Remembering the SPACE AGE

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CHAPTER 5

CREATING A MEMORY OF THE GERMAN ROCKET PROGRAM FOR THE COLD WAR

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In the middle of April 1945, as Allied armies swept into what little remained of the Third Reich, American newspapers carried horrifying reports followed by photos of recently liberated concentration camps in central Germany. Prominent among them was a camp in the city of Nordhausen where several thousand corpses and a few hundred emaciated survivors were found, along with a smaller number of dead and dying a few kilometers away at the Mittelbau-Dora main camp located next to an amazing underground V-weapons plant known as the Mittelwerk. A couple of weeks later, a new wave of shock spread through Allied populations when official newsreels of the camp liberations reached movie theaters, including footage of Bergen-Belsen, Buchenwald, and Nordhausen. Some American newspapers explicitly made the connection between the horrors of the latter and V-2 missile production.¹

Yet within a year or two, that connection had almost sunk without a trace. By the time the U.S. Army held a war crimes trial for Nordhausen in 1947, the U.S. press almost ignored it as yet another trial. When former project leaders Gen. Walter Dornberger and Dr. Wernher von Braun, both by then living in the U.S., came to give interviews and publish memoirs in the 1950s about the V-2 project and the Peenemünde rocket center, they were able to essentially omit the underground plant and its concentration-camp prisoners from their stories as there was little information in the public domain to challenge such a formulation. Other writers, notably Willy Ley—the former German spaceflight society member and refugee from the Nazis who more than anyone else founded space history in the English-speaking world—also said virtually nothing about these atrocities. It appears likely that Ley knew little about them due to a

^{1. &}quot;Tunnel Factory: Yanks Seize V-2 Plant in Mountain," Washington Post, April 14, 1945; Ann Stringer, "Dead and Dying Litter Floor of Nazi Prison Barracks," Los Angeles Times, April 15, 1945; "Germans Forced to Bury Victims," New York Times, April 15, 1945; "Tribune Survey Bares Full Horror of German Atrocities," Chicago Tribune, April 25, 1945; "Waiting for Death" (photo), Los Angeles Times, April 26, 1945; Bosley Crowther, "The Solemn Facts: Our Screen Faces a Responsibility to Show Newsreels and Similar Films," New York Times, April 29, 1945; "Camp Horror Films are Exhibited Here," New York Times, May 2, 1945; "Mrs. Luce Tells Nazi Slave Policy, Aimed to Protect Secret Weapons," New York Times, May 4, 1945.



Two survivors in the Nordhausen-Boelcke Kaserne camp at the time of liberation by the U.S. Army in April 1945. The horrors of Nordhausen and the nearby underground V-weapons plant were briefly infamous in the Western press. (National Archives)

deliberate policy of silence by the ex-Peenemünders and the U.S. government. The former clearly had strong motivations of self-interest, and the latter wished to protect the program of importing engineers, scientists, and technicians from Nazi Germany that became best known as Project Paperclip.²

Of course, those were not the primary reasons why Ley, von Braun, and Dornberger gave interviews and wrote books and articles. These pioneers wanted to tell their part in the exciting story of German rocket development from the Weimar amateur groups through the creation of the V-2 and its export to the U.S.A. Ley and von Braun in particular were also trying to sell the public

^{2.} On Paperclip, see Clarence G. Lasby, Project Paperclip: German Scientists and the Cold War (New York: Atheneum, 1971); Linda Hunt, "U.S. Coverup of Nazi Scientists," Bulletin of the Atomic Scientists (April 1985), pp. 16-24, and Secret Agenda: The United States Government, Nazi Scientists and Project Paperclip, 1945 to 1990 (New York: St. Martin's Press, 1991); Tom Bower, The Paperclip Conspiracy: The Battle for the Spoils and Secrets of Nazi Germany (London: Michael Joseph, 1987). My assertions about U.S. press coverage of Nordhausen between 1945 and the 1980s are based on keyword searches of Proquest Historical Newspapers. Smithsonian researchers have electronic access to seven papers: New York Times, Washington Post, Boston Globe, Christian Science Monitor, Chicago Tribune, Atlanta Journal-Constitution, and Los Angeles Times.

