oxford.
- Cheng Te-k'un  
1963. *Chou China*. Volume 3 in *Archaeology in China*. Cambridge.
- Chichorius, C.  
1900. *Die Reliefs der Traianssäule*. 3 volumes text, 2 volumes plates. Berlin.
- Chinese Art Treasures*  
1961. A Selected Group of Objects from the Chinese National Palace Museum and the Chinese National Central Museum, Taichung, Taiwan, Exhibited in the United States by the Government of the Republic of China . . . [Catalogue].
- Clark, M. A.  
1968. Archaic Chinese Jade. *Oriental Art*, new series, 14(1):59.
- Clauson, G.  
1960. Turk, Mongol, Tungus. *Asia Major*, new series, 8(1):105-123.
- Cotteville-Giraudet, R.  
1938. Coupes et camées sassanides du Cabinet de France. *Revue des Arts Asiatiques*, 12:52-64.
- Couvreur, F. S.  
1911. *Dictionnaire classique de la langue chinoise*. 3rd edition. Ho-kien-fou.  
1914. *Tch'ouen Ts'iou et Tso Tchouan*. Texte chinois avec traduction française. 3 volumes. Ho-kien-fu.
- Creel, H. G.  
1937. Studies in Early Chinese Culture. *American Council of Learned Societies, Studies in Chinese and Related Civilizations*, first series, 3. Baltimore.
- Crump, J. I., Jr.  
1960. The *Chan-kuo Ts'e* and Its Fiction. *T'oung Pao*, 48(4/5):305-375.  
1964. *Intrigues: Studies of the Chan-kuo Ts'e*. Ann Arbor.
- Cumont, F.  
1926. Fouilles de Doura-Europos (1922-1923). *Bibliothèque archéologique et historique*, 9. Paris.
- Dalton, O. M.  
1924. Sarmatian Ornaments from Kerch in the British Museum, Compared with Anglo-Saxon and Merovingian Ornaments in the Same Collection. *The Antiquaries Journal*, 4(3):259-262.  
1964. *The Treasure of Oxus, with Other Examples of Early Oriental Metal-Work*. 3rd edition. London.
- Damascus, National Museum  
1951. *Catalogue illustré du Département des antiquités greco-romaines au Musée de Damas*, by Sélim Abdul-Hak and Andrée Abdul-Hak. Damas: Publications de la Direction Générale des Antiquités de Syrie.  
1969. *Catalogue du Musée National de Damas, publié à l'occasion de son Cinquantenaire (1919-1969)*, by Abû-l-Faraj al-'Ush, Adnan Joundi, Bachir Zouhdi. Translated by G. Saadé. Damas: Publications de la Direction Générale des Antiquités et des Musées.
- Davis, F.  
1944. *Chinese Jade*. 2nd edition. London.
- DeGuignes, M.  
1756-1758. *Historie générale des Huns, des Turcs, des Mongols, et des autres Tartares occidentaux avant et depuis J.-C. jusqu'à présent*. 4 volumes [in 5]. Paris.
- Detroit, The Detroit Institute of Arts  
1940. *An Exhibition of Ancient Chinese Ritual Bronzes*. [Lent by] C. T. Loo and Co., October 18-November 10.  
1962. *Selections from the James Marshall Plumer Collection of Oriental Art: A Memorial Exhibition, March 6-April 8*. Foreword by P. L. Grigaut; Note by C. I. Plumer.
- Devlet, M. A.  
1968. Iz istorii osvoeniya metallurgii zheleza na srednem Enisee. SA, 1:28-38.
- Dohrenwend, D.  
1971. *Chinese Jades in the Royal Ontario Museum*. Toronto.
- Downey, S.  
1968. Notes sur une stèle de Hatra. *Syria*, 45(2):105-109.
- Dresser, L.  
1955. Ancient Chinese Jades. *News Bulletin and Calendar*, Worcester Art Museum, 20(7):25-26.
- Dura-Europos  
1936. *The Excavations at Dura-Europos, Conducted by Yale University and the French Academy of Inscriptions and Letters: Preliminary Report of Sixth Season of Work, October, 1932-March, 1933*. Edited by M. I. Rostovtzeff, A. R. Bellinger, C. Hopkins, and C. B. Wells. New Haven.
- Duyvendak, J. J. L.  
1928. *The Book of Lord Shang: A Classic of the Chinese School of Law*. London.

- Eberhard, W.  
1942. Lokalkulturen im alten China, I: Die Lokalkulturen des Nordens und Westens. *T'oung Pao*, supplement to volume 37. Leiden.
- Eder, M.  
1943. Eiserne Degen und Schwerter aus der Han-Zeit. *Monumenta Serica*, 8:394-400.
- Edwards, R.  
1954. The Cave Reliefs at Ma Hao. *Artibus Asiae*, 17:4-28, 103-129.
- Engelhardt, C.  
1866. *Denmark in the Early Iron Age*. London.  
1869. *Vimose-Fundet*. Copenhagen. [Not seen.]
- Enoki Kazuo  
1959. On the Nationality of the Ephthalites. *Memoirs of the Research Department of the Toyo Bunko (Tōkyō)*, 18:1-58.
- Erdmann, K.  
1937. Das Datum des Tāk-i Bustān. *Ars Islamica*, 4:79-97.  
1943. *Die Kunst Irans zur Zeit der Sasaniden*. Berlin.
- Ettinghausen, R.  
1961. Turkish Elements on Silver Objects of the Seljuq Period of Iran. Pages 128-133 in Faculty of Theology of the University of Ankara and Institute of History of Turkish and Islamic Arts, First International Congress of Turkish Arts, Ankara, October 19-24, 1959, *Communications Presented to the Congress*. Ankara.
- Evyukhova, L. A.  
1952. Kemennye izvayaniya yuzhnoj Sibiri i Mongolii. *MIA (Moscow)*, 24:72-120.
- Faccenna, D.  
1962. Sculptures from the Sacred Area of Butkara I (Swat, Pakistan), Istituto italiano per il Medio ed Estremo Oriente, Centro studi e scavi archeologici in Asia, *Reports and Memoirs*, 2(2). Rome.
- Fajans, S.  
1957. Recent Russian Literature on Newly Found Middle Eastern Metal Work. *Ars Orientalis*, 2:55-76.
- Feddersen, M.  
1961. *Chinese Decorative Art: A Handbook for Collectors and Connoisseurs*. Translated by A. Lane. London.
- Ferguson, J. C.  
1939. *A Survey of Chinese Art*. Shanghai.  
1941. Chinese Foot Measure. *Monumenta Serica*, 6(1/2):357-382.
- Fettich, N.  
1963. Symbolischer Gürtel aus der Awarenzeit (Fund von Bilisics). *Móra Ferenc Múzeum Évkönyve*, 1963(Szeged):61-89.
- Fischer, K.  
1959. *Schöpfungen indischer Kunst von den frühesten Bauten und Bilden bis zum mittelalterlichen Tempel*. Cologne.
- Fogg Art Museum, Harvard University  
1969. *Grenville L. Winthrop; Retrospective for a Collector, January 23-March 31*. Introduction by D. W. Gillerman, G. McKim, J. R. Mertens.
- Foucher, A.  
1905-1951. L'art gréco-bouddhique du Gandhāra: Etude sur les origines de l'influence classique dans l'art bouddhique de l'Inde et de l'Extrême-Orient. *Publications de l'Ecole française d'Extrême-Orient*, volume 5 (Paris, 1905), volume 6 (fascicle 1, Paris, 1918; fascicle 2, Paris, 1922; fascicle 3, Hanoi, 1951).
- Frye, R. N.  
1963a. *The Heritage of Persia*. Cleveland and New York.  
1963b. [Review of] R. Göbl, *Die Münzen der Sasaniden im königlichen Münzkabinette, Haag* ('S-Gravenhage, 1962). *Artibus Asiae*, 26(2):176.
- Fukai Shinji  
1960. The Artifacts of Hatra and Parthian Art. *East and West*, new series, 11(2/3):135-181.
- Gajdukevich, V. F.  
1949. *Bosporskoe tsarstvo*. Moscow-Leningrad.  
1952. Mogil'nik bliz Shirin-saya v Uzbekistane. *SA*, 16:331-359.
- Genig, V. F.  
1959. Udmurtskaya arkheologicheskaya ekspeditsiya. *KSIIMK, ANSSSR*, 74:92-100.
- Getz, J.  
1913. *The Woodward Collection of Jades and Other Hard Stones*. [Privately printed.]
- Ghirshman, R.  
1948. Les Chionites-Hephtalites. *Mémoires de la Délégation archéologique française en Afghanistan*, 13. Cairo.  
1950. Notes iraniennes, III: à propos des bas-reliefs rupestres Sasanides. *Artibus Asiae*, 13(3):86-98.  
1962. *Iran: Parthians and Sassanians*. Translated by S. Gilbert and J. Emmons. The Arts of Mankind. London.  
1963. Notes iraniennes, XIII: Trois épées sassanides. *Artibus Asiae*, 26(3/4):293-311.
- Ghosh, A.  
1947-1948. Taxila (Sirkap), 1944-5. *Ancient India, Bulletin of the Archaeological Survey of India*, 4:41-84.
- Giles, H.  
1912. *A Chinese-English Dictionary*. 2nd edition, revised and enlarged. Shanghai and London.
- Gimbutas, M.  
1961. Timber Graves in Southern Russia: A Pre-Scythian Culture. *Expedition*, 3(3):14-22.
- Ginters, W.  
1928. Das Schwert der Skythen und Sarmaten in Südrussland. *Vorgeschichtliche Forschungen*, 2(1). Berlin.
- Glazkova, N. M., and V. P. Chtetsov  
1960. Paleoanthropologicheskie materialy nizhnevolzhskogo otryada Stalingradskoj ekspeditsii. *MIA (Moscow)*, 78:284-292.
- Göbl, R.  
1964. Zwei neue Termini für ein zentrales Datum der alten Geschichte Mittelasiens, das Jahr I des Kušānkönigs Kaniška. *Anzeiger der phil.-hist. Klasse der Osterreichischen Akademie der Wissenschaften*, 7:137-151.
- Godard, A.  
1931. Les bronzes du Luristan. *Ars Asiatica*, 17. Paris and Brussels.  
Godard, A., Y. Godard, and J. Hackin  
1928. Les antiquités bouddhiques de Bāmiyan. *Mémoires de la Délégation archéologique française en Afghanistan*, 2. Paris.
- Goette, J. A.  
1936. *Jade Lore*. Shanghai, Hong-Kong, and Singapore.
- Goodrich, L. C.  
1943. *A Short History of the Chinese People*. New York and London.
- Goya, F. de  
1956. *The Disasters of War: With an Essay on the Artist's Life and Work* by Xavier de Salvo. . . . New York.
- Grach, A. D.  
1961. *Drevenetyurkskie izvayaniya Tuvy; po materialam issledovaniï 1953-1960 gg.* Moscow.
- Granet, M.  
1958. *Chinese Civilization*. Translated by K. E. Innes and M. R. Brailsford. New York.
- Gray, B.  
1939. A Seljuq Hoard from Persia. *British Museum Quarterly*, 13:73-79.

- Griessmaier, V.  
1933. Studien zur Kunst der Hanzeit; Die Ausgrabungen von Lo-lang in Korea: Die Granulierte Goldschnalle. *Wiener Beiträge zur Kunst- und Kulturgeschichte Asiens*, 7:31-35.
- Grousset, R.  
1948. L'exposition iranienne du Musée Cernuschi. *Oriental Art*, 1(3):105-110.
- Guiganino, A.  
1959. *La pittura cinese*. 2 volumes. [Rome]: Istituto Paligrafico dello Stato.
- Gumilev, L. N.  
1960. *Khumnu: Sredinnaya Aziya v drevnie vremena*. Moscow.
- Gure, D.  
1964. Selected Examples from the Jade Exhibition at Stockholm, 1963: A Comparative Study. *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), 36:117-192.
- Hackin, J.  
1923. *Guide-Catalogue du Musée Guimet: Les collections bouddhiques*. Paris and Brussels.  
1938. Les travaux de la Délégation archéologique française en Afghanistan, Compte-rendu sommaire (septembre 1936-aout 1937). *Revue des Arts Asiatiques*, 12:2-11.  
1959. Le monastère bouddhique de Fondukistan. *Mémoires de la Délégation archéologique française en Afghanistan*, 8:49-58. Paris.
- Hackin, J., and J. Carl  
1936. Recherches archéologiques au Col de Khair khaneh près de Kābul. *Mémoires de la Délégation archéologique française en Afghanistan*, 7. Paris.
- Hackin, J., and others  
1954. Nouvelles recherches archéologiques à Begram. *Mémoires de la Délégation archéologique française en Afghanistan*, 11. Paris.
- Haloun, G.  
1937. Zur Ue-tsi-frage. *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, 91(2):243-318.
- Hanfmann, G. M. A., and M. S. Balmuth  
1956. *Ancient Coins*. Cambridge, Mass.: Harvard University, Fogg Art Museum.
- Hanoi, Ecole française d'Extrême-Orient  
1920. *Bulletin*, 20(4).
- Hansford, S. H.  
1947-1948. Catalogue of the Exhibition of Chinese Jades from April 14 to June 9, 1948. *Transactions of the Oriental Ceramic Society*, pages 46-81. London.  
1948-1949. A Visit to An-yang. *Transactions of the Oriental Ceramic Society*, pages 11-22. London.  
1954. A Glossary of Chinese Art and Archaeology. *China Society Sinological Series*, 4. London: The China Society.  
1957. *The Seligman Collection of Oriental Art, 1: Chinese, Central Asian and Luristan Bronzes and Chinese Jades and Sculptures*. London.  
1968. *Chinese Carved Jade*. London.  
1969. *Jade: Essence of Hills and Streams, The von Oertzen Collection of Chinese and Indian Jades*. Capetown, Johannesburg, London.
- Harada Yoshito  
1962. Ancient Glass in the History of Cultural Exchange between East and West. *Acta Asiatica, Bulletin of the Institute of Eastern Culture* (Tokyo), 3:57-69.
- Haskins, J.  
1952. Northern Origins of Sasanian Metal-Work. *Artibus Asiae*, 15:241-267, 324-347.  
1956. Recent Excavations in China. *Archives of the Chinese Art Society of America*, 10:42-63.
1961. Targhyn—the Hero, Aq-Zhunun—the Beautiful, and Peter's Siberian Gold. *Ars Orientalis*, 4:153-169.
1963. Cache at Stone-fortress-hill: Art from Ancient Tien May Help to Explain Obscurities in Far Eastern History. *Natural History*, 72(2):30-39.
- Herzfeld, E.  
1920. *Am Tor von Asien*. Berlin.  
1928. La sculpture rupestre de la Perse sassanide. *Revue des Arts Asiatiques*, 5(3):129-142.  
1930. Kushano-Sasanian Coins. *Memoirs of the Archaeological Survey of India*, 38. Calcutta.  
1938. Khusrau Parwēz und der Tāq i Vastān. *Archäologische Mitteilungen aus Iran*, 9:91-158.  
1941. *Iran in the Ancient East*. Archaeological Studies Presented in the Lowell Lectures at Boston. London and New York.
- Hillburgh, W. L.  
1906. Chinese Imitations of Hard Stones. *Journal of the Society of Arts*, 55:140-141.
- Hirth, F.  
1916. The Story of Chang K'ien, China's Pioneer in Western Asia. *Journal of the American Oriental Society*, 37:89-152.
- Hobson, R. L.  
1913. Jade. *The Burlington Magazine*, 23:108-112.
- Holmqvist, W.  
1955. Germanic Art during the First Millennium A.D. *Kung. vitterhets historie och antikvitet akademien handlingar*, 90. Stockholm.
- Homès-Fredericq, D.  
1963. Hatra et ses sculptures parthes: Étude stylistique et iconographique. *Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul*, 15. Leiden.
- Hommel, R. P.  
1928. Notes on Chinese Sword Furniture. *The China Journal*, 8(1):3-6.  
1951. Notes on Chinese Sword Furniture. *Hobbies*, 56:144-145, 149. [Reprint of 1928.]
- Honey, W. B.  
1937. Early Chinese Glass. *The Burlington Magazine*, 71:211-223.  
1939-1940. Chinese Glass. *Transactions of the Oriental Ceramic Society*, pages 35-47. London.
- Horan, J. D.  
1955. *Mathew Brady: Historian with a Camera*. New York.
- Horváth, T.  
1955. Pictorial Representation of Han Mural Paintings and Reliefs. *Az Iparművészeti Múzeum Evkönyvei*, 2; 333-346. Budapest: Magyar Nemzeti Múzeum, Iparművészeti Múzeum.
- Houo, P.  
1919. *Comment évaluer les faux? Etudes sur quelques antiquités chinoises*. Translated by X. Peking.
- Hsia Nai  
1959. Tracing the Thread of the Past. *China Reconstructs*, 8(10): 44-49.
- Hsu Cho-yun  
1965. *Ancient China in Transition: An Analysis of Social Mobility, 722-222 B.C.* Stanford Studies in the Civilizations of Eastern Asia. Stanford.
- Hummel, A. W., ed.  
1943-1944. *Eminent Chinese of the Ch'ing Period (1644-1912)*. 2 volumes. Washington: United States Government Printing Office.
- al-Idrīsī (al-Sharīf al-Idrīsī)  
1960. *India and the Neighbouring Territories in the "Kitāb Nuzhat al-Mushtāq fī'Khīrāq al-'Āfāq" of al-Sharīf al-*

