DATING ANCIENT EGYPT

by Lana Troy

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ncient Egyptian events, sites, and artifacts are dated in two basic ways: historical period and absolute year date according to the modern calendar.

The Historical Periods

The division of ancient Egyptian history into periods has its own background. The Egyptian record of the names of kings, the order in which they ruled, and the number of years of each reign goes back to the beginning of the Egyptian history. Examples of this record are known from different periods, such as the Palermo Stone, covering up to mid-Dynasty 5 (c. 3050-2442 BC) and the Turin Papyrus, up to Ramses II of Dynasty 19 (reigned c. 1279-1212 BC).

In the early years of the Ptolemaic rule, the king, Ptolemy II (reigned 285-246 BC), commissioned a history to be written by the Egyptian, but bilingual, priest Manetho. With obvious access to ancient records, Manetho's history of ancient Egypt, written in Greek, grouped the various reigns into 'dynasties'. This provided the basis for the earliest reconstructions of the list of reigning kings. In the 19th century, with the establishment of Egyptology has a discipline, the dynasties were grouped into larger historical periods, setting up a structure that has been periodically revised as evidence has become available.

For the modern Egyptologist, the outline of Egyptian history begins with the Predynastic period, consisting of regional Neolithic 'cultures', identified by specific archaeological components. The development of writing and gradual accumulation of power by the southern Naqada culture leads to the beginning of the central state, divine kingship, and the 'historical' period. The division into historical periods makes an overview of each segment's characteristics possible. The period of initial establishment is termed the Archaic or Early Dynastic Period (Dyn. 1-2). This is followed by three historical phases referred to as

'Kingdoms', (Old, Dyn. 3-6; Middle, Dyn. 12-13 and New, Dyn. 18-20) representing periods of centralized rule. These are interspaced with three 'Intermediate' periods, when more than one dynasty rules at the same time. These are also times when foreign rulers can be found: the Levantine Hyksos during Dynasty 15 and possibly 16, the descendents of Libyan settlers during Dynasties 22-24, and the Nubian chieftains from the fourth cataract during Dynasty 25. The Third Intermediate (Dyn., 21-25) is followed by the distinctive Saite Period (Dyn. 26, 664 BC), once again a centralized rule, with its political center in the Delta city of Sais. By this time, the Libyan rulers no longer had distinctively foreign names, and the remaining 'Egyptian' dynasties (Dyn. 29-30) are comprised of Egyptianized Delta Libyans. The Persian conquest (525 BC) introduces the Late Period (Dyn. 27 to 30), ending the 'Pharaonic Period' of Egyptian history.

The second incursion into Egypt by the Persians, sometimes referred to as Dynasty 31 (342-332 BC), was shortlived and followed by the conquest of Egypt by Alexander the Great in 332 BC. This marks the beginning of the Greco-Roman Period, which includes the 'Macedonian Interlude' (332-305 BC), comprised of Alexander and his relatives, the Ptolemaic Period (305-30 BC) that ends with the death of Cleopatra VII, and the following Roman Rule. The end date of ancient Egypt can be debated, with various events, such as the introduction of Christianity as the state religion (380 AD), the last hieroglyphic inscription (August 24, 394 AD), and the closure of the last Egyptian temples (535 AD) cited as significant.

Year Dates

The use of modern methods, such as C-14, provide an important framework for dating the Predynastic period. Attaching absolute dates (in terms of years, BC and AD) to the historical periods and the reigning kings, and thus to the archaeological sites and objects, is not entirely straight forward. Conclusions are drawn from a combination of Egyptian traditions and the written dates on individual monuments and documents. This is then overlaid and

ameliorated with a range of astronomical dates and other factors.

An example of the way the ancient Egyptians wrote out the date would be 'Regnal year 2, third month of Peret, day 5'. The Egyptian year consisted of three seasons: Akhet ('flooding'), Peret ('going forth'= planting) and Shemsu ('summer' = harvest). Each season had four months of 30 days each. To these 360 days were added five additional days, that, being outside the calendar, were dangerous transitional days. Ideally the New Year would coincide with the beginning of the yearly flooding and the appearance of 'Sothis', the star Sirius, at dawn, sometime around the end of June, beginning of July. The lack of the addition of an extra day every fourth year as we do, to keep the calendar in sync with the solar year, meant that the calendar seasons did not usually line up with the actual occurrence of flooding, planting and harvest. Scholars have speculated how this problem was resolved, without coming up with a satisfactory solution. It has been noted however that the Egyptians had two names, and perhaps two celebrations, of the New Year.