something they fervently believed in: spaceflight. However, in the process, they were compelled to provide a sanitized history of Nazi rocket activities palatable to Western audiences during the Cold War. Because von Braun's German-led engineering team played an important role in American missile development in the 1950s, they needed to justify the Germans' presence and the obvious continuities between Nazi and American rocketry, as did the U.S. government, which faced episodic Soviet-bloc denunciations over the issue. After Sputnik, when the space race with the Soviets became a central public concern, popular writers supplemented the pioneering efforts of Ley, von Braun, Dornberger, and others with books built on the foundation laid by the three former Germans.

Among the most noteworthy aspects of this early German rocket historiography as it developed in the 1960s are: 1) a romanticization of the Nazi rocket center at Peenemünde as fundamentally aimed at space travel, rather than weapons development for Hitler—although that was less the case for Dornberger, the military commander; 2) a corresponding depiction of the Peenemünders as apolitical or even anti-Nazi engineers driven by space dreams, which was both an exaggeration and a conflation of von Braun's experience with that of his group; and 3) a suppression of almost all information about concentration-camp labor and membership in Nazi organizations. These tendencies were bolstered by the deeper Cold War memory cultures of the United States and West Germany, which promoted an often selective view of World War II that neglected the Holocaust. As a result, the Mittelwerk and its attached Mittelbau-Dora camp virtually fell out of history—at least outside the Soviet bloc—until the 1970s, and in the United States, for the most part until 1984. This paper will examine the phases of the creation of this memory of the German rocket program and what social, cultural, and political factors allowed it to flourish relatively undisturbed for three decades.

The postwar history of the German rocket program—and the genre of space history in the English-speaking world—began largely with one book, Willy Ley's Rockets. It originally appeared in May 1944 before he had any knowledge of the V-2, but it was greatly expanded after the war in multiple editions such as Rockets and Space Travel (1947) and Rockets, Missiles and Space Travel (1951). From the outset, Ley included not only the origins of rocketry, early space travel ideas, and the history of military rockets, but also a memoir of his involvement with Weimar rocket activities and the VfR, the German spaceflight society (1927-34). It was quite natural for him to add the history of the rocket programs of Nazi Germany, predominantly the Army program and its Peenemünde center that produced the V-2. His sources included various newspaper and magazine articles, notably in the 1947 edition in which he repeated a lot of wild rumors and nonsense from the press, However, over time he greatly improved his account, based on his personal contacts with Wernher von Braun and later with other Peenemünders. In early December 1946, immediately after the U.S. government unveiled Project Paperclip to

the American press and public, von Braun visited Ley at the latter's home in Queens, New York, their first encounter since sometime in1932 or 1933. They enthusiastically discussed the German project until 2:45 a.m. Ley told Herbert Schaefer, the only other Weimar rocketeer to emigrate during the 1930s, "that I found no reason to regard v.B. as an outspoken anti-Nazi. But just as little, if not even less, did I find him to be a Nazi. In my opinion the man simply wanted to build rockets. Period." While this judgment contained a lot of truth, it would not be the last time that von Braun received a free pass on his Third Reich activities from his fellow space enthusiasts.³