- Idrīsi*. Translated, with Commentary, by S. M. Ahmad, with a Foreword by V. Minorsky. Leiden.
- Ingholt, H., and I. Lyons  
1957. *Gandhāran Art in Pakistan*. New York.
- Izobrazitel'noe iskusstvo Kitaya*  
1960. Introduction by O. Glukhareva. Moscow.
- Janse, O.  
1930. Notes sur quelques épées anciennes trouvées en Chine. *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), 2:67-192.  
1935. L'empire des steppes et les relations entre l'Europe et l'Extrême-Orient dans l'antiquité. *Revue des Arts Asiatiques*, 9:9-26.  
1936. *Briques et objets céramiques funéraires de l'époque des Hans, appartenant à C. T. Loo et Cie*. Les Editions d'art et d'Histoire. Paris.  
1947-1958. *Archaeological Research in Indo-China*. Volumes 1 and 2, Cambridge, Mass., 1947-1951; volume 3, Bruges, 1958.
- Jenyns, R. S.  
1951. *Chinese Archaic Jades in the British Museum*. London.
- Jettmar, K.  
1951-1952. Hunnen und Hsiung-nu—ein archäologisches Problem. *Archiv für Völkerkunde*, 6/7:166-190.  
1952. Archäologische Spuren von Indogermanen in Zentralasien. *Paideuma*, 5(5):236-254.
- Josephus  
1959. *The Jewish War*. Translated by G. A. Williamson. Harmondsworth: Penguin Books.
- K., F. S.  
1930. A Han Foot-Rule. *Bulletin of the Museum of Fine Arts* (Boston), 28:8-9.
- Kansas City, William Rockhill Nelson Gallery of Art and Mary Atkins Museum of Fine Arts  
1959. *Handbook of the Collections*. 4th edition. Kansas City.
- Kaō Chū-hsün  
1960. The Ching Lu Shen Shrines of Han Sword Worship in Hsiung-nu Religion. *Central Asiatic Journal*, 5(3):221-232.
- Kareish  
1844. Razrytie kurganov voze Kerchi i Tamani v 1842 i v nachale 1843 goda. *Zapiski Odesskogo obshchestva lyubitelei estestvoznaniya* (Odessa), 1:609-620. [Not seen.]
- Karlbeck, O.  
1925. Ancient Chinese Bronze Weapons. *The China Journal of Science and Arts*, 3(3):127-132; 3(4):199-206.  
1933-1935. *Hallwylska Samlingen*, Grupp XLIX: *Östasiatiska smäbronser*. 2 volumes. Stockholm.  
1939. An Early Chinese Leather Belt. *Ethnos*, 4(3/4):112-113.  
1955. Selected Objects from Ancient Shou-Chou. *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), 27:41-130
- Karlgren, B.  
1931. The Early History of the Chou Li and Tso Chuan Texts. *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), 3:1-59.  
1934. On the Date of the Piao Bells. *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), 6:137-149.  
1937. Ordos and Huai. *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), 9:97-112.  
1938. Notes on a Kin-ts'un Album. *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), 10:65-81.  
1941. Huai and Han. *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), 13:1-128.
- Kemp, E. G.  
1914. *Wanderings in Chinese Turkestan*. London.
- Khazanov, A. M.  
1968. Sarmatskij kinzhal iz Saratovskogo muzeya. *SA*, 1:249-250.
- Kieffer, C. M.  
1962. Kusana Art and the Historic Effigies of Mat (India) and Surkh Kotal (Afghanistan). *Marg*, 15(2):43-48.
- Kierman, F. A., Jr.  
1962. *Ssu-ma Ch'ien's Historiographical Attitude as Reflected in Four Late Warring States Biographies*. University of Washington, Far Eastern and Russian Institute, Studies on Asia. Wiesbaden.
- Kieseritzky, G. von, and C. Watzinger  
1909. *Griechische Grabreliefs aus Südrussland*. Berlin.
- Kinzhaltov, R. V., and V. G. Lukonin  
1960. *Pamyatniki kul'tury sasanidskogo Irana*. Leningrad: State Hermitage Museum.
- Kiselev, S. V.  
1951. *Drevnyaya istoriya yuzhnoĭ Sibiri*. Moscow.
- Kolchin, B. A.  
1959. Zhelezobrabatyvayushchee remeslo Novgoroda velikogo. *MLA* (Moscow), 65:7-119.
- Komarova, M. N.  
1952. Tomskiĭ mogil'nik pamyatnik istorii drevnikh plemen lesnoj polosy zapadnoĭ Sibiri. *MLA* (Moscow), 24:7-50.
- Konow, S.  
1947. The White Huns and Tokharian. Pages 79-82 in *Festschrift til Professor Olaf Broch*. Oslo.
- Korzukhina, G. F.  
1950. Iz istorii drevnerusskogo oruzhiya XI veka. *SA*, 13:83-94.
- Kozhombierdiev, I.  
1963. Katakombnye pamyatniki Talasskoĭ doliny. *Arkhéologicheskie pamyatniki Talasskoĭ doliny*, pages 33-77. Frunze.
- Kozlov, P. K.  
1923. *Mongoliya i Amdo i mertvyĭ gorod Khara-Khoto*. Ekspeditsiya Russkogo geograficheskogo obshchestva v nagornoĭ Azii P. K. Kozlova, prochetnogo chlena Russkogo geograficheskogo obshchestva, 1907-1909. Moscow-Petrograd.
- Krechetova, M. N.  
1960. *Reznoĭ kamen' Kitaya v Ermitazhe*. Leningrad.
- Kritsova-Grakova, O. A.  
1955. Stepnoe Povolzh'e i Prichernomor'e v epokhu pozdnej bronzy. *MLA* (Moscow), 46.
- Krupnov, E. I.  
1960. Novee istochniki po drevnej i srednevekovoj istorii severnogo Kavkaza. *KSIIMK, ANSSR*, 78: 107-118.
- Krupnov, E. I., and I. V. Sinitsyn  
1954. Drevnee naselenie nizhnego Povolzh'ya. Pages 64-94 in *Po sledam drevnikh kul'tur*. Moscow.
- Kukhareva, I. S.  
1961. Mogil'nik kochevnikov u sela Maksimovka na Dnepre. Pages 194-202 in *Issledovaniya po arkheologii SSSR, Sbornik stateĭ v chest' professora M. I. Artamonova*. Leningrad: Leningrad University.
- Kümmel, O.  
1930a. *Chinesische Kunst*. Berlin.  
1930b. *Jörg Trübner zum Gedächtnis*, Berlin.
- Kusheva-Grozevskaya, A. N.  
1929. Odin iz tipov sarmatskogo mecha. *Izvestiya nizhne-volzhskego instituta kraevedeniya imeni M. Gor'kogo* (Saratov), 3:157-167.
- Kuznetsov, V. A., and V. K. Pudovich  
1961. Alany v zapadnoĭ Evrope v epokhu 'Velikogo Pereseleniya Narodov.' *SA*, 2:79-95.
- Kyzlasov, L.  
1948. Zheleznyĭ toporik iz Sinyavino. *KSIIMK, ANSSR*, 20:82-85.



- László, G.  
1955. Etudes archéologiques sur l'histoire de société des Avars. *Archaeologica Hungarica*, 34. Budapest.
- Lattimore, O.  
1929. The Desert Road to Turkestan. *The National Geographic Magazine*, 55(6):661-702.
- Laufer, B.  
1912. Jade, a Study in Chinese Archaeology and Religion. Field Museum of Natural History, *Anthropological Series*, 10. Chicago.  
1914. Chinese Clay Figures, Part I: Prolegomena on the History of Defensive Armor. Field Museum of Natural History, *Anthropological Series*, 13(2). Chicago.
- Lebedev, A. K.  
1958. *Vasilež Vasil'evich Vereshchagin, zhizn' i tvorchestvo*. Moscow.
- LeCoq, A. von  
1913. *Chotscho*. Königlich preussische Turfan-Expedition. Berlin.  
1925. *Bilderatlas zur Kunst- und Kulturgeschichte Mittel-Asiens*. Berlin.
- LeCoq, A. von, and others  
1922-1933. *Die buddhistische Spätantike in Mittelasien*. 7 volumes. Berlin.
- Legge, J., translator  
1893-1895. *The Chinese Classics*. 2nd edition, revised. London.
- Lehmann-Hartleben, K.  
1926. *Die Trajanssäule*. Berlin.
- I essen, A. A.  
1952. Rannie svyazi Priural'ya s Iranom. *SA*, 16:206-231.  
1965. Raskopki bol'shogo kurgana v urochishche Uch-tepe. Volume 2 in *Trudy Azerbajdzhanskoj arkeologicheskoi ekspeditsii*. MIA (Moscow-Leningrad), 125:153-193.
- Li Chi  
1957. *The Beginnings of Chinese Civilization*. Seattle.
- Lindenschmit, L.  
1880. *Handbuch der deutschen Altertumskunde, Ubersicht des Denkmale und Gräberfunde frühgeschichtlicher und vorge-schichtlicher Zeit, erster Theil: Die Alterthümer der mero-vingischen Zeit*. Braunschweig.
- Lion-Goldschmidt, D., and J.-C. Moreau-Gobard  
1960. *Chinese Art: Bronze, Jade, Sculpture, Ceramics*. New York: The International Library of Antique Art.
- Lippe, A.  
1970. The Freer Indian Sculptures. Smithsonian Institution, Freer Gallery of Art, *Oriental Studies*, 8. Washington, D.C.
- Lodge, J. E., A. G. Wenley, and J. A. Pope  
1946. A Descriptive and Illustrative Catalogue of Chinese Bronzes Acquired during the Administration of John Ellerton Lodge. Smithsonian Institution. Freer Gallery of Art, *Oriental Studies*, 3. Washington, D.C.
- Loehr, M.  
1949-1951. Ordos Daggers and Knives: New Material, Classification and Chronology. *Artibus Asiae*, 12:23-83; 14:77-162.  
1956. *Chinese Bronze Age Weapons: The Werner Jannings Collection in the Chinese National Palace Museum, Peking*. Ann Arbor.  
1965. *Relics of Ancient China from the Collection of Dr. Paul Singer*. New York: The Asia Society.  
1967-1968. The Fate of the Ornament in Chinese Art. *Archives of Asian Art*, 21:8-19.
- Loewe, M.  
1961. Military Operations in the Han Period. *The China Society, Occasional Papers*, 12. London: The China Society.
- London, The Burlington Fine Arts Club  
1915. *Catalogue of a Collection of Objects of Chinese Art*. London.
- London, Royal Academy of Arts  
1936. *The Chinese Exhibition: A Commemorative Catalogue of the International Exhibition of Chinese Art, November 1935-March 1936*. London.  
n.d. *International Exhibition of Chinese Art, 1935-6, Catalogue*. 3rd edition [n.p.].
- Löw-Beer, F.  
1949. A Carved Lacquer Plaque of the Late Chou Period. *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), 21: 27-29.
- Lozinski, B. P.  
1959. *The Original Homeland of the Parthians*. The Hague.
- Lubo-Lesnichenko, E. I.  
1961. *Drevnie Kitaiskie tkani i vyshivki V v. do n. e.—III v. n. e. v sobranii Gosudarstvennogo Ermitazha*. Leningrad.  
1965. Importnye zerkala Minusinskoj kotloviny. Pages 19-21 in *Tezisy dokladov nauchnoi sessii posvyashchennoi itogam raboty Gosudarstvennogo Ermitazha 3A 1964 god, 10-12 Maya 1965 g.* Leningrad.
- Lukonin, V. G.  
1961. *Iran v epokhu pervykh Sasanidov*. Leningrad.
- Luzzatto-Bilitz, O.  
1969. *Antique Jade*. London.
- Majewski, K., and others  
1966. Nowe - Sektor Zachodni, 1965: Sprawozdanie tymczasowe z wykopalisk ekspedycji archeologicznej Uniwersytetu Warszawskiego. *Archeologia, Rocznik Instytutu Historii Kultury Materialnej Polskiej Akademii Nauk*, 17:143-184.
- McCune, E.  
1962. *The Arts of Korea: An Illustrated History*. Rutland, Vermont, and Tokyo.
- Macdermot, B. C.  
1954. Roman Emperors in the Sassanian Reliefs. *Journal of Roman Studies*, 44:76-80.
- Maenchen-Helfen, O. J.  
1937a. Chinesisches Lackgerät. *Östasiatische Zeitschrift, neue folge*, 13:1-5.  
1937b. Zur Geschichte der Lackkunst in China. *Wiener Beiträge zur Kunst- und Kulturgeschichte Asiens*, 11:46-53.  
1943. From China to Palmyra. *Art Bulletin*, 25:358-362.  
1944-1945a. Huns and Hsiung-nu. *Byzantion, American Series 3*, 17:222-243.  
1944-1945b. The Legend of the Origin of the Huns. *Byzantion, American Series 3*, 17:244-251.  
1945a. Are Chinese *hsi-p'i* and *kuo-lo* IE Loan Words? *Language*, 21:256-260.  
1945b. The Yüeh-chih Problem Re-examined. *Journal of the American Oriental Society*, 65:71-81.  
1950. Two Notes on the Diamond in China. *Journal of the American Oriental Society*, 70:187-188.  
[1957]. Crenelated Mane and Scabbard Slide. *Central Asiatic Journal*, 3(2):85-138.  
1958. A Chinese Bronze with Central-Asiatic Motives. *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), 20:167-175.  
1959. The Ethnic Name Hun. Pages 223-238 in *Studia Serica Bernhard Karlgren Dedicata: Sinological Studies Dedicated to Bernhard Karlgren on His Seventieth Birthday, October Fifth, 1959*. Edenda curaverunt Søren Egerod et Else Glahn. Copenhagen.
- Maleki, Y.  
1964. Une fouille en Luristan. *Iranica Antiqua*, 4(1):1-35.
- Mantsevich, A. P.  
1941. O skifskikh poyasakh. *SA*, 7:19-30.

- Marshall, Sir J.  
1930. Taxila. Pages 110–119 in *Archaeological Survey of India, Annual Report, 1926–27*. Calcutta.  
1933. Excavations at Taxila. Pages 51–66 in *Archaeological Survey of India, Annual Report, 1928–29*. Delhi.  
1951. *Taxila: An Illustrated Account of Archaeological Excavations Carried Out at Taxila under the Orders of the Government of India between the Years 1913 and 1934*. 3 volumes. Cambridge.  
1960. *The Buddhist Art of Gandhāra. Memoirs of the Department of Archaeology in Pakistan*, 1. Cambridge.
- Martin, F. R.  
1893. *L'âge du bronze au Musée de Minoussinsk*. Stockholm: Société Suédoise d'Anthropologie et de Géographie.  
1897. *Sibirica, ein Beitrag zur Kenntnis der Vorgeschichte und Kultur sibirischer Völker . . . Sammlung F. R. Martin*. Stockholm.
- Maspero, H.  
1931. La vie privée en Chine à l'époque des Han. *Revue des Arts Asiatiques*, 7(4): 185–201.
- Masson, M. E.  
1950. Nekotorye novye dannye po istorii Parfii. *Vestnik drevnei istorii*, 3:41–55.  
1951. O severo-vostochnykh predelakh parfyanskogo gosudarstva. *KSIIMK, ANSSSR*, 38:145–151.
- Masterpieces of Korean Art*  
1957. *An Exhibition under the Auspices of the Government of the Republic of Korea*. Edited by R. T. Paine, Jr. Boston. [Catalogue.]
- Mathews, R. H.  
1963. *A Chinese-English Dictionary*. Revised American edition. Cambridge, Mass.
- Matsulevich, L.  
1926. *Serebryanaya chasha iz Kerchi*. Leningrad.  
1929. (Matzulewitsch.) *Byzantinische Antike*. Berlin and Leipzig.
- Maxwell, I. B.  
1914. Chinese Jade. *The Burlington Magazine*, 25:294–299.
- Maxwell-Hyslop, K. R.  
1962. Bronzes from Iran in the Collection of the Institute of Archaeology, University of London. *Iraq*, 24 (2):126–133.
- Maxwell-Hyslop, K. R., and H. W. M. Hodges  
1964. A Note on the Significance of the Technique of "Casting On" as Applied to a Group of Daggers from Northwest Persia. *Iraq*, 26(1):50–53.  
1966. Three Iron Swords from Luristan. *Iraq*, 28(2):164–176.
- Mellaart, J.  
1959. The Royal Treasure of Dorak (Turkey). *Illustrated London News*, November 28, page 754.
- Mély, F. de  
Souvenirs d'un archéologue, XII: Emaux et émailleurs. *Le Cousin Pons*, October 1 [?]. [Not seen; cited in Kusheva-Grozevskaia, 1929, page 162, note 5, and Rostovtsev, 1923, page 106.]
- Melyukova, A. I.  
1952. Kamennaya figura Skifa-voina. *KSIIMK, ANSSSR*, 48:125–128.
- Merhart, G. von  
1926. *Bronzezeit am Jenissei*. Vienna.
- Merpert, N. Ya  
1955. Iz istorii oruzhiya plemen vostochnoi Evropy v rannem srednevekov'e. SA, 22:131–168.
- Meunié, J.  
1942. Shotorak. *Mémoires de la Délégation archéologique française en Afghanistan*, 10. Paris.
- México, Museo Nacional de Artes e Industrias Populares  
1954. *La Charrería*. México.
- Mogil'nikov, V. A.  
1968. Elykaevskaya kolleksiya Tomskogo universiteta SA, 1:263–268.
- Montelius, O.  
1896. Den nordiska jernålderns kronologi, II. *Svenska Fornminnesförenigens Tidskrift*, 9(3):215–274.
- Morden, W. J.  
1927. By Coolie and Caravan across Central Asia. *The National Geographic Magazine*, 52(4):369–431.
- Moscow, Moskovskij Publichnyĭ i Rumyantsevskij muzeĭ  
1905. *Katalog Otdelenie drevnostei: Drevnosti doistoricheskie*. Moscow.
- Moshkova, M. G.  
1963. Pamyatniki prokhorovskoi kul'tury. *Arkheologiya SSSR svod arkheologicheskikh istochnikov*, D–10. Moscow.
- Needham, J.  
1954. *Science and Civilization in China*. Volume 1. Cambridge.  
1958. *The Development of Iron and Steel Technology in China*. London.
- New Orleans, Isaac Delgado Museum of Art  
1914. *The Morgan Whitney Collection of Chinese Jades and Other Hard Stones*. Catalogue and Notes by J. Getz. New Orleans.
- New York, Arden Gallery  
1939. *Three Thousand Years of Chinese Jade: Exhibition Catalogue, January 10–February 11*. New York.
- New York, Asia Society  
1960. *Gandhara Sculpture from Pakistan Museums*. Catalogue by B. Rowland, Jr. New York.
- New York, China Institute in America  
1954. *Exhibition of Chinese Jade Carvings, Sung to Ch'ien Lung, May 3rd through June 23rd*. New York.
- New York, Chinese Art Society of America  
1961. *Arts of the Han Dynasty*. Asia House, February–March. Introduction and Notes by H. Trubner. New York.  
1962. *The Art of Eastern Chou, 772–221 B.C. (A Loan Exhibition), November 13–December 15*. Introduction and Notes by E. C. Bunker.
- New York, Parke-Bernet Galleries, Inc.  
1938. *Chinese Porcelains and Jades, Fine Japanese Lacquers and Sword Mounts*. Sale Number 65. New York.  
1939. *Japanese Lacquer, Gold and Ivory Ornaments, Chinese Porcelains, Snuff Bottles, Jades . . .* Sale Number 80. New York.
- New York, Yamanaka and Company, Inc.  
1943. *Collection of Chinese and Other Far Eastern Art Assembled by Yamanaka and Company, Inc., Now in Process of Liquidation under the Supervision of the Alien Property Custodian of the United States of America*. Preface by C. M. Stow. New York.
- Nott, S. C.  
1936. *Chinese Jade throughout the Ages: A Review of Its Characteristics, Decoration, Folklore and Symbolism*. London.  
1940. *A Catalogue of Rare Chinese Jade Carvings*. [Privately printed.]  
1942. *An Illustrated Record of the Stanley Charles Nott Collection of Chinese Jades: Prepared as a Handbook for Visitors to the Jade Room of The Norton Gallery and School of Art*. West Palm Beach, Florida.
- Obel'chenko, O. V.  
1961. Lyavandakskii mogil'nik. *Istoriya material'noi kul'tury Uzbekistana*, 2(Tashkent):97–176.  
1962. Mogil'nik Akdzhar-tepe. *Istoriya material'noi kul'tury Uzbekistana*, 3(Tashkent):57–70.
- Obermaier, H., E. von Stern, A. M. Tallgren, M. Ebert  
1928–1929. Südrussland. In M. Ebert, ed., *Reallexikon der Vor-*