The few records of the 'heliacal (same time as the sun) rising' of Sirius, called 'the going forth of Sothis', do however provide a range of absolute year dates. A papyrus from the Middle Egyptian Fayum oasis cites the heliacal rising occurring on Year 7, 4th month of Peret, day 16 of the reign of Sesostris III (Middle Kingdom, Dynasty 12), which is $1870 \, \text{BC} (+/-6 \, \text{years})$, with Memphis, near Cairo, as the observation point. During the reign of Amenhotep I (New Kingdom, Dynasty 18) another observation gives the date 1544-1537 BC, if observed from Memphis, or 1525-1517 BC if from Thebes. A record from the reign of Tuthmosis III (New Kingdom, Dynasty 18) provides 1469 BC (+/- 4 years) from Memphis or 1451 BC (+/- 4 years) from Thebes. The so-called Sothic cycle, which is the time it took for the solar year to align with the 365 day calendar, is 1460 years. The beginning of new cycles are estimated to 2781-2773 and 1321-1317 BC. This is calculated using the one known record of the heliacal rising falling on the calendar New Year in 139 AD.

These few astronomically fixed dates are combined with a number of other factors in order to insert approximate year dates into the system of kings, dynasties and historical periods. Dated contemporary documents, that include things as mundane as wine-jar labels, can be important when determining the length of specific reigns. With the approximation of the length of each reign, it is possible to link the kings together in a chronological chain. There are however variables that allow the construction of alternative chronologies. The Sothic dates, when the observation point is known, allow a range of four years. When the possibility of observation from Elephantine in the south to Memphis in the north is taken into account, the difference can be as much as c. 40 years. In addition, scholars have different opinions with regards to co-regencies and their length. Individual pieces of evidence for the length of a reign can reopen discussions and suggest revisions. Over the years, different standard chronologies have emerged, with the focus point being the beginning of the 18th dynasty, dated to as early as 1560 BC and as late as 1505 BC. Although differing in detail, all of these chronologies provide a good orientation with regard to an overview of Egyptian history. With the beginning of the 26th dynasty however (664 BC), Egypt enters a phase of interaction with its Mediterranean neighbors and absolute dates are established by combining Egyptian with foreign, primarily Greek, evidence, so that dates after this point are no longer treated as approximate.

[See the next page for a reference chronology of dates and dynasties for Ancient Egypt provided by Professor Troy. The chronology has been adapted from the book *The Mummy in Ancient Egypt: Equipping the Dead for Eternity* by Salima Ikram and Aidan Dodson (Thames & Hudson 1998, pp. 8-12).]

Predynastic Period

Badarian c. 5000–4000 BC Nagada I c. 4000–3500 BC Nagada II c. 3500–3150 BC Nagada III c. 3150–3050 BC

Early Dynastic period

Dynasties 1-2 c. 3050-2663 BC

Old Kingdom

Dynasties 3–6 c. 2663–2195 BC

Subdivided into

Early Old Kingdom

Dynasties 3-4 c. 2663-2471 BC

Late Old Kingdom

Dynasties 5-6 c. 2471-2195 BC

First Intermediate

Dynasties 7–8 (Memphis) c. 2195–2160 BC Dynasties 9–10 (Herakleopolis) c. 2160–2040 BC Dynasty 11 (Thebes) c. 2160–2066 BC

Middle Kingdom

Dyn. 11 c. 2066–1650 BC Dyn. 11 c. 2066–1994 BC Dyn. 12 c. 1994–1781 BC Dyn. 13 c. 1781–1650 BC

Second Intermediate Period

Dynasties 14-17 c. 1650-1550

New Kingdom

Dynasties 18-20 c. 1550–1064 BC Dyn 18 c. 1550–1298 BC Dyn 19 c. 1298–1187 BC Dyn 20 c. 1187–1064 BC

Third Intermediate Period

Dynasty 21 (Thebes – Tanis) c. 1064–940 BC Dynasties 22–24 (Bubastis, Leontoplis, Sais) c. 940–717 BC Dynasty 25 (Napata, Nubia) c. 752–656 BC

Saite Period

Dynasty 26 664-525 BC

Late Period

Dynasties 27-31 525-332 BC

Hellenistic Period

The Macedonian Dynasty 332–310 BC The Ptolemaic Dynasty 310–30 BC

The Roman period 30 BC-AD 395