Ley had fled to the U.S. in 1935 to escape the Nazi crackdown on the private rocket groups and later wrote for the leftist New York tabloid P.M., so this willingness to accept von Braun's account is intriguing and not entirely easy to explain. The end-of-war concentration-camp revelations were not far in the past. Certainly a passionately shared absorption with space travel has everything to do with it, but it also seems likely that Ley willingly accepted the assumptions that Americans brought to the problem of the complicity of scientists, engineers, and doctors with Nazi crimes: that it was fairly straightforward to separate the few fanatical Nazis from the bulk of mere opportunists who only wanted to work in their specialty. Crimes against humanity were ascribed to the SS; technically trained people were given almost a free pass unless there was evidence of specific involvement and/or Nazi enthusiasm. In the case of the V-2 and its underground plant, those assumptions can be seen at work from an early stage in the reports of Major Robert Staver, who led U.S. Army Ordnance's technical intelligence team there; he described the rocketeers as "top-notch engineers" no different than Allied "scientists" in developing weapons of war. These assumptions also played out in Project Paperclip, where behind a veil of classification, U.S. military agencies screened engineers and scientists almost solely on the basis of membership in Nazi organizations while explaining away virtually all "problem cases" as opportunism. Even Wernher von Braun, who had been (admittedly somewhat reluctantly) an SS officer, was finally legalized as an immigrant in 1949 on those grounds. But his file, like those of the others, remained classified until the 1980s, so he was able to leave the potentially damaging fact of his SS membership out of his memoirs and the official biographies that the U.S. Army and later NASA distributed.4

^{3.} Willy Ley, Rockets: The Future of Travel Beyond the Stratosphere (New York: Viking, 1944), Rockets and Space Travel (New York: Viking, 1947), Rockets, Missiles and Space Travel (New York: Viking, 1951). Compare the Peenemünde chapters in the latter two. For von Braun's visit and the quotation: Ley to Schaefer, December 8, 1946, in file 165, box 5, Ley Collection, National Air and Space Museum Archives (original in German, my translation).

Staver to Ordnance R&D, June 17, 1945, in Box 87, E.1039A, RG156, National Archives College Park; Hunt, Secret Agenda, chaps. 3, 4, 7; Michael J. Neufeld, Von Braun: Dreamer of Space, Engineer of War (New York: Alfred A. Knopf, 2007), pp. 120-122, 234-238, 245, 323-324, 347-348, 404-406, 428-429.



Willy Ley (right) and Wernher von Braun (middle) with Heinz Haber, c. 1954. These three were the scientific advisors to Walt Disney's mid-1950s space television series. (National Air and Space Museum, Smithsonian Institution)

Von Braun wrote his first memoir in 1950 for a British Interplanetary Society book never came to pass. It eventually appeared in the society's journal in 1956, somewhat rewritten and, in one case at least, bowdlerized. His original manuscript made a rather bald statement of amoral opportunism regarding the 1932 discussions between his Berlin rocket group and the German Army, which led to his working for the latter as a civilian: "We felt no moral scruples about the possible future use of our brainchild. We were interested solely in exploring outer space. It was simply a question with us of how the golden cow could be milked most successfully." That statement vanished in the published version, but it had already appeared in print five years earlier in a lengthy and fascinating profile of von Braun in *The New Yorker* magazine on April 21. 1951. Whether he actually said it to the writer, Daniel Lang, during the interview or Lang

Wernher von Braun (hereinafter WvB), "Behind the Scenes of Rocket Development in Germany 1928 through 1945," ms., 1950, in file 702-20, WvB Papers, U.S. Space and Rocket Center (hereinafter USSRC); WvB, "Reminiscences of German Rocketry," *Journal of the British Interplanetary Society 15* (May-June 1956), 125-145.

lifted it from the manuscript that von Braun lent him is unclear. But the memoir and the profile offered the same fundamental account: von Braun, seized with dreams of spaceflight since his teenage years in the 1920s, went along with the German Army as it offered money for rocketry, then Hitler came to power, which led to vastly increased resources and the building of Peenemünde and the V-2. Late in the war, the intervention of higher Nazi powers increased as these weapons became of interest to Hitler—who von Braun saw a few times—leading to Heinrich Himmler's attempt to take over the rocket program for the SS. After von Braun rebuffed Himmler's initiative, he was arrested by the Gestapo with two colleagues in early 1944 for drunken remarks in which they stated that they would rather go into space than build weapons. He was only rescued because of the intervention of his mentor, General Dornberger. When the Third Reich collapsed a year later, von Braun led his team away from the Soviets and surrendered to the Americans. He hoped that in the U.S. he would eventually realize his space dreams, albeit again in the employ of the military,.⁶