- geschichte*, 13 (Berlin):32–114.
- Oboldueva, T. G.  
1948. Kurgany kaunchinskoj i dzhunskoj kul'tur v Tashkentskoj oblasti. *KSIIMK, ANSSSR*, 23:101–102.
- Okamoto Yoshiji  
1960. Studies on the History of Manchuria and Mongolia in Post-war Japan. *Monumenta Serica*, 19:437–479.
- Orbeli, I. A., and K. V. Trever  
1935. *Sasanidskiĭ metall*. Moscow-Leningrad.
- Oriental Art Recently Acquired by American Museums  
1956. *Archives of the Chinese Art Society of America*, 10:64–78.
- Osten, H. H. von der  
1956. *Die Welt der Perser*. Grosse Kulturen der Frühzeit. Stuttgart.
- Oxenskierna, E. G.  
1957. *Die Nordgermanen*. Grosse Kulturen der Frühzeit, neue Folge, 1. Stuttgart.
- Palmer, J. P.  
1967. *Jade*. Spring Art Books. Feltham, England.
- Palmgren, N., editor  
1948. *Selected Chinese Antiquities from the Collection of Gustaf Adolf, Crown Prince of Sweden*. Stockholm.
- Panofsky, E.  
1964. *Tomb Sculpture: Four Lectures on Its Changing Aspects from Ancient Egypt to Bernini*. Edited by H. W. Janson. New York.
- Paris, Société des Antiquaires de France  
1920. Extrait des procès-verbaux du 3<sup>e</sup> trimestre de 1920, séance de 7 juillet. *Bulletin de la Société Nationale des Antiquaires de France*, pages 253–265. [Report by M. E. Michon, pages 257–262, on Messaksudi finds.]
- Paruck, F. D. J.  
1924. *Sāsānian Coins*. Bombay.
- Peck, E. H.  
1969. The Representation of Costumes in the Reliefs of Taq-i-Bustan. *Artibus Asiae*, 31(2/3):101–146.
- Pelliot, P.  
1923. Un nouveau périodique oriental: Asia Major. *T'oung Pao*, 22(5):345–376.  
1925. *Jades archaïques de Chine appartenant à M. C. T. Loo*. Paris and Brussels.  
1928. L'édition collective des oeuvres de Wang Kuo-wei. *T'oung Pao* 26(2/3):113–182.  
1929. Quelques réflexions sur l'art sibérien et l'art chinois, à propos de bronzes de la collection David-Weill. *Documents*, année 1(1):9–21.
- Periplus maris Erythraei*  
1912. *The Periplus of the Erythraean Sea: Travel and Trade in the Indian Ocean by a Merchant of the First Century*. Translated from the Greek and annotated by W. H. Schoff. New York.
- Phillips, E. D.  
1965. *The Royal Hordes: Nomad Peoples of the Steppes*. Library of Early Civilizations. London.
- Piggot, S.  
1962. Heads and Hoofs. *Antiquity*, 36(142):110–118.
- Piotrovskij, B. B.  
1955. *Arkheologicheskie raskopki v Armenii*, 5: *Karmir-Blur III: Rezul'taty rabot arkheologicheskoi ekspeditsii Instituta istorii Akademii nauk Armyanskoj SSR i Gosudarstvennogo Ermitazha, 1951–1953 gg*. Erevan.
- Pliny  
1953. *Natural History*, volume 9. Loeb Classical Library. Translated by J. Rackham. Cambridge, Mass.
- Polesskikh, M. R.  
1968. Boevoe oruzhie i snaryazhenie iz mogil'nikov Armievskogo tipa. *SA*, 1:198–207.
- Pope, A. U., editor  
1938–1958. *A Survey of Persian Art*. 7 volumes. London and New York.
- Pope-Hennessy, U.  
1923. *Early Chinese Jades*. London.  
1946. *A Jade Miscellany*. London.
- Prague, Národní Galerie  
1968. *Zul'čecí Styl – I*. Introduction and Catalogue by L. Hájek. Prague.
- Pugachenkova, G. A.  
1962. Koroplastika drevnego Merva. *Trudy Yuzhno-Turkmenistanskoj arkheologicheskoi kompleksnoi ekspeditsii*, 11(Ashkhabad):117–173.  
1966. *Khalchyan. K probleme khudozhestvennoi kul'tury severnoi Baktrii*. Tashkent.
- Rabinovich, M. G.  
1959. Krepost' i gorod Tushkov. *SA*, 29/30:263–286.
- Radlov, V. V.  
1888–1902. *Sibirskiya drevnosti*, 4 parts: *Materialy po arkheologii Rossii*, number 3, (volume 1, part 1, St. Petersburg, 1888); number 5 (volume 1, part 2, St. Petersburg, 1891); number 15 (volume 1, part 3, St. Petersburg, 1894); number 27 (volume 2, part 1, St. Petersburg, 1902).
- Raphael, O.  
1936. Jade: Its History in China. *Journal of the Royal Society of Arts*, 84:338–346.
- Raspopova, V. I.  
1965. Poyasnoi nabor Sogda VII–VIII vv. *SA*, 4:78–91.
- Rau, P. N.  
1927. Prähistorische Ausgrabungen auf der Steppenseite des deutschen Wolgagebiets im Jahre 1926. *Mitteilungen des Zentralmuseums der aut. soz. Räte-Republik der Wolgadeutschen*, 2(1). Pokrovsk [Pokrowsk].
- Read, T. T.  
1937. Chinese Iron – a Puzzle. *Harvard Journal of Asiatic Studies*, 2:398–407.
- Reinach, S.  
1912 [1921?]. *Les accroissements des Musées nationaux français*. Volume 3. Paris. [Not seen; cited in Kusheva-Grozevskaya, 1929, page 162, note 5, and Rostovtsev, 1923, page 106.]
- Rhé, G., N. Feticch, L. Bartucz  
1931. Jutas und Öskü: Zwei Gräberfelder aus der Völkerwanderungszeit in Ungarn. *Seminarium Kondakovianum, Skythika*, 4. Prague.
- Roes, A.  
1952. Achaemenid Influences upon Egyptian and Nomad Art. *Artibus Asiae*, 15(1):17–30.
- Rome, Istituto Italiano per il Medio ed Estremo Oriente  
1958. *L'arte del Gandhara in Pakistan e i suoi incontri con l'arte dell'Asia centrale: Catalogo della mostra, Roma, Torino, 1958*. Catalogo a cura di M. Bussagli. Rome.  
1961. *L'Afghanistan dala preistoria all'Islam, capolavori del Museo di Kabul: La mostra è stata promossa dall'Istituto Italiano per il Medio ed Estremo Oriente e dalla città di Torino, organizzata dal Museo di Torino e dal Centro Scavi in Asia*. Catalogo a cura di G. Gullini. Turin.
- Rostovtsev, M. I.  
1922. (Rostovtzeff.) *Iranians and Greeks in South Russia*. Oxford.  
1923. (Rostovtzev.) Une trouvaille de l'époque gréco-sarmate de Kerch au Louvre et au Musée de Saint-Germain, L'Académie des Inscriptions et Belles-Lettres, Fondation Eugène Piot. *Monuments et mémoires*, 26:99–163.

1924. (Rostovtzeff.) L'Art chinois de l'époque de Han. *Revue des Arts Asiatiques* 1(3):10-20.
- 1929a. (Rostovtzeff.) The Animal Style in South Russia and China. *Princeton Monographs in Art and Archaeology*, 14. Princeton.
- 1929b. Sredinnaya Aziya, Rossiya, Kitaï i zverinyi stil'. Seminarium Kondakovianum, *Skythika*, 1. Prague.
1930. (Rostovcev.) Le porte-épée des iraniens et des chinois. In *Orient et Byzance*, 4: *L'Art byzantin chez les Slaves*, part 1, *Les Balkans* (Paris):337-346.
- 1930-1932. (Rostovtzeff.) The Great Hero of Middle Asia and His Exploits. *Artibus Asiae*, 4(1):99-117.
1931. (Rostowzew.) *Skythien und der Bosphorus*. Berlin.
- 1931-1932. (Rostovtzeff.) L'Art gréco-iranien. *Revue des Arts Asiatiques*, 7:202-222.
1935. (Rostovtzeff.) Dura and the Problem of Parthian Art. *Yale Classical Studies*, 5:157-304.
- Rostovtsev, M. I. and S. I. Rudenko
1918. Kurgannyya nakhodka Orenburgskoi oblasti epokhi rannyyago i pozdnyago Ellinizma. *Materialy po arkheologii Rossii*, 37. Petrograd.
- Rudenko, S. I.
1953. *Kul'tura naseleniya gornogo Altaya v shifskoe vremya*. Moscow-Leningrad.
1961. *Iskusstvo Altaya i Perednei Azii (seredina I tysyacheletiya do n. e.)*. Moscow.
- 1962a. *Kul'tura Khunov i Noinulinskie kurgany*. Moscow-Leningrad.
- 1962b. Sibirskaya kollektsiya Petra I. *Arkheologiya SSSR svod arkheologicheskikh istochnikov*, D3-9. Moscow-Leningrad.
- Rudolph, R. C.
1951. *Han Tomb Art of West China*. Berkeley and Los Angeles.
- Rybakov, B. A.
1953. Drevnie Rusy, sa 17:23-104.
- Rykhov, R.
1925. Suslovskii kurgannyi mogil'nik. *Uchenye zapiski Saratovskogo Gosudarstvennogo universiteta imeni N. G. Chernyshevskogo* (Saratov), 4(3):28-103.
- Sadykova, M. Kh.
1962. Sarmatskie pamyatniki Bashkirii. *MIA* (Moscow), 115:242-273.
- Sági, K.
1954. Intercissa, 1. *Archaeologia Hungarica*, 33:61-123.
- St. Petersburg, Commission impériale archéologique
1865. *Compte-rendu pour l'année 1864*. St. Pétersbourg.
- Salin, B.
1904. *Die altgermanische Thierornamentik*. Stockholm.
- Salmony, A.
1938. *Carved Jade of Ancient China*. Berkeley.
1952. *Archaic Chinese Jades from the Edward and Louise B. Sonnenschein Collection*. The Art Institute of Chicago.
1963. *Chinese Jade through the Wei Dynasty*. New York.
- Sal'nikov, K. V.
1940. Sarmatskie kurgany bliz g. Orska. *MIA* (Moscow-Leningrad), 1:121-138.
1950. Sarmatskie pogrebeniya v raione Magnitogorska. *KSIMK, ANSSR*, 34:115-121.
- Savage, G.
1965. *Chinese Jade: A Concise Introduction*. New York.
- Schafer, E. H.
1963. *The Golden Peaches of Samarkand: A Study of T'ang Exotics*. Berkeley and Los Angeles.
- Schlumberger, D.
1952. Le palais Ghaznévide de Lashkari Bazar. *Syria*, 29(3/4):251-270.
1954. Le temple de Surkh Kotal en Bactriane (II). *Journal Asiatique*, 242:161-187.
1960. Descendants non-méditerranéens de l'art grec. Extrait de la revue *Syria*, 1960. Institut français d'archéologie de Beyrouth, *Publications hors série*, 10. Paris.
1961. The Excavations at Surkh Kotal and the Problem of Hellenism in Bactria and India. *Proceedings of the British Academy*, 47:77-95.
- Schmidt, E. F.
1957. Contents of the Treasury and Other Discoveries. Volume 2 in Persepolis. *The University of Chicago Oriental Institute Publications*, 69. Chicago.
- Scott, H.
1967. *The Golden Age of Chinese Art: The Lively T'ang Dynasty*. Rutland, Vermont, and Tōkyō.
- Seligman, C. G.
- 1940-1941. Early Chinese Glass. *Transactions of the Oriental Ceramic Society* (London), pages 19-26.
- Seligman, C. G., and H. C. Beck
1938. Far Eastern Glass: Some Western Origins. *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), 10:1-64.
- Seyrig, H.
1937. Antiquités syriennes, 20: Armes et costumes iraniens de Palmyre. *Syria*, 18(1):4-31.
- Shepherd, D.
1964. Sasanian Art in Cleveland. *Bulletin of the Cleveland Museum of Art*, 51(4):66-92.
- Shiel, J., Lieut.-Col.
1838. Notes on a Journey from Tabriz, through Kurdistan, via Van, Bitlis, Se'ert and Erbil, to Suleimaniyeh, in July and August, 1836. *Journal of the Royal Geographical Society of London*, 8:54-101.
- Shih, Hsio-yen
1959. I-nan and Related Tombs. *Artibus Asiae*, 22(4):277-312.
- Shilov, V. P.
1955. Raskopki Kalinovskogo kurgannogo mogil'nika. *KSIMK, ANSSR*, 59:118-128.
1959. Kalinovskii kurgannyi mogil'nik. *MIA* (Moscow), 60:323-523.
- Shishkin, V. A.
1955. Varakhshah, sa, 23:101-130.
1963. *Varakhshah*. Moscow.
- Shkorpil, V. V.
1904. In *Ochety Arkheologicheskoi kommissii*. [Not seen.]
- Shmit, A. V.
1925. Tuiskii vsadnik: k voprosu o ranneistoricheskikh svyazyakh mezhdou Uralom i Srednei Aziei. *Zapiski kollegi vostokovedov pri aziatskom muzee Rossiiskoi Akademii nauk* (Leningrad), 1:410-434.
1927. (Schmidt.) Kačka, Beiträge zur Erforschung der Kulturen Östrusslands in der Zeit der Völkerwanderung (III.-V. Jh.). *Eurasia Septentrionalis Antiqua* (Helsinki), 1:18-50.
- Shtern, E. R. von
1897. K voprosu o proiskhozhdenii *gotskogo-stilya* predmetov yuvelirnogo iskusstva; arkheologicheskie zametki po povodu zolotykh veshchei, najdenykh v Kerchi letom 1896 g. *Zapiski Odesskogo obshchestva istorii i drevnostei* (Odessa), 20:1-15.
- Sickman, L., and A. Soper
1960. *The Art and Architecture of China*. 2nd edition, with additions. The Pelican History of Art. Baltimore.
- Sinitsyn, I. V.
1936. Pozdne-sarmatskie pogrebeniya nizhnego Povolzh'ya. *Izves-*

- tiya Saratovskogo nizhne-volzhskogo instituta kraevedeniya imeni M. Gor'kogo* (Saratov), 7:71-85.
1946. K materialam po sarmatskoj kul'ture na territorii nizhnego Povolzh'ya. SA, 8:73-95.
1951. Arkheologicheskie issledovaniya v nizhnem Povolzh'e i zapadnom Kazakhstane. KSIIMK, ANSSSR, 37:97-105.
1952. Arkheologicheskie issledovaniya v Saratovskoj oblasti i zapadnom Kazakhstane. KSIIMK, ANSSSR, 45:62-73.
- Sirén, O.
1925. Documents d'art chinois de la collection Osvald Sirén, publiés avec une préface de M. Raymond Koechlin, sous la direction de M. Henri Rivière, avec la collaboration de Serge Elisséév, Gustaf Monthe, Osvald Sirén. *Ars Asiatica*, 7. Paris and Brussels.
1930. *The Han Period*. Volume 2 in *A History of Early Chinese Art*. London.
- 1942-1943. *Kinas Konst under Tre Artusenden*. 2 volumes. Stockholm.
- Smirnov, A. P.
1957. Zheleznyj vek Bashkirii. MIA (Moscow), 58:5-113.
- Smirnov, K. F.
1948. Sarmatskie pogrebeniya yuzhnogo Priural'ya. KSIIMK, ANSSSR, 22:80-86.
1950. Sarmatskie plemena severnogo Prikaspiya. KSIIMK, ANSSSR, 34:97-114.
1951. O nekotorykh itogakh issledovaniya mogil'nikov meotskoj i sarmatskoj kul'tury Prikuban'ya i Dagestana. KSIIMK, ANSSSR, 37:151-160.
- 1952a. Osnovnye puti razvitiya meoto-sarmatskoj kul'tury srednego Prikuban'ya. KSIIMK, ANSSSR, 46:3-18.
- 1952b. Voprosy izucheniya sarmatskikh plemen i ikh kul'tury s sovetskoi arkheologii. *Voprosy skifo-sarmatskoj arkheologii*, Institut istorii material'noj kul'tury, Akademiya nauk SSSR (Moscow), pages 195-219.
1953. Itogi i ocherednye zadachi izucheniya sarmatskikh plemen i ikh kul'tury. SA, 17:133-148.
1954. Rabota pervogo nizhnevolzhskogo otryada Stalingradskoj ekspeditsii. KSIIMK, ANSSSR, 55:64 ff.
1959. Kurgany u sel. Plovatka i Politatdel'skoe Stalingradskoj oblasti. MIA (Moscow), 60:206-322.
1961. Vooruzhenie Savromatov. MIA (Moscow), 101.
1964. *Savromaty: Rannaya istoriya i kul'tura sarmatov*. Moscow.
- Smirnov, K. F., and V. G. Petrenko
1963. Savromaty Povolzh'ya i yuzhnogo Priural'ya. *Arkheologiya SSSR svod arkheologicheskikh istochnikov*, D1-9. Moscow.
- Smirnov, Ya. I.
1909. *Vostochnoe srebro, Atlas drevnej serebryanoi i zolotoj posudy vostochnago proiskhozhdeniya, najdennoj preimushchestvenno v predelakh Rossijskoj Imperii, Izdanie Imperatorskoj Arkheologicheskoi Kommissii ho dnyu pyatidesyatiletiya eya deyatel'nosti*. St. Petersburg.
- Smith, C. S.
1965. Materials and the Development of Civilization and Science. *Science*, 148 (3672):908-917.
- Smith, V. A.
1911. *A History of Fine Art in India and Ceylon from the Earliest Time to the Present Day*. Oxford.
- Sokol'skij, N. I.
1954. Bosporskie mechi. MIA (Moscow), 33:123-196.
- Sommerström, B., and F. Bergman
- 1956-1958. Archaeological Researches in the Edsen-Gol Region, Inner Mongolia. Volumes 8 and 9 in Section 7: Archaeology, Publications 39 and 41 in *Reports from the Scientific Expedition to the North-Western Provinces of China under the Leadership of Dr. Sven Heden*. Stockholm: Statens Etnografiska Museum.
- Soper, A. C.
- 1951a. Kuo Jo-hsü's Experiences in Painting (T'u-hua chien-wen chih): An Eleventh Century History of Chinese Painting Together with the Chinese Text in Facsimile. Translated and annotated by A. C. Soper. *American Council of Learned Societies, Studies in Chinese and Related Civilizations*, 6. Washington, D.C.
- 1951b. The Roman Style in Gandhāra. *American Journal of Archaeology*, 55(4):301-319.
1964. The Tomb of the Marquis of Ts'ai. *Oriental Art*, new series, 10(3):152-157.
- Splotsyn, A. A.
1902. Drevnosti Kamskoj chudi po kollekcii Teploukhovykh. *Materialy po arkheologii Rossii*, 26. St. Petersburg.
1905. Veshchi s inkrustatsiej iz Kerchenskikh katakomb 1904 g. *Izvestiya Arkheologicheskoi Kommissii*, 17. Petrograd. [Not seen.]
- Splith, A.
1894. Ausgrabungen im Nydamer-Moor. *Mitteilungen des Anthropologischen Vereins in Schleswig-Holstein* (Kiel), 7. [Not seen.]
- Stanford University, Palo Alto
1958. *Arts of the Chou Dynasty*. Stanford University Museum, February 21 to March 28, 1958. Sponsored by The Committee for Art at Stanford. Introduction and Notes by J. D. La Plante.
- Staviskij, B. Ya.
1960. O datirovka i proiskhozhdenii Ermitazhnoj serebryanoi chashi s izobrazheniem venchaniya tsarya. *Soobshcheniya Gosudarstvennogo Ermitazha* (Leningrad), 17:67-71.
- Stein, M. A.
1907. *Ancient Khotan*. 2 volumes. Oxford.
1921. *Serindia*. 5 volumes. Oxford.
1928. *Innermost Asia*. 4 volumes. Oxford.
- Stockholm, Museum of Far Eastern Antiquities and Ab Gustavsbergs Fabriker
1963. *Celedon-Jade: Finds, Specimen, Scientific Results*. Exhibition Arranged by the Museum of Far Eastern Antiquities and Ab Gustavsbergs Fabriker, at the National Museum, Stockholm, May-June. Preface by B. Gyllensvärd.
- Stryzowski, J.
1917. *Allai-Iran und Völkerwanderung*. Leipzig.
- Suetonius
1957. *The Twelve Caesars*. Translated by R. Graves. Harmondsworth: Penguin Books.
- Sulimirski, T.
1952. Les archers à cheval, cavalerie légère des anciens. *Revue Internationale d'Histoire Militaire*, 3(12):447-461.
- Sullivan, M.
1961. *An Introduction to Chinese Art*. Berkeley and Los Angeles.
1963. *Chinese Ceramics, Bronzes and Jades in the Collection of Sir Alan and Lady Barlow*. London.
- Sunglin *Collection of Chinese Art and Archaeology, The*
1939. Catalog of Exhibition, May. Introduction by H. Mueller. New York.
- Swann, N. L., translator and annotator
1950. *Food and Money in Ancient China: The Earliest Economic History of China to A.D. 25, Han Shu 24, with Related Texts, Han Shu 91 and Shih-chi 129*. Princeton.
- Swann, P. C.
1963. *Chinese Monumental Art*. London.

- Syme, R.  
1929. *The Argonautica of Valerius Flaccus. Classical Quarterly*, 23 (3/4):129-137.
- Symonovich, E. A.  
1955. Pamyatniki Chernyakhovskoi kul'tury stepnogo Podneprov'ya. SA, 14:282-316.
- Tacitus  
1937. *History*, volume I. Loeb Classical Library. Translated by J. Jackson. Cambridge, Mass.
- Takeuchi Kimpei  
1913. The Chinese Appreciation of Jade. *The Burlington Magazine*, 23:140-146.
- Talitskaya, I. A., compiler  
1952. Materialy i issledovaniya po arkheologii Urala i Priural'ya; materialy k arkheologicheskoi karte bassejna r. Kamy. MIA (Moscow), 27.
- Tallgren, A. M.  
1916. *Collection Zaoussaïlov au Musée Historique de Finlande*. 2 parts. Helsinki.  
1917. *Collection Tovostine des antiquités préhistoriques de Minoussinsk conservées chez le Dr. Karl Hedman à Vasa*. Société finlandaise d'archéologie. Helsinki.  
1924. L'Orient et l'Occident dans l'âge du fer finno-ougrien jusqu'au IX:e siècle de notre ère. *Suomen Muinaismuisto-Yhdistyksen Aikakauskirja* (Helsinki), 35 (3).  
1933. Notes marginales. *Eurasia Septentrionalis Antiqua* (Helsinki). 7:235-242 [here pages 237-238].
- Tanner, P. de  
1925. *Chinese Jade, Ancient and Modern: Descriptive Catalogue, Illustrating the Most Prominent Pieces of a Collection of Jade Articles, with Special Reference to Sepulchral Jades*. 2 volumes. Berlin. [Volume 1, plate 15, classifies numbers 516, 1510, 565, 687, 1327, as scabbard slides but they are not. All scabbard slides on plate 15, volume 1, are stated to be one-sixth natural size, but this indication appears to be unreliable.]
- Tarakanova, S. A.  
1947. Arkheologicheskie raboty v gorodne na Volge v 1944 g. KSIMK, ANSSSR, 14:110-114.
- Tarn, W. W.  
1930. Seleucid-Parthian Studies. *Proceedings of the British Academy* (London), 16:105-135.
- Teggart, F.  
1939. *Rome and China*. Berkeley.
- Terenozhkin, A. I.  
1950. Sogd i Chach. KSIMK, ANSSSR, 23:152-169.
- Ternback, J.  
1964. Technical Aspects of the Herzfeld Bent Iron Dagger. Pages 46-51 in M. Mellink, editor, *Dark Ages and Nomads ca. 1000 B. C.: Studies in Iranian and Anatolian Archaeology*. Nederlands Historisch-Archaeologisch Instituut in het Nabije Oosten. Istanbul.
- Tiratsyan, G. A.  
1960. Utochnenie nekotorykh detalej sasanidskogo vooruzheniya po dannym Armyanskogo istorika IV v. n. e. Favsta Buzanda. Pages 474-486 in *Issledovania po istorii kul'tury narodov Vostoka*. Sbornik v chest' Akademika I. A. Orbeli. Moscow-Leningrad.
- Tokyo University, Iraq-Iran Archaeological Expedition  
1966. Report 7: *Dailaman II: The Excavation at Noruzmahale and Khoramrud, 1960*, by Egami Namio, Fukai Shinji, and Masuda Seiichi. Tokyo: The Institute for Oriental Culture.  
1968. Report 8: *Dailaman III: The Excavations at Hassani Mahale and Ghalekuti, 1964*, by Toshihiko Sono and Shinji Fukai. Tokyo: The Institute for Oriental Culture.
- Toll', N. P.  
1927. Zametki o kitaïskom shelke na yuge Rossii. Seminarium Kondakovianum, *Annales*, 1:85-92. Prague.
- Tolstov, S. P.  
1938. Osnovnye voprosy drevnei istorii Srednei Azii. *Vestnik drevnei istorii*, 1(2):176-203.  
1948. *Po sledam drevnekhorezmiïskoi tsivilizatsii*. Moscow-Leningrad. [Translated by O. Mehlitz, *Auf den Spuren der altchoresmischen Kultur*, Berlin, 1953.]  
1963. Scythians of the Aral Sea Area and Khorezm. *Trudy dvadtsat' pyatogo mezhdunarodnogo kongressa vostokovedov* (Moscow, 9-16 August 1960), 3:147-169.
- Tolstov, S. P., and M. A. Itina  
1966. Saki nizov'ev Syr-dar'i. SA, 2:151-175.
- Treuer, K. V.  
1932. (C. Treuer.) Excavations in Northern Mongolia (1924-1925). *Memoirs of the Academy of History of Material Culture* (Leningrad), 3.  
1940. Pamyatniki greko-baktrijskogo iskusstva. *Pamyatniki kul'tury i iskusstva v sobraniyakh Ermitazha*, 1. Moscow-Leningrad.
- Trousdale, W.  
1968. The Crenelated Mane: Survival of an Ancient Tradition in Afghanistan. *East and West*, new series, 18(1/2):169-177.  
1969. A Possible Roman Jade from China. *Oriental Art*, new series, 15(1):58-64.
- Trubner, H.  
1962. An Unusual Chinese Tomb Figure. *Archives of the Chinese Art Society of America*, 16:99-101.
- Tylecote, R. F.  
1962. *Metallurgy in Archaeology: A Prehistory of Metallurgy in the British Isles*. London.
- Umehara Sueji  
1926. Deux grandes découvertes archéologiques en Corée. *Revue des Arts Asiatiques*, 3(1):24-33.  
1957. Some Ancient Chinese Relics in Tenri Museum. *Oriental Art*, new series, 3(1):6-13.
- University of Michigan, Museum of Art  
1953. *Early Chinese Jades: A Loan Exhibition Presented by the Museum of Art, University of Michigan*. Introduction by M. Loehr. Ann Arbor.  
1964. *James Marshall Plumer Memorial Collection, December 6, 1964-January 10, 1965*. Ann Arbor.
- University of Pennsylvania, University Museum  
1940. *Archaic Chinese Jades: Special Exhibition, February*. Introduction and Notes by H. H. F. Jayne. Philadelphia.  
1962. *Chinese Jade: November 30, 1962-February 3, 1963*. Philadelphia.
- Vandier, N.  
1938. Note sur un vase chinois du Musée du Louvre. *Revue des Arts Asiatiques*, 12:133-141.
- Venice, City of  
1954. *Mostra d'arte Cinese: Città di Venezia, Settimo centenario di Marco Polo, Catalogo*. Introduction by A. Guiganino; Catalogue by J.-P. Dubosc. Venice.
- Vienna, Österreichischer Museum für Kunst und Industrie  
1937. *Ausstellung östasiatische Malerei aus dem Museum V. D. Heydt, Eysden, Holland; chinesisches Lackgerät aus verschiedenem Besitz*. Vienna.
- Vignier, C.  
1926. Notes sur un livre récent. *Revue des Arts Asiatiques*, 3(1): 11-16.
- Visser, H. F. E.  
1948. *Asiatic Art in Private Collections of Holland and Belgium*. Amsterdam.

- Vogel, J. Ph.  
1930. La sculpture de Mathurâ. *Ars Asiatica*, 15. Paris and Brussels.
- Volback, W. F., and M. Hirmer  
1961. *Early Christian Art*. London.
- Voshchinina, A. I.  
1953. Osvyazyakh Priural'ya s Vostokom v VI-VII vv, n. e. SA, 17:183-196.
- Waldschmidt, E.  
1925. *Gandhara, Kutscha, Turfan: eine Einführung in die frühmittelalterliche Kunst Zentralasiens*. Leipzig.
- Waley, A., translator  
1946. *Chinese Poems*. London.
- Warner, L.  
1950. Far Eastern Art. *The Bulletin of the Fogg Art Museum, Harvard University*, 11 (2):74-75.
- Watson, B.  
1961. (Translator.) Records of the Grand Historian of China Translated from the *Shih chi* of Ssu-ma Ch'ien by Burton Watson. *Records of Civilization, Sources and Studies*, number 65. 2 volumes. New York.  
1962. *Early Chinese Literature*. New York.  
1963a. (Translator.) *Hsün Tzu, Basic Writings*. New York and London.  
1963b. (Translator.) *Mo Tzu, Basic Writings*. New York and London.
- Watson, G. R.  
1969. *The Roman Soldier*. Aspects of Greek and Roman Life. Ithaca, N. Y.: Cornell University Press.
- Watson, W.  
1960. *Archaeology in China*. London.  
1961. *China before the Han Dynasty*. Ancient Peoples and Places. New York.  
1962. *Ancient Chinese Bronzes*. The Arts of the East. London.  
1963. *Handbook to the Collections of Early Chinese Antiquities*. London: The Trustees of the British Museum.
- Weitzmann, K.  
1943. Three Bactrian Silver Vessels with Illustrations from Euripides. *The Art Bulletin*, 25 (4):289-324.
- Wellesz, E.  
1950. A New Museum of Eastern Art in Oxford. *Artibus Asiae*, 13(1/2):99-101.
- Werner, E. T. C.  
1932. *Chinese Weapons*. Extra volume. Royal Asiatic Society, North China Branch. Shanghai.
- Werner, J.  
1932. Bogenfragmente aus Carnuntum und von der unteren Wolga. *Eurasia Septentrionalis Antiqua* (Helsinki), 7:33-58.  
1956. Beiträge zur Archäologie des Attila-Reiches. *Bayerische Akademie der Wissenschaften, philosophisch-historische Klasse, Abhandlungen, Neue Folge, Heft 38-A, Textteil; Heft 38-B, Tafelteil*. Munich.
- West Palm Beach, Norton Gallery of Art  
1950. *An Exhibition of Chinese Archaic Jades, Arranged for Norton Gallery of Art by C. T. Loo, Inc., New York*. Introduction by L. H. Cooper. West Palm Beach, Florida.
- White, W. C.  
1934a. Archaic Chinese Jade is Perfection: Finds in the Lo-yang Tombs. *Illustrated London News*, March 10, pages 371-373.  
1934b. *Tombs of Old Lo-yang: A Record of the Construction and Contents of a Group of Royal Tombs at Chin-ts'un, Honan, Probably Dating 550 B.C.* Shanghai.  
1935. Sacrificial Knives and Weapons from Ancient China. *Illustrated London News*, April 20, pages 640-641.  
1939. *Tomb Tile Pictures of Ancient China*. Toronto.  
1946. Bronze Knives of Ancient China. *Bulletin of the Royal Ontario Museum of Archaeology*, 15:1-24.
- Whitlock, H. P., and M. L. Ehrmann  
1949. *The Story of Jade*. New York.
- Widengren, G.  
1956. Some Remarks on Riding Costume and Articles of Dress among Iranian Peoples in Antiquity. *Studia Ethnographica Upsaliensia*, 11 (*Artica*): 228-276. Uppsala.
- Wiley, B. I., and H. D. Milhollen  
1959. *They Who Fought Here*. New York.
- Wilhelm, H.  
1942. *Chinas Geschichte: Zehn einführende Vorträge*. Peking.
- Wilkinson, F.  
1969. *Militaria*. London and Sydney.
- Wong, K. C.  
1927-1928. Ancient Jades. *The China Journal*, 1927 7(2):58-69; 1927, 7(3):111-123; 1927, 7(4):176-181; 1927, 7(5):222-228; 1927, 7(6):284-287; 1928, 8(3):118-121.  
1931-1932. Ancient Chinese Jades. *The China Journal*, 1931, 14(1):6-7; 1932, 16(2):58-62; 1932, 16(4):157-158.  
[1937] *The Wong Collection of Ancient Chinese Jades*. London.
- Yakubovskii, A. Yu., A. M. Belenitskii, and others  
1954. *Zhivopis' drevnego Pyandzhikenta*. Moscow. Yale University Art Gallery.
1954. *Palmyrene and Gandharan Sculpture: An Exhibition Illustrating the Cultural Interrelations between the Parthian Empire and Its Neighbors West and East, Palmyra and Gandhara, October 14-November 14*. Introduction by H. Ingholt. New Haven, Conn.
- Yetts, W. P.  
1926. A Chinese Scabbard-Jade. *The Burlington Magazine*, 49(283): 197-201.
- Zasetskaya, I. P.  
1968. O khronologii pogrebenii epokhi pereseleniya narodov nizhnego Povolzh'ya. SA, 2:52-62.
- Zavitukhina, M. P.  
1961. Mogil'nik vremeni rannikh kochevnikov bliz g. Biiska. Pages 89-108 in *Arkheologicheskii sbornik*, 3: *Epokha bronzy i rannego zheleza Sibiri i Srednei Azii*. Leningrad.
- Zbrueva, A. V.  
1952. Istoriya naseleniya Prikam'ya v anan'inskuyu epokhu. Tom 4 in *Materialy i issledovaniya po arkheologii Urals i Priural'ya*. MIA, (Moscow), 30.
- Zimmer, H.  
1955. *The Art of Indian Asia*. 2 volumes. New York.





**PLATES 1-24**

## SOURCES FOR PLATES

1. *a*, After Yün-nan Chin-ning Shih-chai-shan (1959), plate CX,3; *b*, courtesy Dr. Paul Singer, Summit, New Jersey; *c*, courtesy Royal Ontario Museum, Toronto, Ontario; *d*, after Salmony (1952), plate XCIII,6; *e*, courtesy Worcester Art Museum, Worcester, Massachusetts.
2. *a*, After Umehara (1955), plate CVI; *b-e*, courtesy Dr. Arthur M. Sackler, New York.
3. *a*, Courtesy the late Mr. Desmond Gure, London; *b*, after Umehara (1955), plate CIV; *c*, after Hanoi, Ecole française d'Extrême-Orient, *Bulletin* (1920), plate V,B; *d*, after Umehara (1955), plate CVII; *e*, after Ku-kung, number 36, page 10.
4. *a*, After Hamada (1925), volume 2, plate XXI,46; *b*, courtesy Minneapolis Institute of Arts, Alfred F. Pillsbury Bequest; *c*, Chung-kuo k'o-hsüeh yüan, ККНР, 1963,2, plate XIV,11; *d*, courtesy Art Institute of Chicago, Edward and Louise B. Sonnenschein Bequest; *e*, after University of Michigan, *Early Chinese Jades* (1953), number 117; *f*, after Jenyns (1951), plate XXXV,B.
5. *a*, After Ch'ang-sha fa-chüeh pao-kao (1957), plate XCIII,12; *b*, courtesy Royal Ontario Museum, Toronto, Ontario; *c*, after Pelliot (1925), plate XLII; *d*, courtesy Dr. Arthur M. Sackler, New York.
6. *a*, After Hu-nan sheng wen-wu kuan-li wei-yüan-hui (1957a), plate III,1; *b*, courtesy Trustees of the British Museum; *c*, courtesy Dr. Paul Singer, Summit, New Jersey; *d*, after Salmony (1938), plate LVIII,1; *e*, courtesy Dr. Paul Singer, Summit, New Jersey; *f*, courtesy Trustees of the British Museum.
7. *a*, After Janse (1930), plate XVIII,2; *b*, after Umehara (1955), plate CVI; *c*, courtesy Freer Gallery of Art, Washington, D.C.; *d*, after Umehara (1955), plate CVII,10.
8. *a*, Courtesy Dr. Paul Singer, Summit, New Jersey; *b*, after Karlbeck (1955), plate LXI,8; *c-d*, courtesy Royal Ontario Museum, Toronto, Ontario.
9. *a*, Courtesy Dr. Paul Singer, Summit, New Jersey; *b*, after Pope-Hennessy (1923), plate XXXIII,1; *c*, after Wu Ta-ch'eng (1889), II, 114:a, right; *d*, after Umehara (1955), plate CVI.
10. *a*, After Umehara (1955), plate CV; *b*, after Antiquus (1928), figure 1; *c*, after Umehara (1955), plate CVII,8; *d*, after Maenchen-Helfen [1957], page 104, figure 15.
11. *a*, After Salmony (1938), plate LXI,5; *b*, courtesy Dr. Paul Singer, Summit, New Jersey; *c*, courtesy Dr. Arthur M. Sackler, New York.
12. *a*, After Ginters (1928), page 71, plate XXIX,d; *b*, after Ginters (1928), page 71, plate XXIX,b; *c* courtesy Margaret McC. and Walter S. Hurley, Laurinburg, North Carolina; *d*, after Ginters (1928), page 71, plate XXIX,c; *e*, after Yetts (1926), plate C.
13. *a-b*, Courtesy Musée Guimet, Paris; *d*, courtesy Dr. Arthur M. Sackler, New York.
14. *a*, After Yetts (1926), plate B; *b*, after Engelhardt (1866), page 67, figure C; *c*, courtesy Nationalmuseet, Copenhagen.
15. *a*, After Janse (1930), page 81, figure 5; *b*, after Engelhardt (1866), plate VIII.Nyd.32; *c*, after Lindenschmit (1880), page 234, figures 155-157; *d*, after Behmer (1939), plate IX,1.
16. *a*, After Behmer (1939), plate XVII,1; after Behmer (1939), plate XVII,5d; *c*, after Behmer (1939), plate XX.
17. *a*, After Behmer (1939), plate XXII,3b; *b*, courtesy Professor Kazimierz Majewski, University of Warsaw; *c*, after Stein (1928), volume 3, plate VI; *d*, after Marshall (1933), plate XX,4; *e*, after Aspelin (1877), volume 2, page 149, number 631.
18. *a*, After Aspelin (1877), volume 2, page 149, number 630; *b*, after Spitsyn (1902), plate II,1; *c-d*, courtesy Direction-Générale des Antiquités et des Musées, Damascus.
19. *a-b*, Courtesy Direction-Générale des Antiquités et des Musées, Damascus; *c*, after Umehara (1938a), plate XX,1.
20. *a-b*, After Umehara (1938a), plate XX,2; *c*, after Ginters (1928), page 75, plate XXXI,e; *d*, after Kusheva-Grozevskaia (1929), plate II,1.
21. *a*, After Kusheva-Grozevskaia (1929), plate II,2; *b*, after Baye (1890), plate III,1; *c*, after Salmony (1952), plate CVII,1.
22. *a-b*, After Sinitsyn (1936), page 74, figure 2; *c*, after Na Chih-liang (1964), plate LXXVIII,3; *d*, courtesy Dr. Paul Singer, Summit, New Jersey; *e* after Janse (1930), plate XVII,8; *f*, after Shū Kan iho (1932), plate XXXIII,3.
23. *b*, Courtesy Art Institute of Chicago, Edward and Louise B. Sonnenschein Bequest; *c*, after Nei-meng-ku ch'u-t'u (1963), plate CXLV; *d*, courtesy Dr. Ralph W. Chaney, Berkeley.
24. *b*, After Ancient Jade Sword and Scabbard Parts (1927), plate II, following page 296, lower section, third item from top right; *c-d*, after *Sommarström* (1956-1958), volume 2, page 245, figure 117.

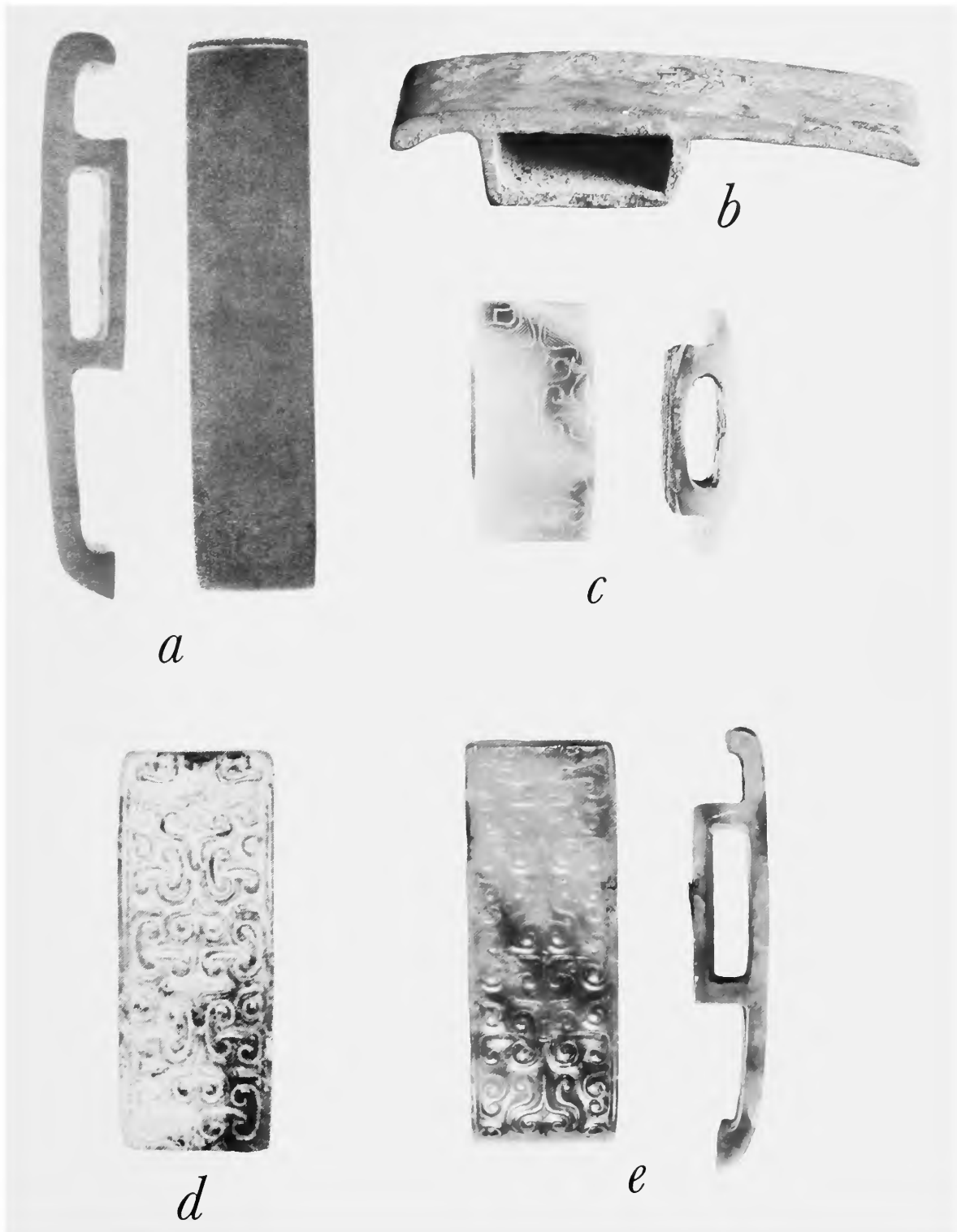


PLATE 1.—Chinese scabbard slides, Form I, Unornamented and Geometric classes: *a*, CP.1; *b*, CP.9; *c*, CV.4 (Type 1, Stage a); *d*, CV.13 (Type 1, Stage a); *e*, CV.34 (Type 1, Stage a).