As an account of the trajectory of his life to that point, the article was reasonably accurate; what he left out was that which not-so-subtly altered the story. For example, he did not mention joining the Nazi Party in 1937, when the party pressed him to do so, although Lang did quote one of von Braun's U.S. Army superiors, who dated it to 1940. In fact, von Braun himself told the Army in 1947 that he had joined the Party in 1939, so he himself consciously or unconsciously falsified the date. Over time, this key indicator of Nazi commitment, or the lack of it, drifted in popular accounts, such that his first biographer in English, Erik Bergaust, dated von Braun's entry to 1942; the latter made no attempt to correct him. Von Braun naturally also suppressed his brief membership in an SS cavalry unit and riding club in 1933-34 and his 1940 "readmittance" (as his SS record calls it) to the black corps as an officer. His memoir article did discuss the underground plant near Nordhausen briefly, but the brutal exploitation of concentration-camp workers was blamed solely on SS General Hans Kammler, thereby holding the whole matter at arm's length. Von Braun left the impression that the underground plant was completely separated from Peenemünde. The fact that SS prisoners had also worked at the rocket center and many other V-2 sites and that he had been inside the Nordhausen facility at least a dozen times he also suppressed. Given his intimate encounters with the Nazi elite, however, it was hard for him to deny that his prominent

^{6.} Ibid.; Daniel Lang, "A Romantic Urge," in From Hiroshima to the Moon: Chronicles of Life in the Atomic Age (New York: Simon & Schuster, 1959), pp. 175–193, quote on p. 180, originally published in The New Yorker (April 21, 1951), 69–70, 72, 74, 76–84.

place in that regime, but his arrest by the Nazis allowed him to depict himself as ultimately more a victim of the regime than a perpetrator.⁷

In mid-1952, another memoir appeared under his name, "Why I Chose America," in a periodical aimed at women and families, *The American Magazine*. Ghostwritten by an interviewer with von Braun's superficial editing, this article came in the wake of a sudden increase in his fame. In March, he had finally made his space-advocacy breakthrough with the publication of his lead article in a space series in Collier's magazine, which had a circulation of millions. Although "Why I Chose America" was clearly written less in his voice than that of the ghostwriter, it is revealing for how much it makes transparent the context of that time, specifically, the era of McCarthyism and the Red Scare. It centered his alleged decisive moment at the end of the war, when he had to choose between East and West-in fact, he was basically in the power of General Kammler and scarcely in a position to do anything but follow his orders to evacuate southwest to get away from the Soviets. It was fortunate that Kammler's orders matched his own desires. "Why I Chose America" also makes much of his disillusionment with Nazism and with totalitarianism in general, notably as a result of his arrest, and it hammers on his Americanization. his conversion in El Paso to born-again Christianity, and his happiness with his new home in Huntsville. In short, this article made von Braun—a German who could not be naturalized until 1955 because of his delayed legal entry into a patriotic Cold-War American.8

It is not at all clear how much "Why I Chose America" influenced the later literature on von Braun and Peenemünde. While certainly read by a much larger initial audience than his own memoir, which only came out in 1956 in an obscure space periodical, the latter was reprinted in a book and taken as a fundamental source by many later journalists and authors. The 1952 piece, on the other hand, probably faded away, especially in comparison to the Lang 1951 profile in a much more prominent magazine. In any case, the canonical von Braun stories of his rise, success at Peenemünde, arrest, and rescue by the U.S. Army were reinforced in the summer of 1958 when the Sunday newspaper supplement, *The American Weekly*, published his third and longest memoir, also ghostwritten, "Space Man—The Story of My Life." This three-part piece came in the wake of Sputnik, and the national hero status he achieved as a result of his prominent place in launching the first U.S. satellite, Explorer I. The topic of Nordhausen and concentration-camp labor appear again only in the most

^{7. &}quot;Affidavit of Membership in NSDAP of Prof. Dr. Wernher von Braun," June 18, 1947, Accession 70A4398, R.G.330, National Archives College Park; WvB NSDAP file card, former BDC records, microfilm in National Archives College Park; WvB, "Behind the Scenes...," ms., 1950, in file 702–20, WvB Papers, USSRC; WvB, "Reminiscences"; Lang, "A Romantic Urge"; Erik Bergaust, Reaching for the Stars (Garden City, NY: Doubleday, 1960), p. 23.

^{8.} WvB, "Why I Chose America," The American Magazine 154 (July 1952), 15, 111-112, 114-115.

marginal way. His Americanization was once again emphasized, a seemingly necessary strategy in view of his burdensome past. It is noteworthy that by this time von Braun's life story, at least for that concerning his past in Nazi Germany, had hardened into a clichéd pattern of anecdotes visible in all media profiles and in the first book-length biographies that appeared in English and German in 1959 and 1960.⁹

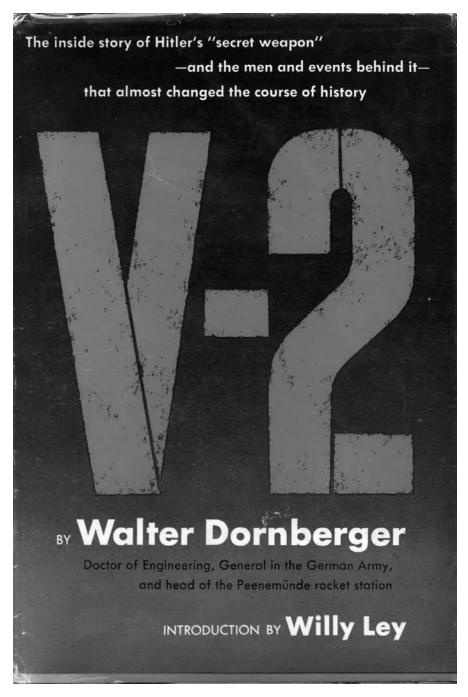
Several years earlier, General Walter Dornberger published his book, V-2, which became the most influential account of the German rocket program aside from the specifics of von Braun's life. Judging by a manuscript in English now in the Deutsches Museum's archive in Munich, Germany, Dornberger originally tried writing it for an American audience in a language he then scarcely commanded, probably while working for the U.S. Air Force in Dayton, Ohio, from 1947 to 1950. (He then joined Bell Aircraft in Buffalo, New York, to work on rocket plane projects, ultimately becoming its vice president for engineering.) In 1951, von Braun pointed out his former boss's manuscript to his new German publisher, Otto Bechtle, who was arranging for von Braun's own bad science-fiction novel, Mars Project, to be rewritten in German by a popular aviation writer and former Nazi propagandist, Franz Ludwig Neher. Neher did the same, and much faster, for Dornberger's memoir, which appeared as V2: Der Schuss ins All (V-2: The Shot into Space) in the fall of 1952. It would be nice to know who invented the subtitle, which so neatly captures the reinvention of a Nazi terror weapon as the space rocket it most certainly was not, at least before it was launched at White Sands, New Mexico, with scientific instruments.¹⁰

Although Dornberger was a space enthusiast as well, the book was a straight military account of the program, which only mentions the space aspects in passing. Neher's unacknowledged rewrite was a success; *V-2* became an instant classic. Translations appeared in Britain and America in 1954, the latter edited and introduced by Willy Ley.¹¹ It entrenched certain stories about the German Army rocket program, some of which have been almost impossible to dislodge in the popular media, such as the claim that the Reichswehr only began working on rockets

^{9.} WvB, "Space Man—The Story of My Life," *The American Weekly* (July 20, 1958), 7-9, 22-25; (July 27, 1958), 10-13; (August 3, 1958), 12, 14-16; Heinz Gartmann, *Wernher von Braun* (Berlin: Colloquium, 1959); Bergaust, *Reaching* (see above).