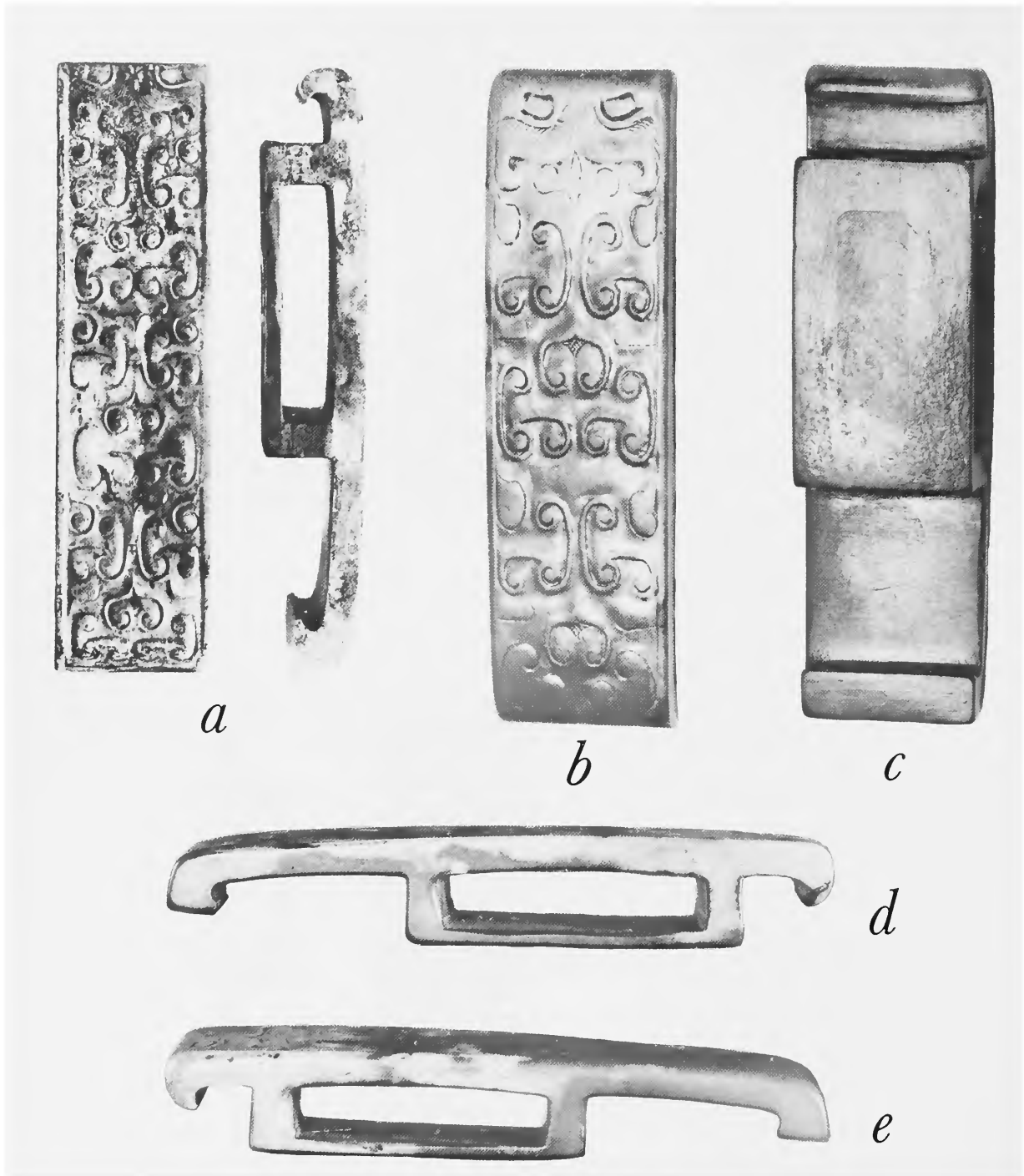


PLATE 2.—Chinese scabbard slides, Form I, Geometric Class: *a*, CV.22 (Type 1, Stage b); *b-e*, CV.103 (Type 1, Stage c).

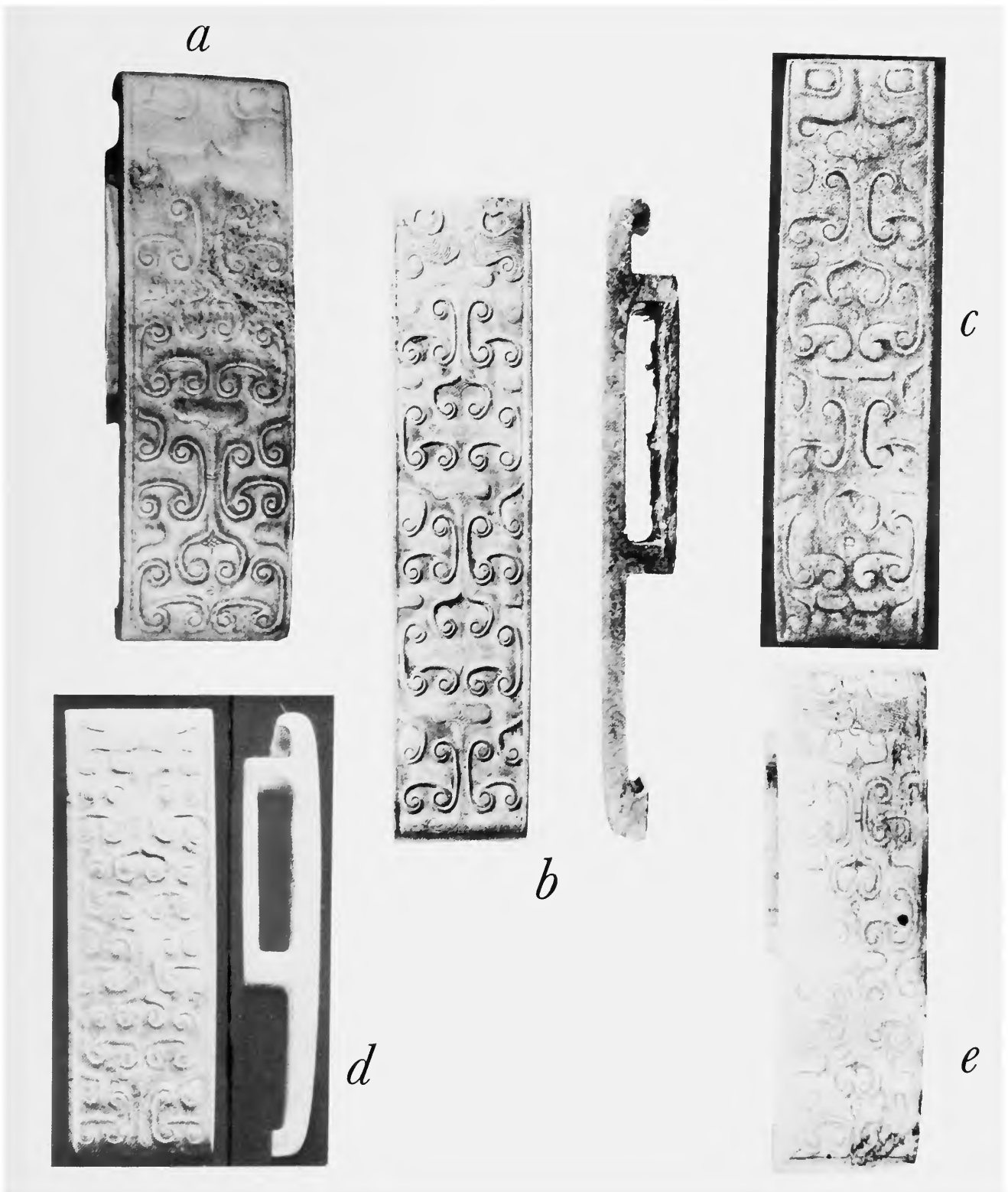


PLATE 3.—Chinese scabbard slides, Form I, Geometric Class: *a*, CV.33 (Type 1, Stage e); *b*, CV.8 (Type 1, Stage d); *c*, CV.81 (Type 1, Stage d); *d*, CV.25 (Type 1, Stage e); *e*, CV.30 (Type 1, Stage e).

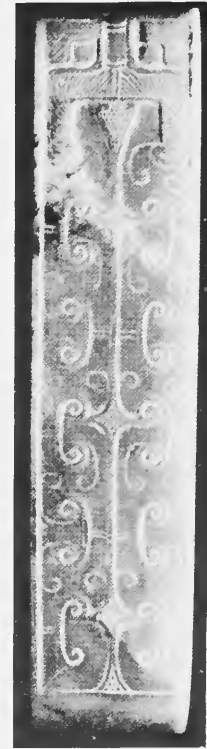
*a**c**d**e**f**b*

PLATE 4.—Chinese scabbard slides, Form I, Geometric Class: *a*, CV.24 (Type 2, Stage a); *b*, CV.32 (Type 2, Stage a, enlarged); *c*, CV.83 (Type 2, Stage a); *d*, CV.14 (Type 2, Stage b); *e*, CV.23 (Type 2, Stage b); *f* CV.43 (Type 2, Stage b).

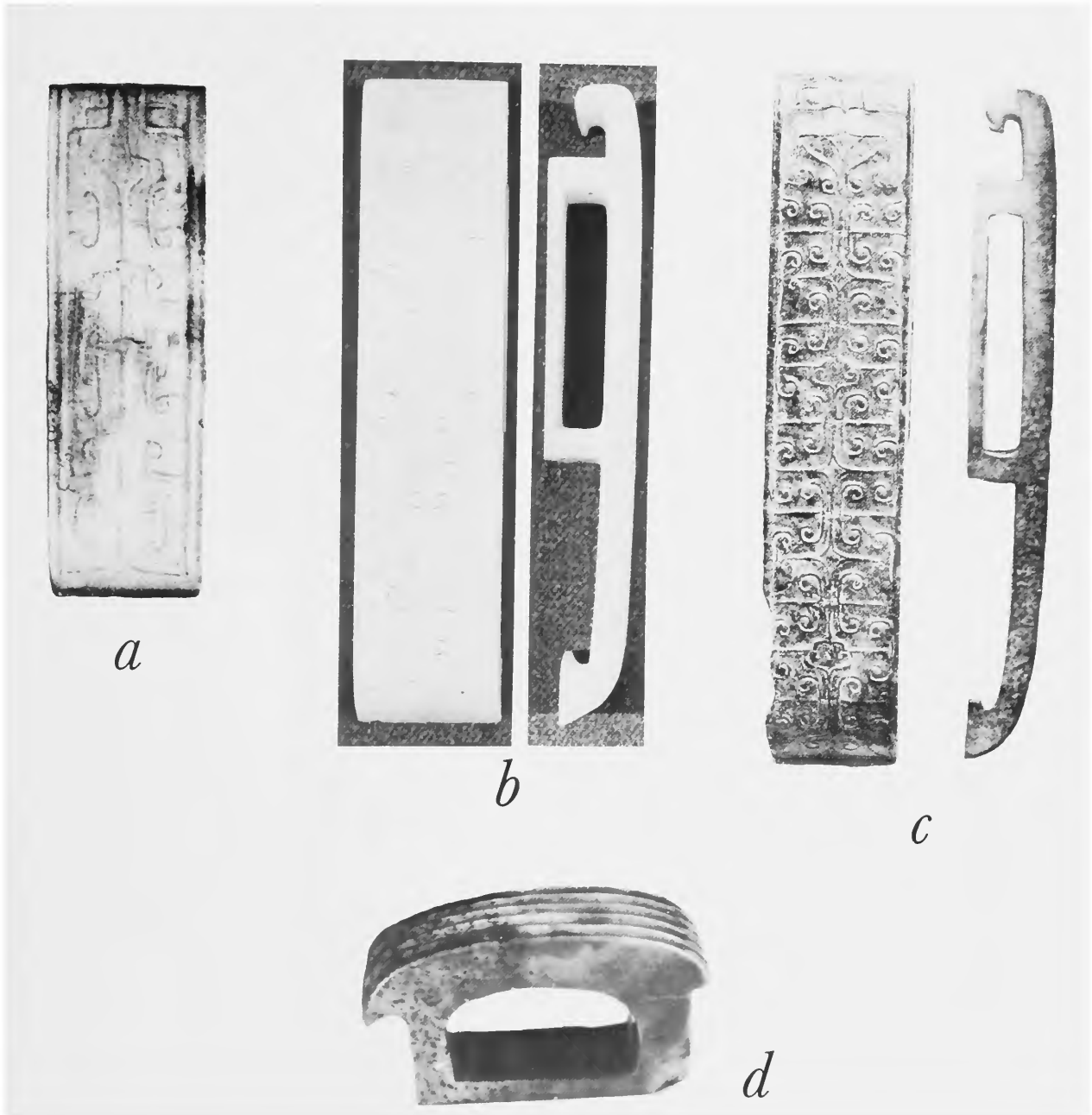


PLATE 5.—Chinese scabbard slides, Form I, Geometric and Ridge Classes: *a*, CV.79 (Type 2, Stage b); *b*, CV.90 (Type 2, Stage b); *c*, CV.18 (Type 2, Stage c); *d*, CR.1.

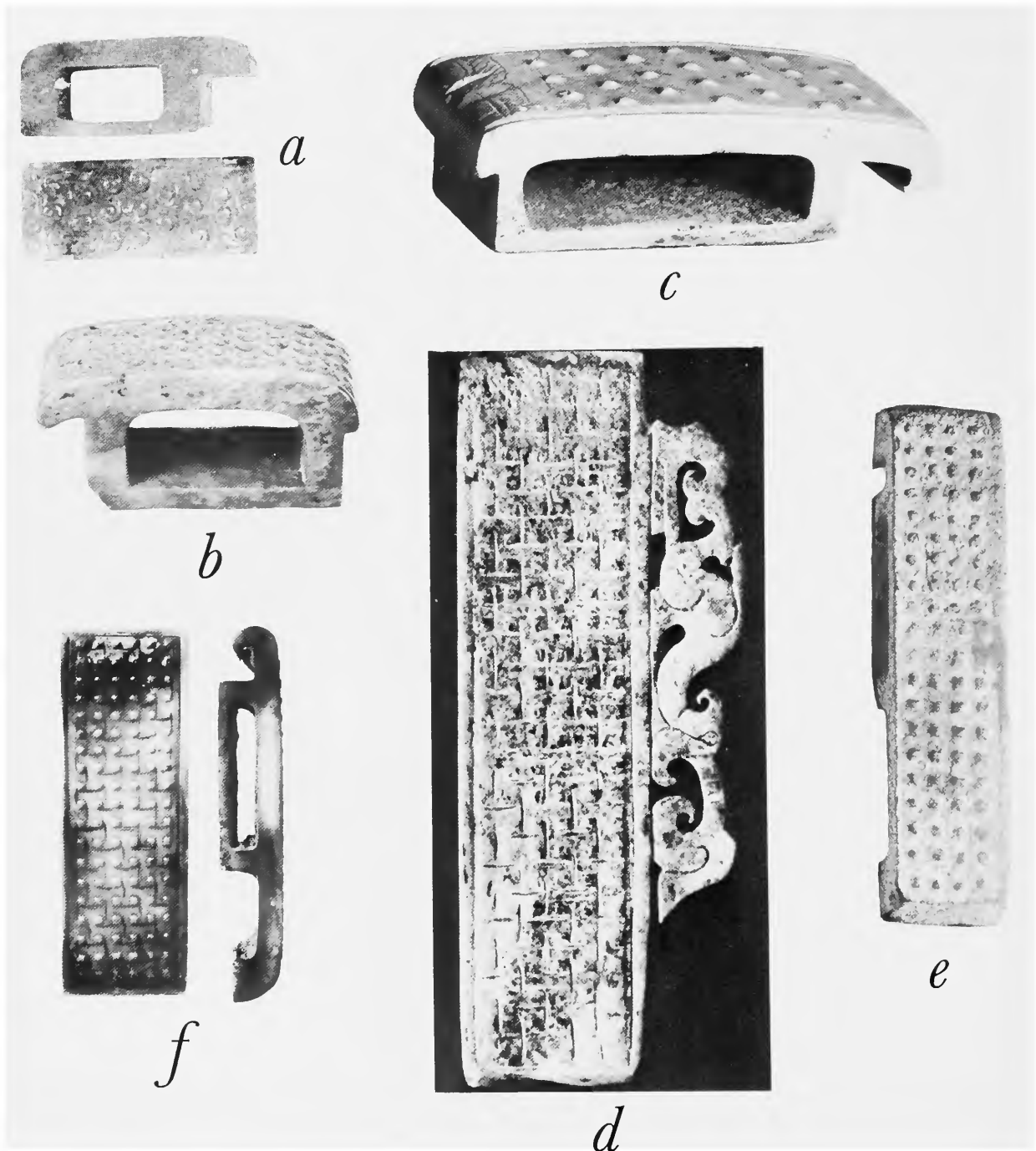


PLATE 6.—Chinese scabbard slides, Form I, Grain Class: *a*, CG.1; *b*, CG.19; *c*, CG.65 (enlarged); *d*, CG.6 (enlarged); *e*, CG.66; *f*, CG.14.



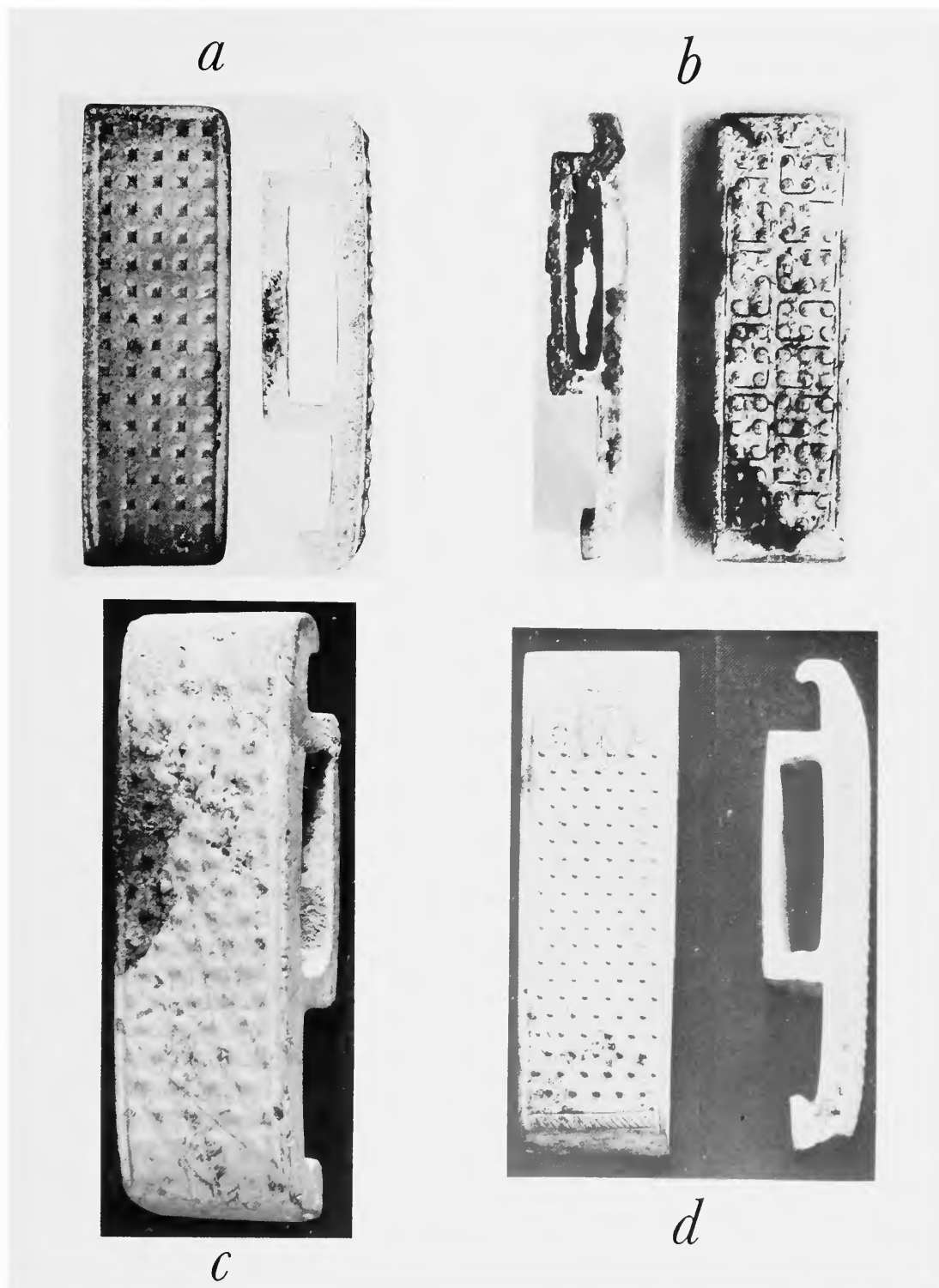


PLATE 7.—Chinese scabbard slides, Form I, Grain Class: *a*, CG.11; *b*, CG.21; *c*, CG.20 (enlarged); *d*, CG.22.