^{10.} On the story of von Braun's novel see Michael J. Neufeld, Von Braun: Dreamer of Space, Engineer of War (New York: Knopf, 2007); chaps. 10-11; WvB to Otto Bechtle, March 9, 1951, in German Corr. 1949-54, Box 43, WvB Papers, Library of Congress Manuscript Division; Walter Dornberger, Ms., "V 2: Around a Great Invention" (1948), NL165/010 and NL165/011, Deutsches Museum Archives, Munich; Walter Dornberger, V 2: Der Schuβ ins Weltall (Esslingen: Bechtle, 1952), reprinted as Peenemünde: Die Geschichte der V-Waffen (Frankfurt/Main and Berlin: Ullstein, 1989). Von Braun's novel was recently published as Project Mars: A Technical Tale (Burlington, Canada: Apogee, 2006).

^{11.} Walter Dornberger, V-2 (New York: Viking, 1954).



Walter Dornberger's 1954 memoir, along with the works of Ley and von Braun, fundamentally shaped the initial manner in which the German rocket program was remembered. (author's collection)

because they were not banned in the Versailles Treaty. Noteworthy is Dornberger's account of the relationship between the rocket program and the Nazi leadership, above all Hitler. The former rocket general claimed that because the Führer's doubts early in the war, the program was delayed by two years, making it "too late" to affect the outcome—an argument much in line with the postwar memoirs of other German officers, who scapegoated Hitler for everything. In Dornberger's influential account—but also in von Braun's memoirs—their breakthrough with Hitler only comes on a visit to his Wolf's Lair in July 1943, when the dictator suddenly became a missile enthusiast. To emphasize the story, both Dornberger and von Braun omitted a visit they made to Hitler at the same place in August 1941 and underplayed the steps on the road to V-2 mass production made by Armaments Minister Speer with Hitler's approval in 1942. Blaming the Führer certainly fit the mood in the new West German Federal Republic, the population of which was inclined to focus on German suffering, while blaming a handful of leading Nazis for all crimes, above all for the crime of losing the war.¹²

With hindsight created by the revelations about the Mittelbau-Dora camp in the 1970s and 1980s, the most striking thing about Dornberger's book is that it barely mentions the underground plant and omits any reference to concentration-camp labor whatsoever. As someone intimately involved in decision-making about slave laborers, and as who (like von Braun) encountered them personally on numerous occasions at Nordhausen, Peenemünde, and many other construction and production sites of the rocket program, Dornberger could only written it that way as a deliberate choice to suppress a central feature of the program that was just too dangerous to the reputation of the Peenemünders to discuss. As a result, he successfully falsified history by omission. But of course, in his depiction of himself, von Braun, and other leading rocket engineers, he also managed to make them all appear as non-Nazis, even as anti-Nazis, by laying emphasis on the meddling of Himmler's SS and other National Socialist organs late in the war. Dornberger's own Nazi enthusiasm, and that of several leading members of von Braun's team, like Arthur Rudolph, Ernst Steinhoff and Rudolf Hermann, also vanished. Regarding a conversation that he, von Braun, and others had with Himmler at the Peenemünde officer's club, Dornberger states: "We engineers were not used to political talk and found it difficult." He claimed