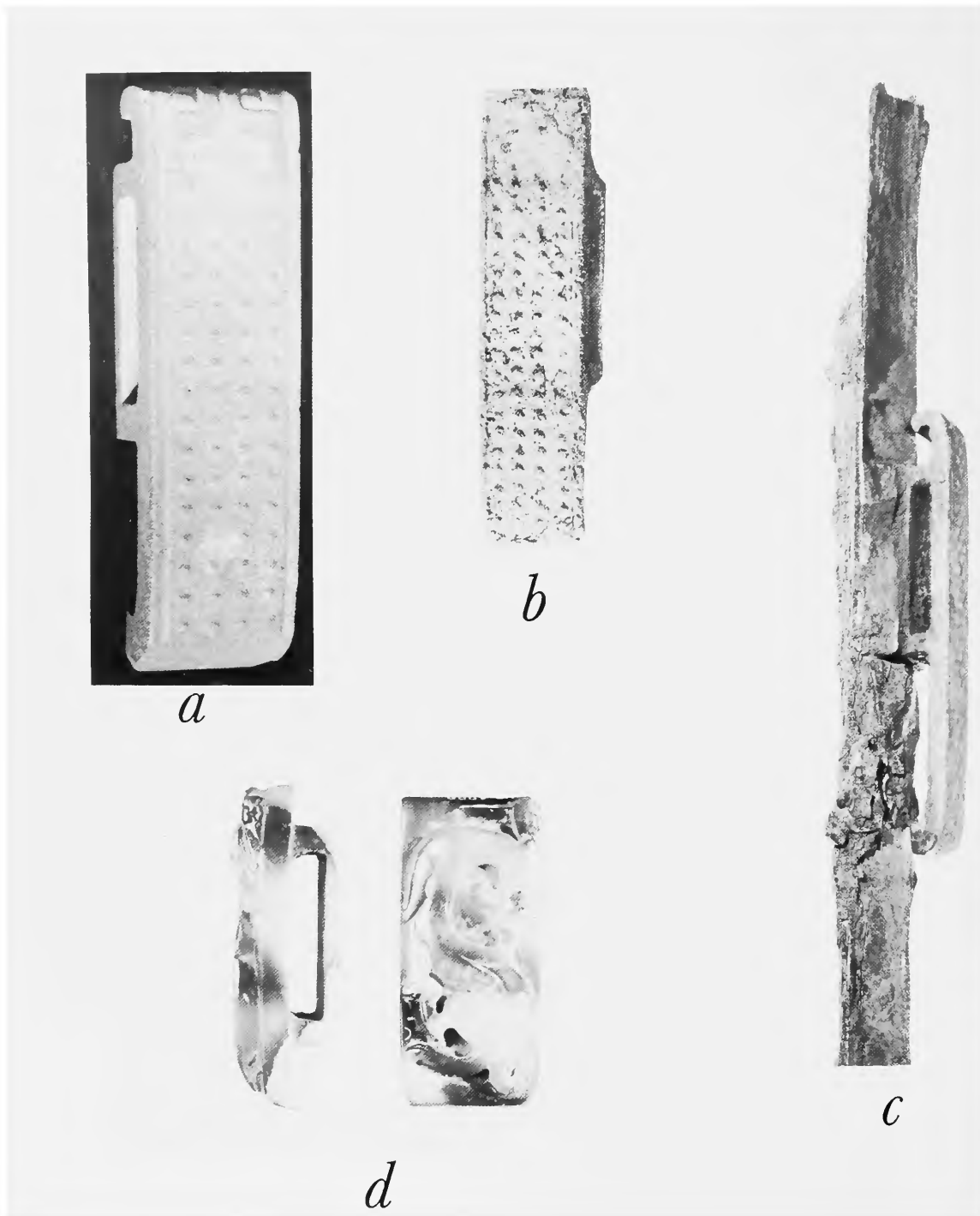


PLATE 8.—Chinese scabbard slides, Form I, Grain and Hydra Classes: *a*, CG.67;  
*b*, CG.25; *c*, CG.70; *d*, CH.5.



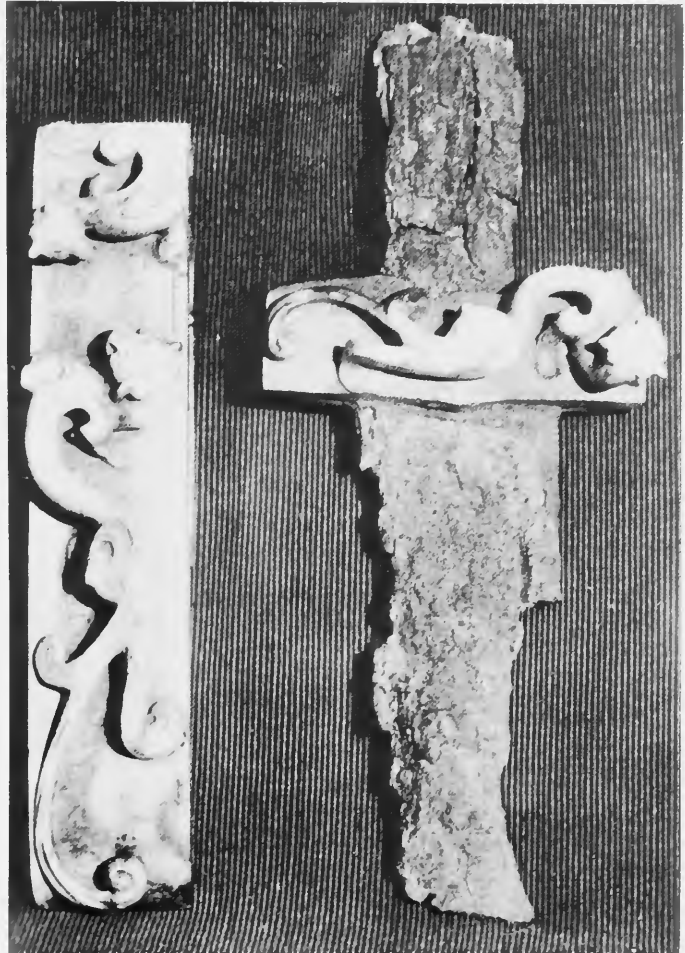
*a*



*b*



*c*



*d*

PLATE 9.—Chinese scabbard slides, Form I, Hydra Class: *a*, CH.11; *b*, CH.8; *c*, CH.23; *d*, CH.14.

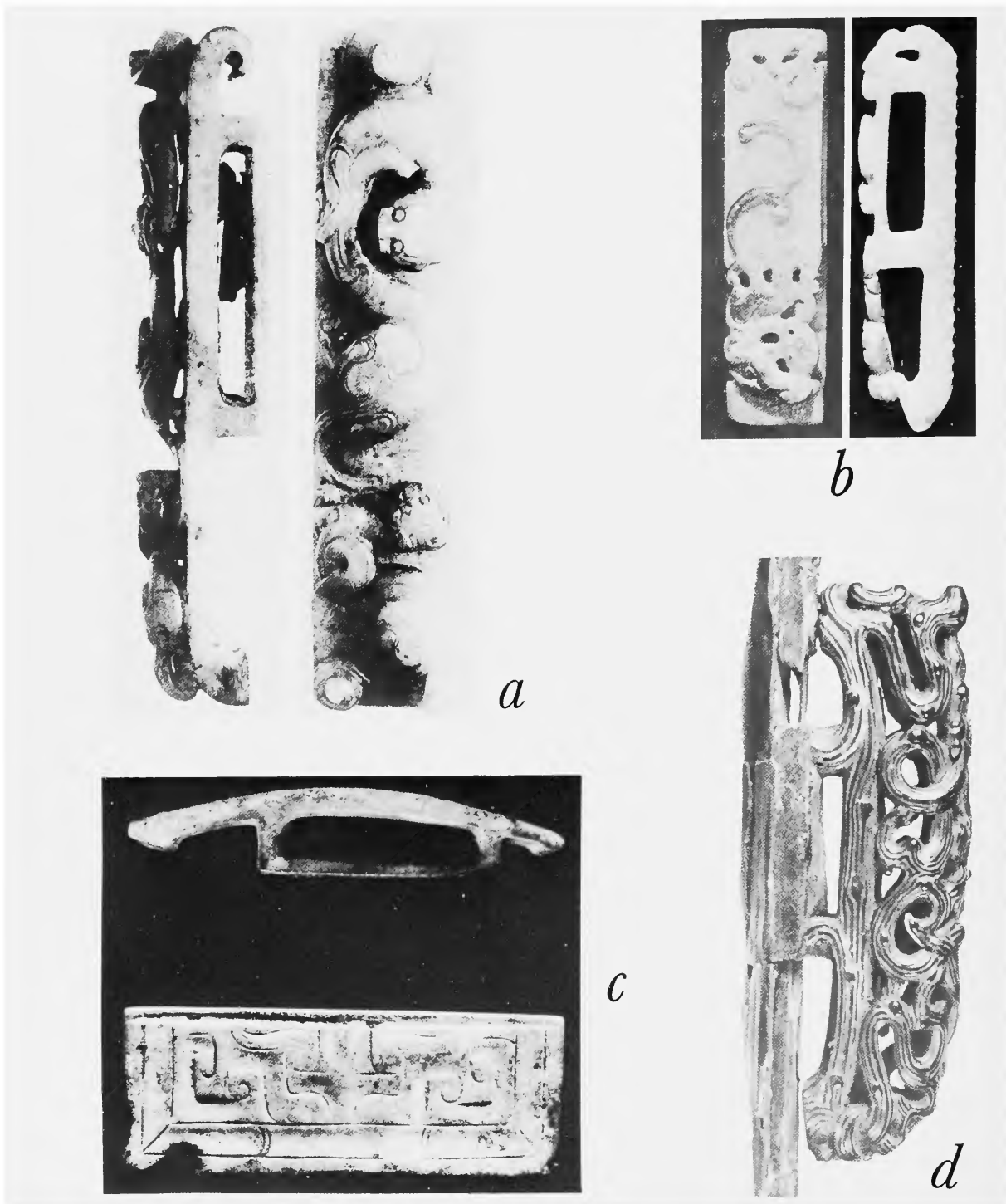


PLATE 10.—Chinese scabbard slides, Form I, Hydra and Atypical classes: *a*, CH.6; *b*, CZ.7; *c*, CZ.12; *d*, CZ.10.

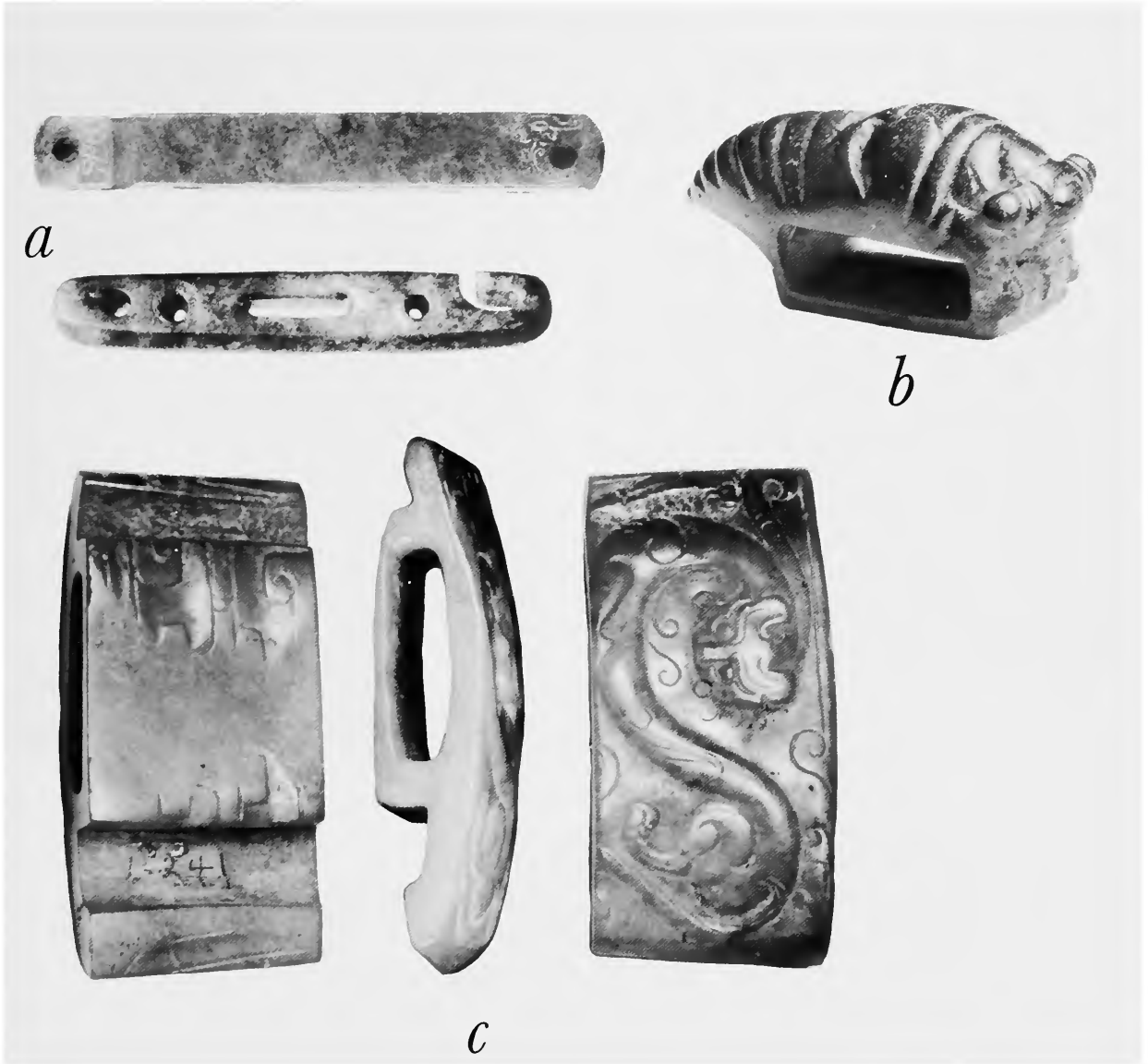


PLATE 11.—Chinese scabbard slides, Form I, Atypical class: *a*, CZ.14; *b*, CZ.18; *c*, CZ.19.

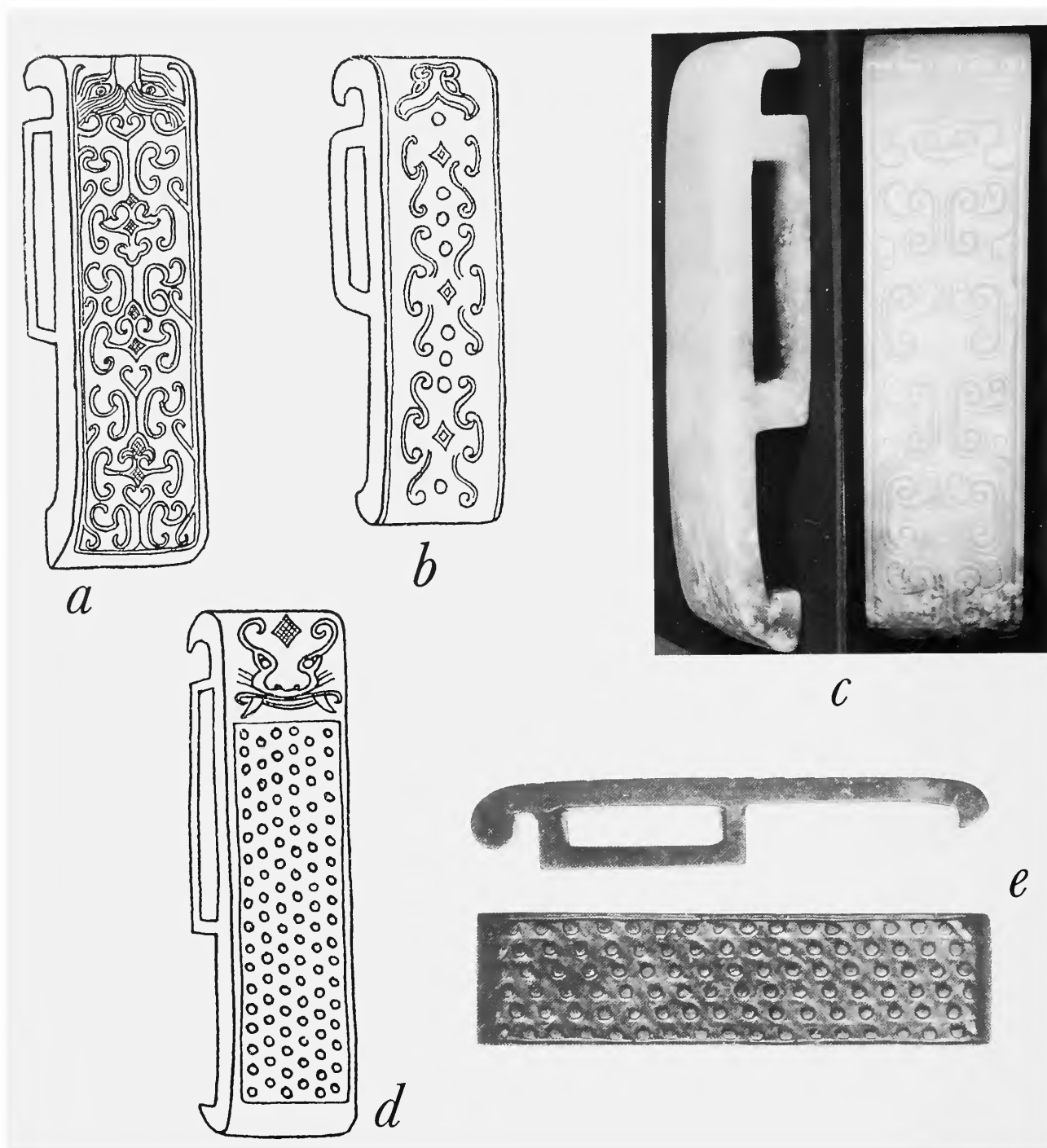


PLATE 12.—Chinese scabbard slides, Form I, antiquarian specimens: *a*, CV.47; *b*, CV.48; *c*, CV.89; *d*, CG.44; *e*, CG.45.

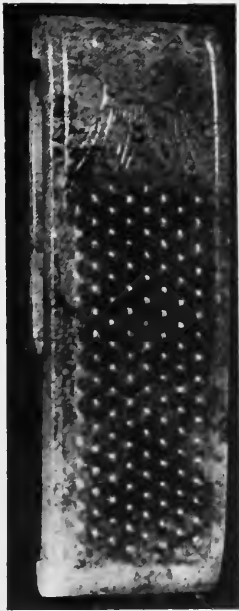
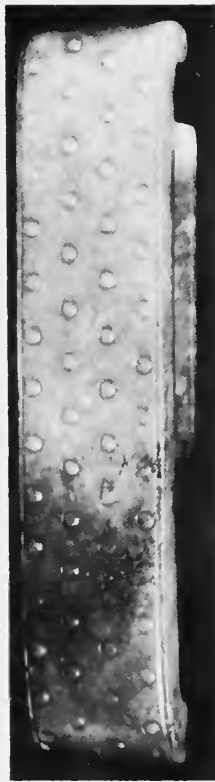
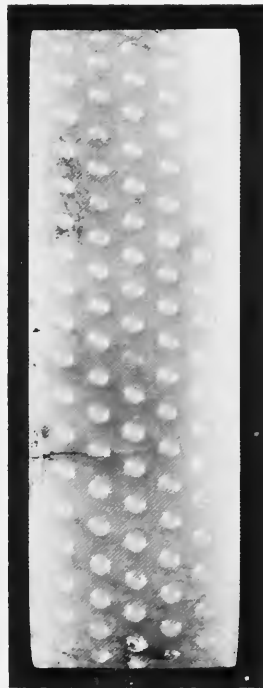
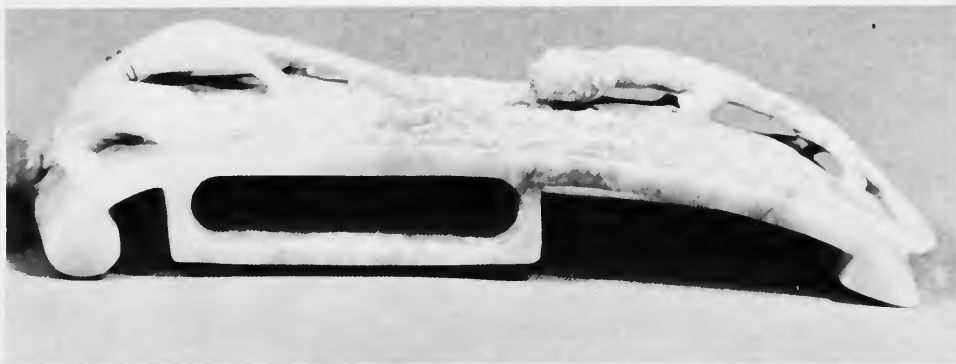
*a**b**c**d*

PLATE 13.—Chinese scabbard slides, Form I, antiquarian specimens: *a*, CG.49; *b*, CG.50; *c*, CG.64; *d*, CH.60.

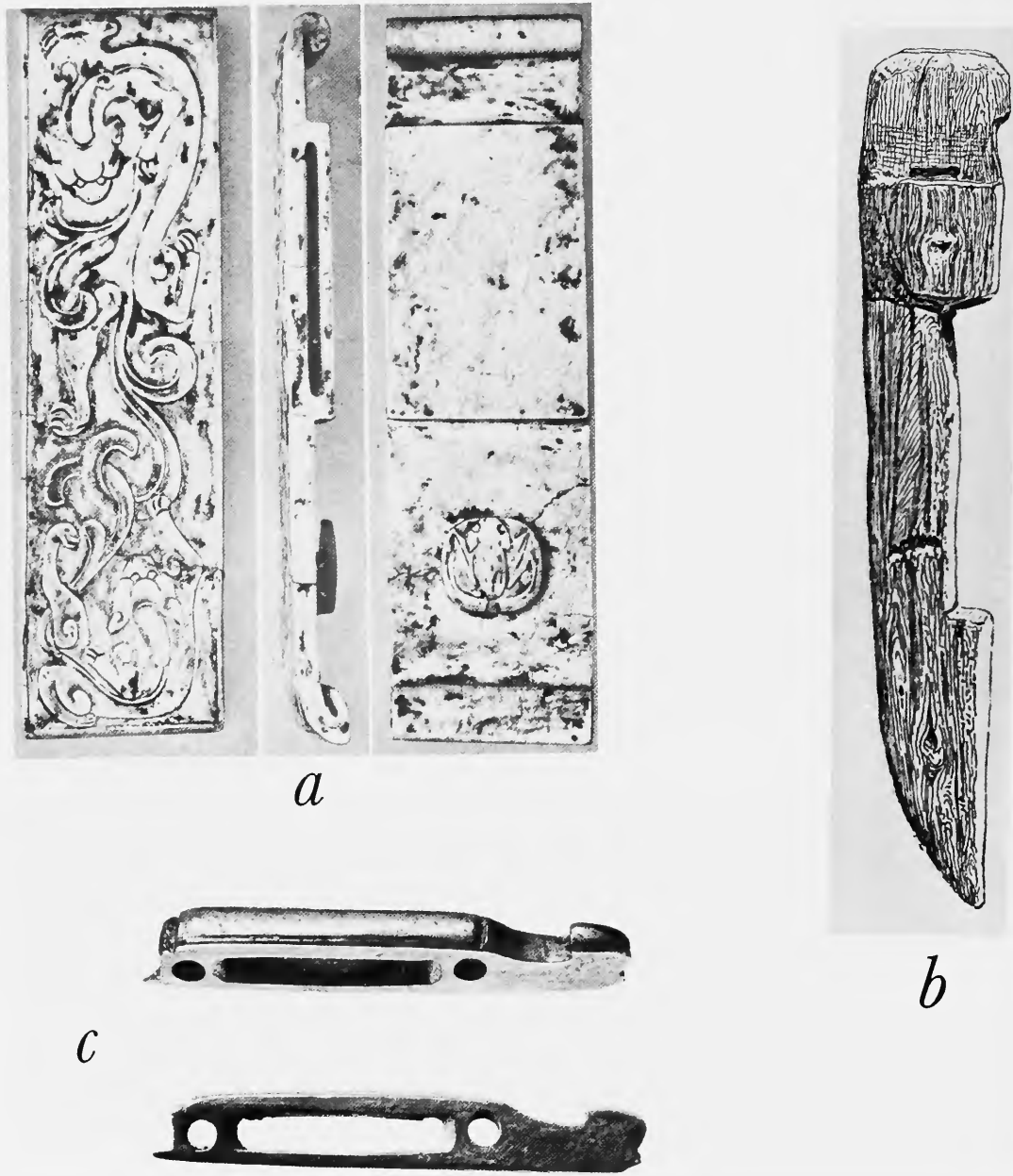


PLATE 14.—*a*, Chinese scabbard slide, Form I, antiquarian specimen CH.45. Scabbard slides from Europe: *b*, E.1; *c*, E.2.



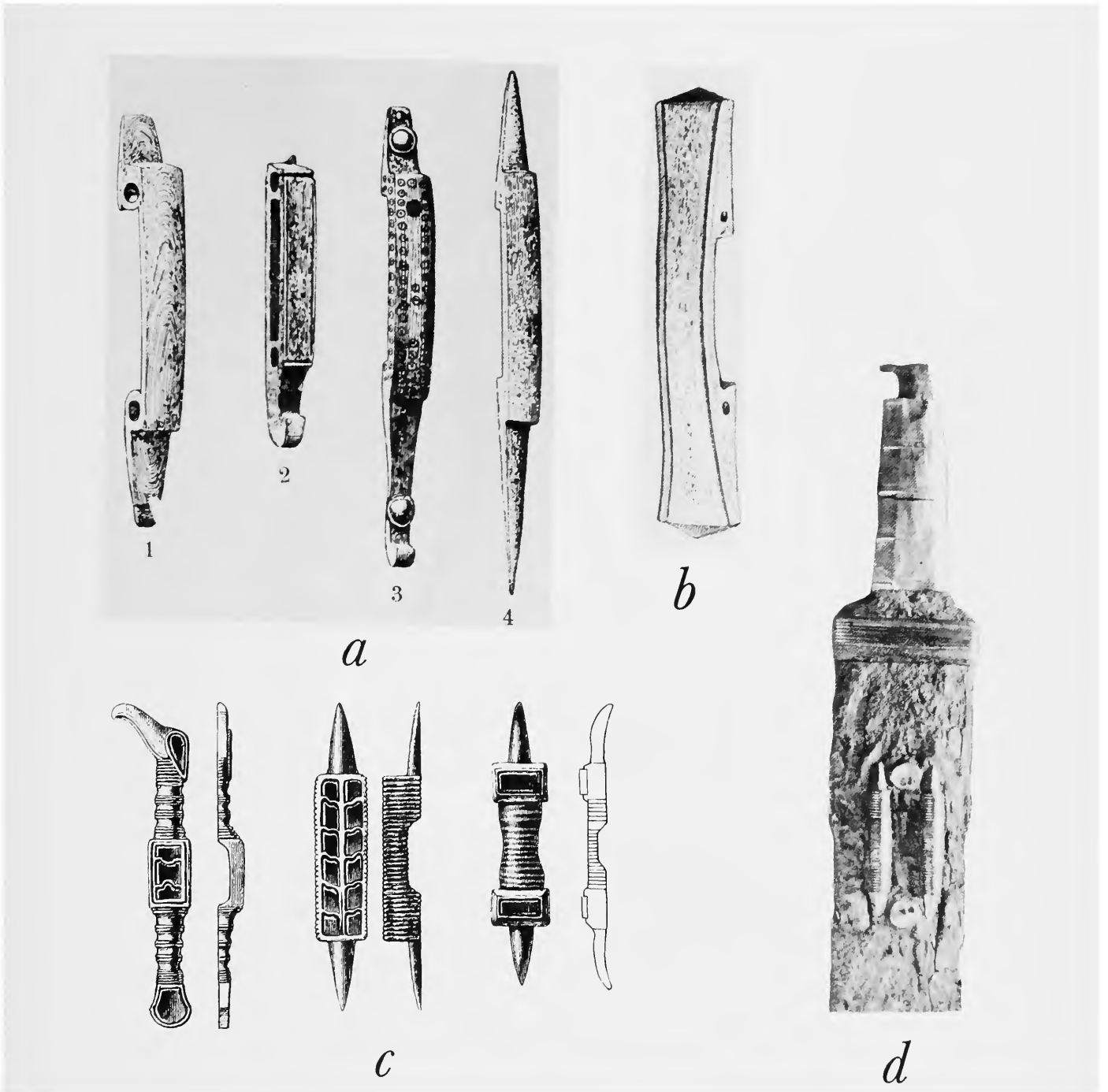


PLATE 15.—Scabbard slides from Europe: *a*, E.3(1), E.2(2), E.4(3), E.5(4); *b*, E.8; *c*, left to right, E-12, E.10, E.11; *d* E.14.

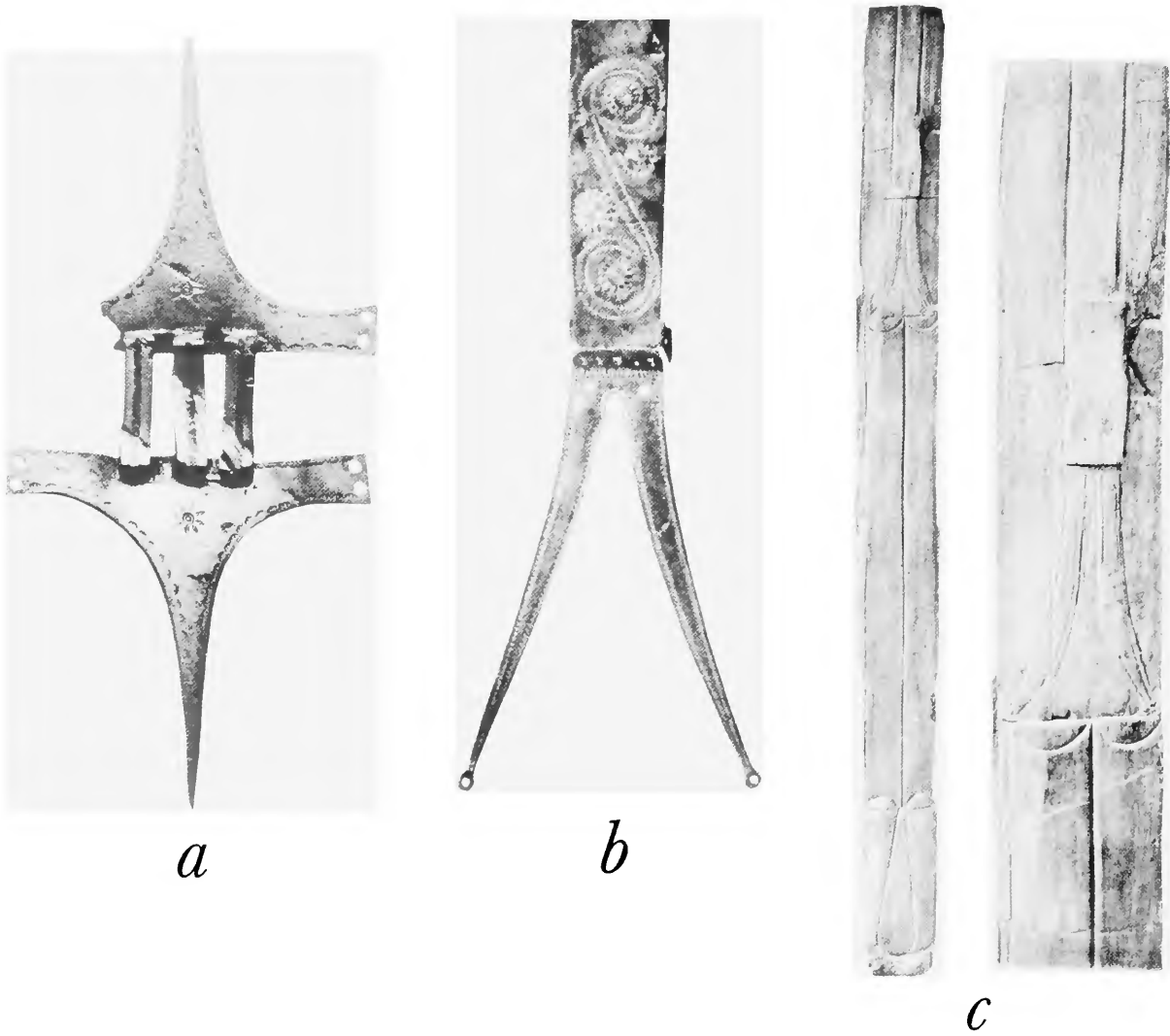


PLATE 16.—Scabbard slides from Europe: *a*, E.20; *b*, E.24; *c*, E.26.

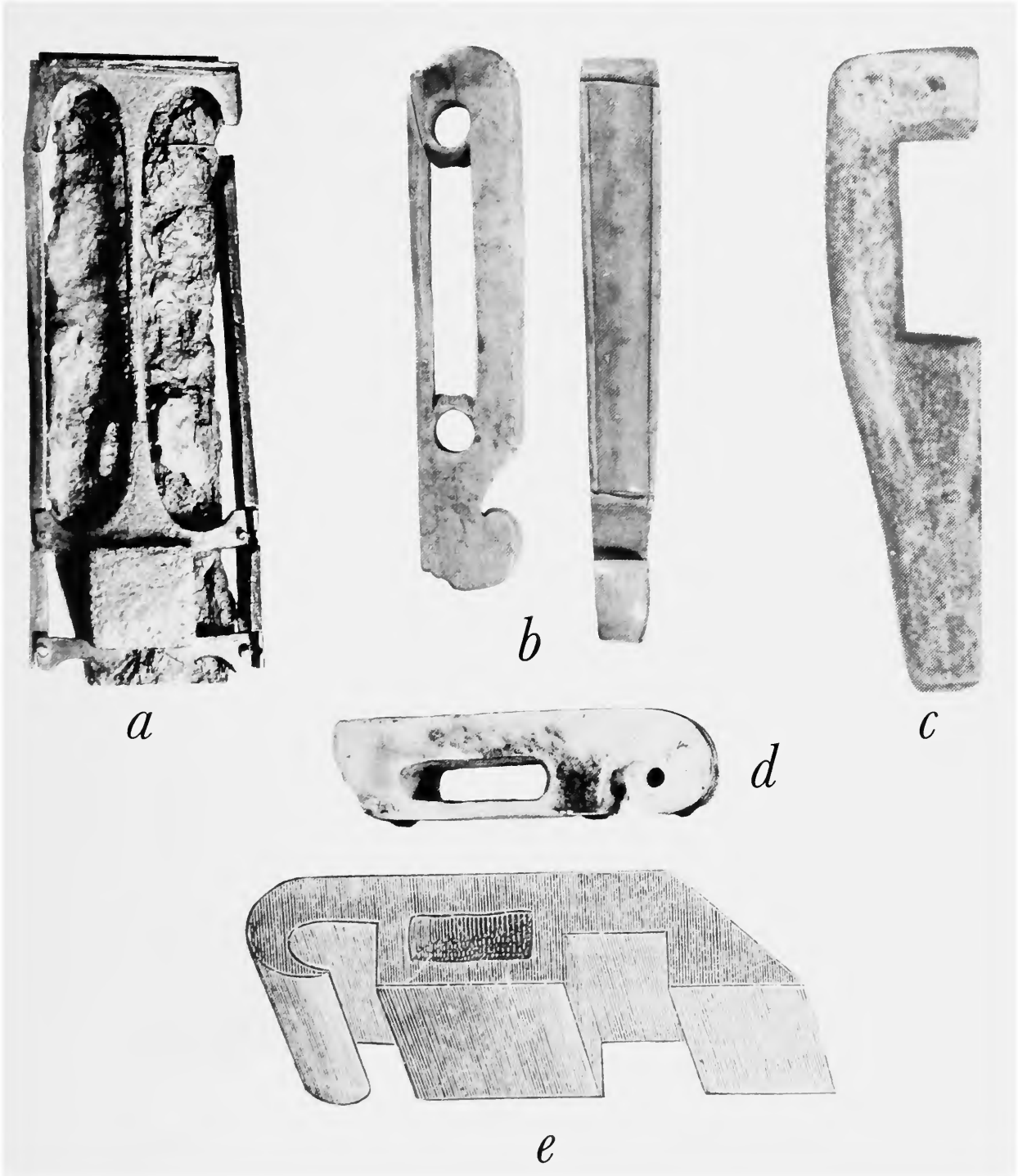


PLATE 17.—Scabbard slides. From Europe: *a*, E.34; *b*, E.35. From East Turkistan: *c*, ET.1. From Gandhara region of West Pakistan: *d*, GP.1. From Perm district of the Soviet Union: *e*, P.1.

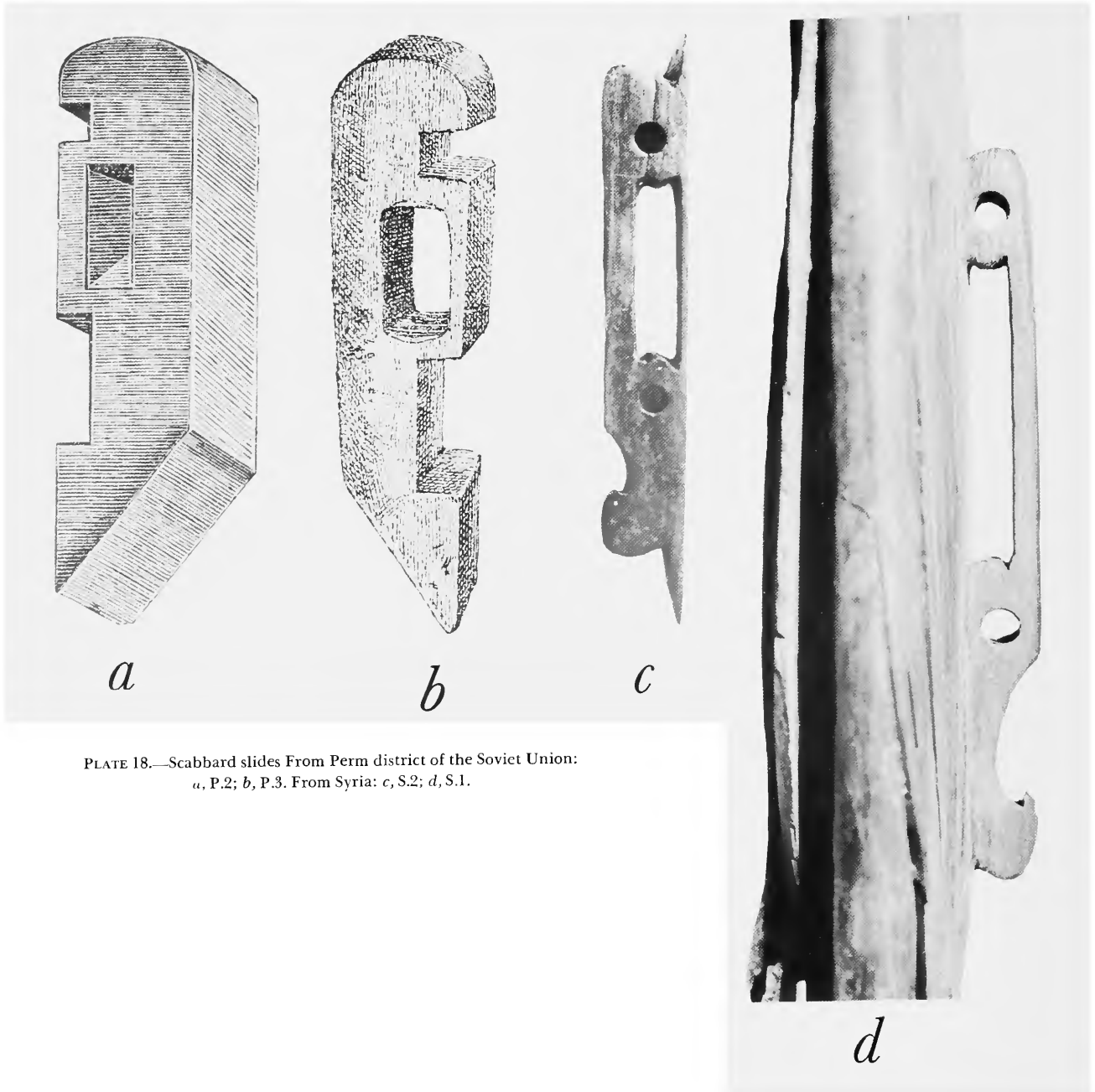


PLATE 18.—Scabbard slides From Perm district of the Soviet Union:  
*a*, P.2; *b*, P.3. From Syria: *c*, S.2; *d*, S.1.