^{12.} On Versailles, see Michael J. Neufeld, "The Reichswehr, the Rocket and the Versailles Treaty: A Popular Myth Reexamined." Journal of the British Interplanetary Society 53 (2000), 163-72. On Hitler and the V-2 priority battle, see Heinz Dieter Hölsken, Die V-Waffen: Entstehung—Propaganda—Kriegseinsatz (Stuttgart: Deutsche Verlags-Anstalt, 1984); Michael J. Neufeld, "Hitler, the V-2 and the Battle for Priority, 1939-1943," Journal of Military History 57 (July 1993), 511-38, and The Rocket and the Reich: Peenemünde and the Coming of the Ballistic Missile Era (New York: The Free Press, 1995), chaps. 4-6. On West German memory, see Robert G. Moeller, War Stories: The Search for a Usable Past in the Federal Republic of Germany (Berkeley: University of California Press, 2001) and Jeffrey Herf, Divided Memory: The Nazi Past in the Two Germanys (Cambridge, MA: Harvard University Press, 1997).

they were all repelled by Himmler's "inhuman policy of force." Later in the same chapter, he states: "We hardly ever discussed politics in Peenemünde. We were out of the world. Whenever two people met in the canteen or at mess, their conversation would turn with five minutes to valves, relay contacts, mixers, . . . or some other technical detail that was giving us trouble." In short, he describes them as all just apolitical engineers serving their country, which certainly was how they wanted to see themselves after the war.¹³

Dornberger's book fed into the space-oriented narrative of German rocketprogram history launched by Ley, but it also helped create a second genre: the military-oriented V-weapons literature. In the late 1950s and early 1960s, several books were published, mostly in Britain, on British intelligence and countermeasures and the V-1 and V-2 campaigns, including Air Marshal Sir Phillip Joubert de la Ferté's Rocket (1957), Basil Collier's Battle of the V-Weapons 1944-45 (1964), and David Irving's The Mare's Nest (1965). Irving, who was already noticeably pro-German but not yet infamous as a Nazi apologist and Holocaust denier, provided the most complete account on both Allied and German sides of the V-weapons campaign in the last two years of the war, but it is noteworthy that, although he did much more original research than the others, he minimized the Mittelwerk/Nordhausen story about which he certainly knew more. Surprisingly, there was more information in a contemporaneous American book, James McGovern's Crossbow and Overcast (1964), which featured the transfer of the von Braun group to the U.S. Army. But even as McGovern reported the horrors discovered in and near Nordhausen in 1945, he followed von Braun's lead in holding the whole thing at arm's length from the German rocketeers by blaming it all on the SS—perhaps not surprisingly, as two of his key sources were Dornberger and von Braun.¹⁴

At this point, let's step back and look at the larger contexts of the American memory of National Socialism, the concentration camps, and the Holocaust as it took shape between 1945 and 1965. Although it is not easy to demonstrate that these contexts shaped the memory of the Peenemünde and the German rocket program that Ley, von Braun, and Dornberger created and popular writers extended, it is difficult to believe that they did not have some influence. It is particularly noteworthy in regard to Mittelbau-Dora that the Holocaust was

^{13.} Dornberger, V-2, 187, 192, 194. This self-image is demolished in a new book by Michael Petersen, Missiles for the Fatherland, forthcoming with Cambridge University Press. Petersen demonstrates the committed work of the engineers for the Nazi regime and the intimate relations between Peenemünde and the underground slave-labor Mittelwerk plant. On Dornberger's pro-Nazi political attitudes see his personal notes quoted in Neufeld, The Rocket, 182-183; on the others, see the evidence cited in ibid., in Neufeld, Von Braun, and in Hunt, Secret Agenda.

^{14.} Phillip Joubert de la Ferté, Rocket (London: Hutchinson, 1957); Basil Collier, Battle of the V-Weapons 1944-45 (London: Hodder and Stoughton, 1964); David Irving, The Mare's Nest (Boston and Toronto: Little, Brown, 1965); James McGovern, Crossbow and Overcast (New York: William Morrow & Co., 1964), pp. 120-122.