*a**b**c*

PLATE 19.—Scabbard slides From Syria: *a-b*, S.1. From South Russia: *c*, SR.1.

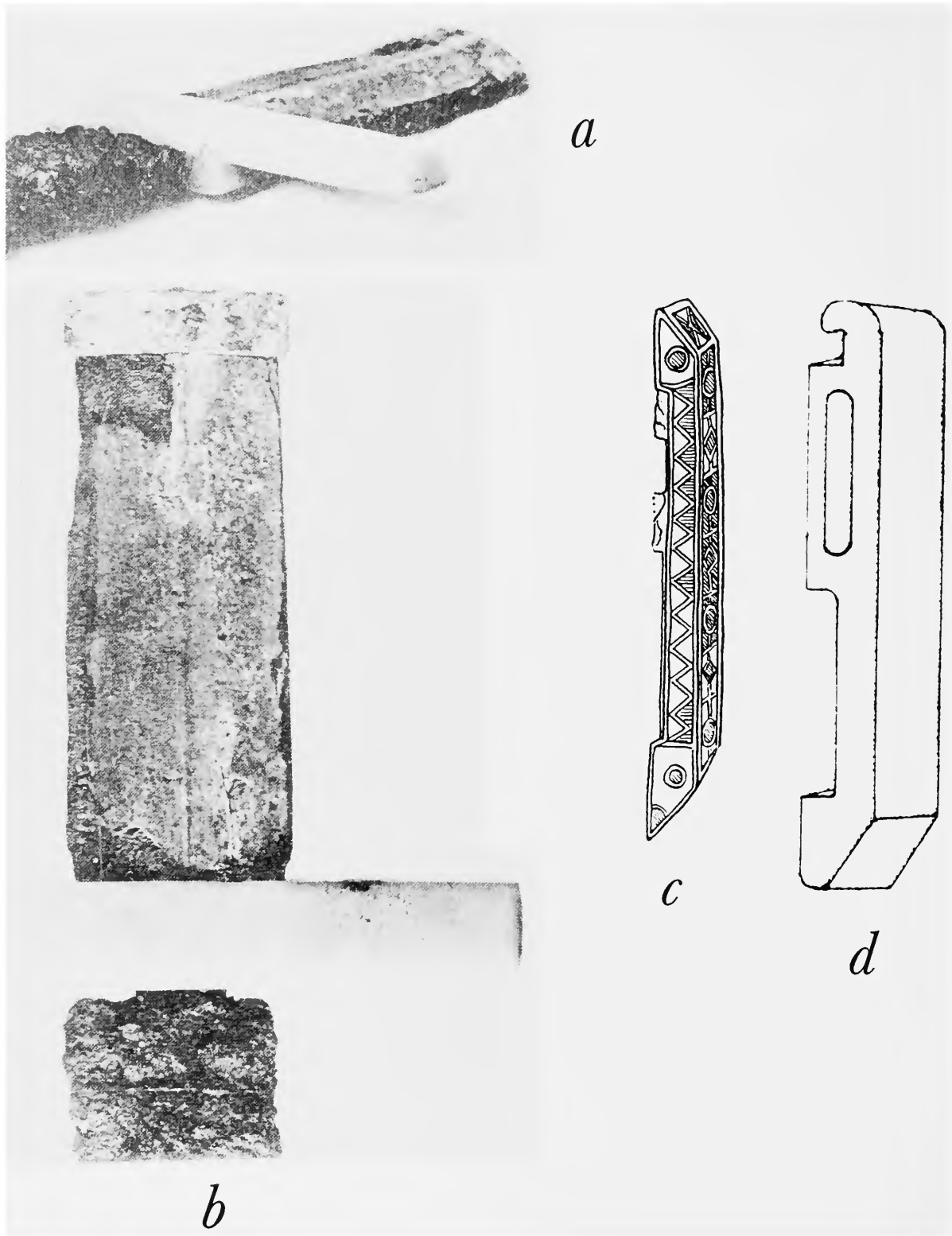


PLATE 20.—Scabbard slides from South Russia: *a-b*, SR.2; *c*, SR.3; *d*, SR.6.

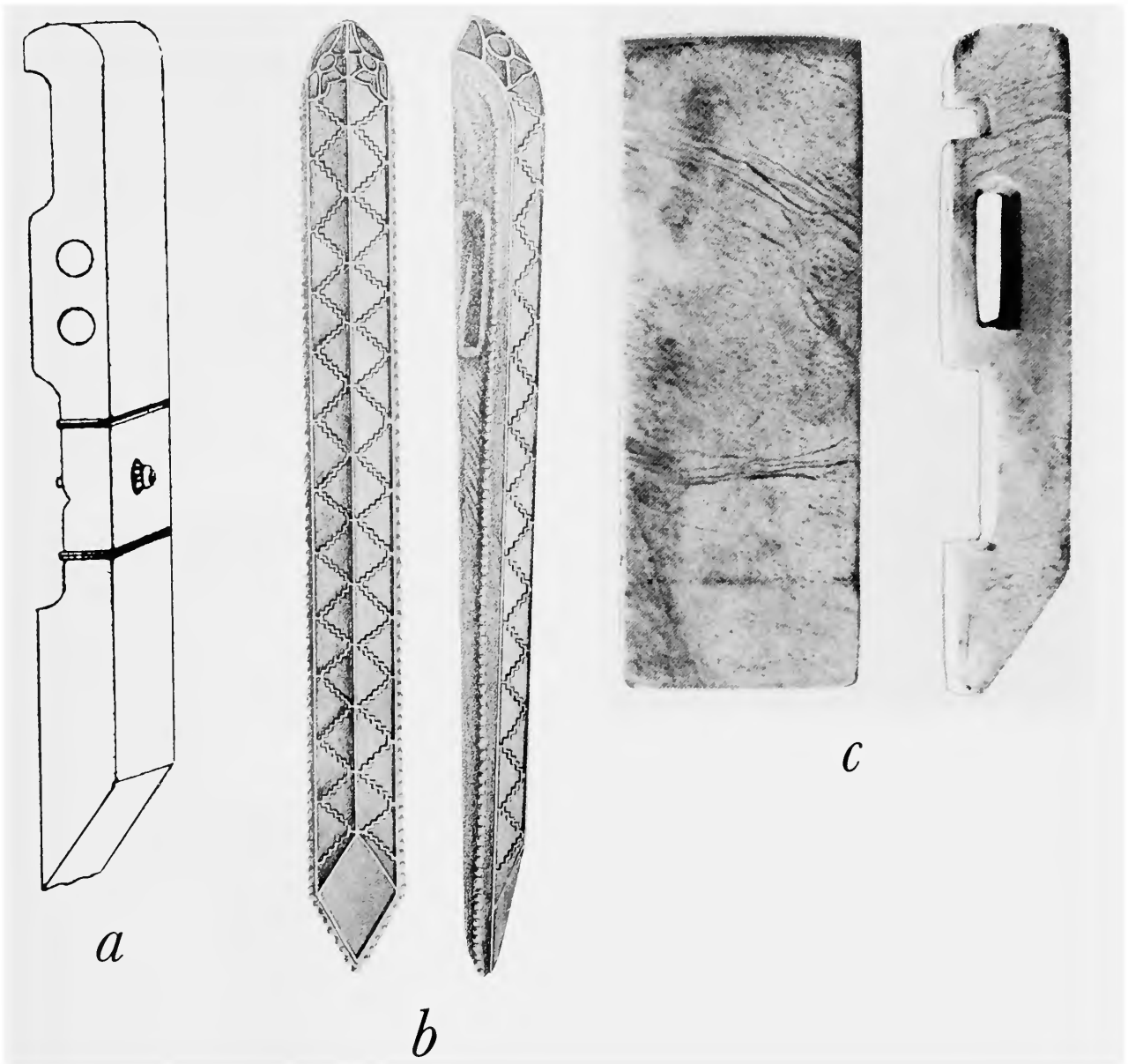


PLATE 21.—Scabbard slides from South Russia: *a*, SR.7; *b*, SR.8; *c*, SR.10.

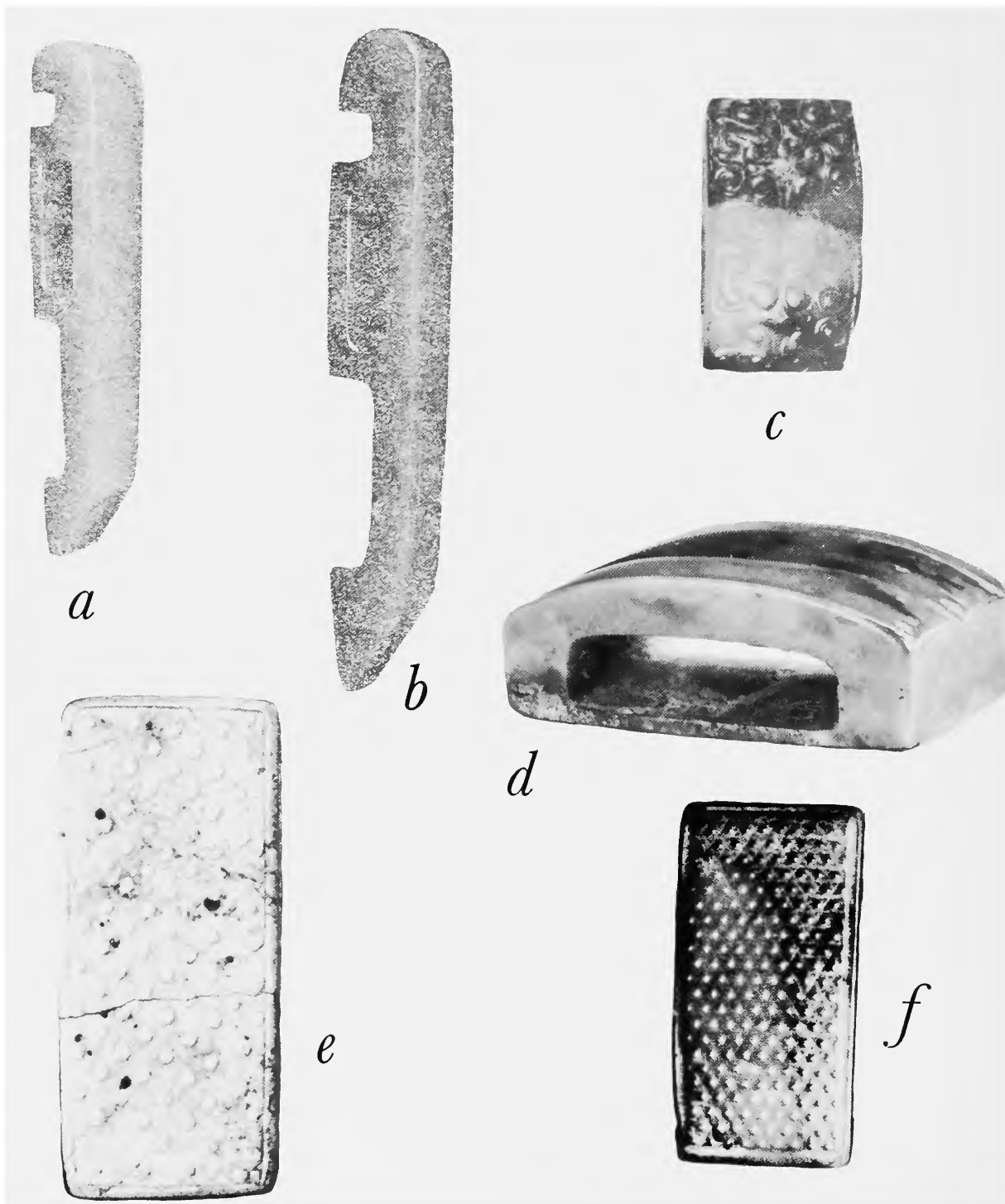


PLATE 22.—Scabbard slides from the lower Volga region of the Soviet Union: *a*, V.1; *b*, V.2. Chinese scabbard slides, Form II, Geometric Ridge and Grain classes: *c*, XCV.1; *d*, XCR.9; *e*, XCG.4; *f*, XCG.6.



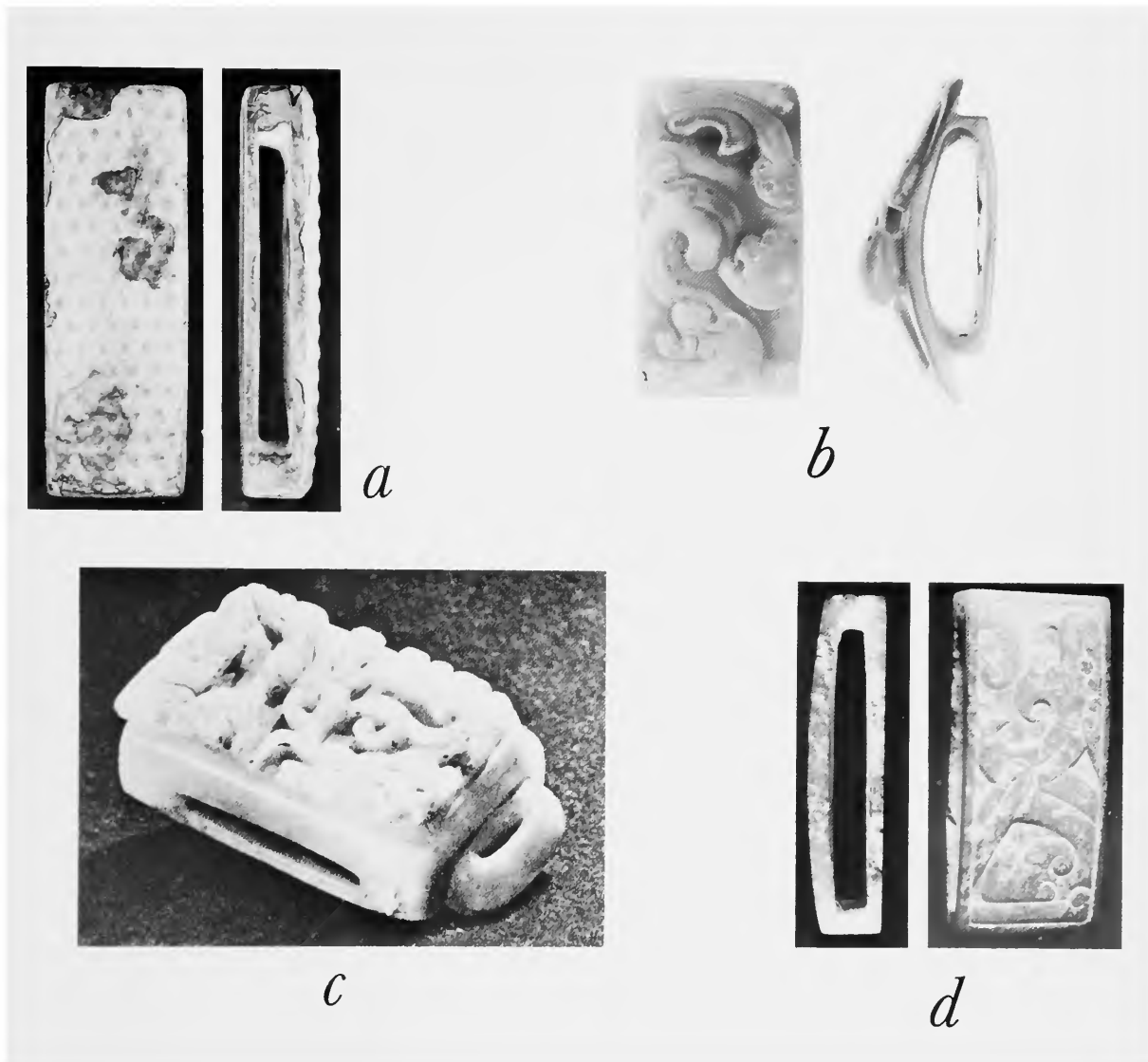


PLATE 23.—Chinese scabbard slides, Form II, Grain and Hydra classes: *a*, XCG.16;  
*b*, XCH.1; *c*, XCH.15; *d*, XCH.16.

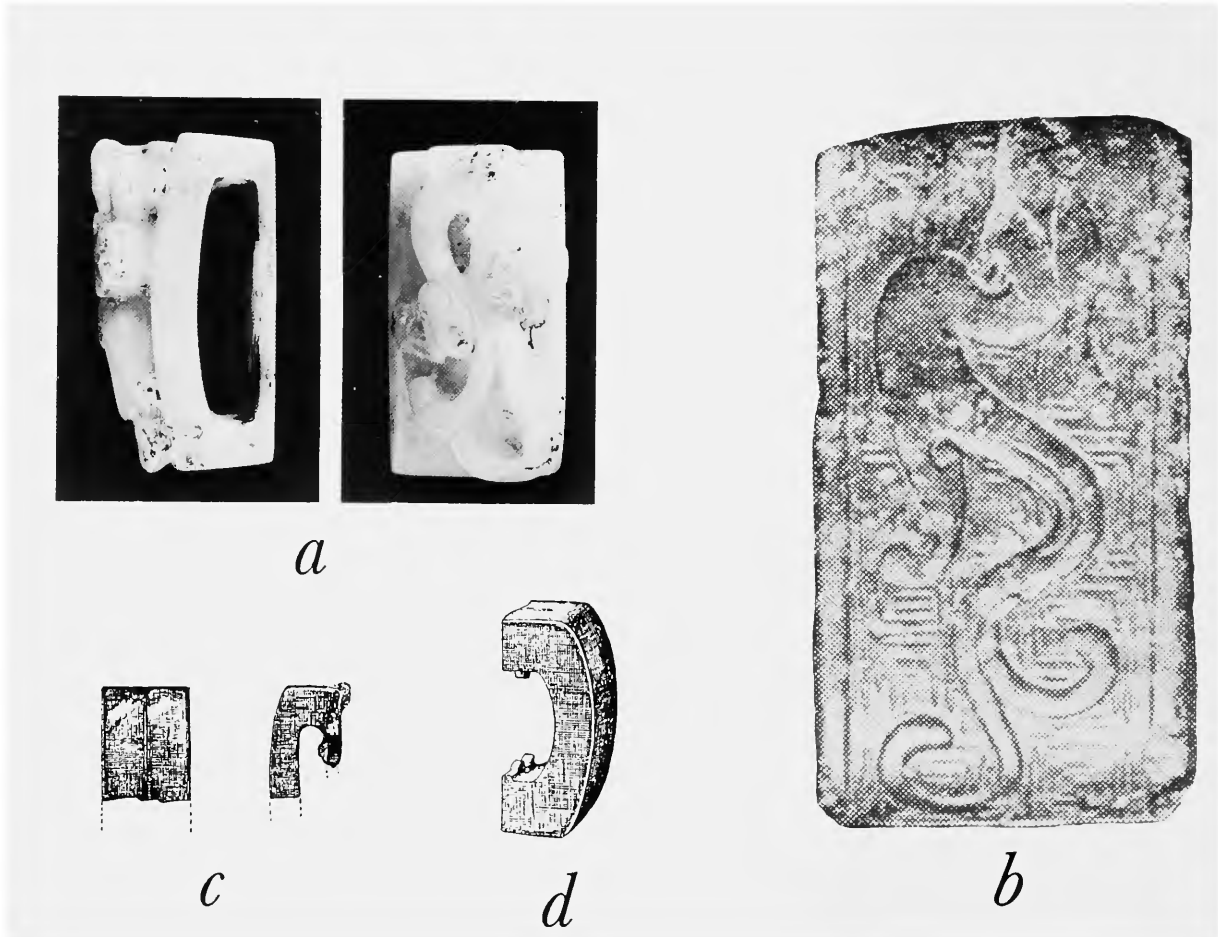


PLATE 24.—Chinese scabbard slides, Form II, Hydra and Atypical classes: *a*, XCH. 17; *b*, XCZ.3 (enlarged). Form II scabbard slides from the Etsin-gol region of Inner Mongolia: *c*, XM.2; *d*, XM.3.

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