little discussed between the end of the main Nuremberg trial in 1946 and the Eichmann trial in Israel in 1961. Other than the Anne Frank story, which was presented with an uplifting, universalistic message in the book and movie, the topic was nearly taboo. The Jewish community in the U.S. spoke of the Shoah reluctantly, wishing to assimilate into Cold War America. Before Raul Hilberg published his groundbreaking *The Destruction of the European Jews* in 1961, he had a very difficult time finding a publishing house to take it; afterward, his book was either ignored or attacked. The American public apparently just was not ready to deal with the topic, and the same applied in Europe.¹⁵

However, the relationship between the Jewish Holocaust and Mittelbau-Dora is not straightforward, as few of the prisoners there were Jewish. The camp was filled with Soviet POWs and Polish forced laborers who had somehow ended up in SS hands, plus French and Belgian resistance fighters, German political prisoners, German criminals, Gypsies, and several other groups. Jewish prisoners did not arrive in the camp until May 1944 and were rarely employed in V-2 production. But at the end of the war, thousands of starving, largely Jewish survivors of Auschwitz and Gross Rosen were dumped into the Mittelbau-Dora camp system and constituted a large fraction of the dead and dying discovered by the U.S. Army in 1945. 16 Although it can be posed only as a counterfactual hypothesis, it seems to me that if the consciousness and knowledge of the camps and the Holocaust that arose after the late sixties had existed in the fifties, it would have been much harder for Dornberger and von Braun to sweep the Nordhausen story under the rug. Indeed, in the 1970s, the rising attention to the Holocaust in the Western world did have an indirect effect on the attention paid to Mittelbau-Dora, eroding the received story of Peenemünde constructed in the 1950s.

Despite the lack of interest in the worst of Nazi crimes in the late 1940s and 1950s, reinforced by the Cold War alliance with the newly constructed West Germany, it cannot be said that the American environment was entirely friendly to the Peenemünders as they told their stories of the German rocket program. There were large number of veterans of the war and members of ethnic and religious groups who had no reason to like Germans. There were many false alarms in the media about the rise of neo-Nazism in the Federal Republic. In 1960-61, the West German government became worried about an "anti-German wave" in the American public and media as the result of anti-Semitic incidents in German cities, as well as William Shirer's best-selling book

^{15.} Peter Novick, *The Holocaust in American Life* (Boston/New York: Houghton Mifflin, 1999), chaps. 4-6; Raul Hilberg, *The Politics of Memory: The Journey of a Holocaust Historian* (Chicago: Ivan R. Dee, 1996).

On the history of Mittelbau-Dora, the definitive work is Jens-Christian Wagner, Produktion des Todes: Das KZ Mittelbau-Dora (Göttingen: Wallstein, 2001). See also André Sellier, A History of the Dora Camp (Chicago: Ivan Dee, 2003).

The Rise and Fall of the Third Reich, the movie Judgment at Nuremberg, and the revelations of the Eichmann trial. German crimes had scarcely been forgotten, although equated for years to Communism under the label totalitarianism.¹⁷

Anti-German prejudice bubbled up repeatedly in public comments about von Braun, who rapidly became by far the most famous of the rocketeers in the 1950s. It certainly explains the heavy handed stress on his Americanization and his supposed non- or anti-Nazi record in his two ghostwritten memoirs and in the first American biography written about him. It even surfaced in the heroic movie about him released in August 1960, I Aim at the Stars, an American-German co-production. Von Braun's most trusted German producer wrote to him from Hollywood in June 1958 about the process of formulating a story treatment: "As you know, they are anxiously trying to show that you were no Nazi, although you were a member of the Party and built the V-2 for Hitler." In the end, the movie script incorporated a hectoring American character who pursues von Braun with questions like why he had not been hanged at Nuremberg. Apparently, the American script writers were just not comfortable making him the unalloyed hero of his own heroic "biopic." Even so, the movie opened to protest in Munich, London, Antwerp and New York, but it bombed basically because it was tedious. Comic Mort Sahl's punch line became the most memorable thing about it: I Aim at the Stars should have been subtitled But Sometimes I Hit London.18

Such public doubts and media fiascos notwithstanding, Wernher von Braun had an enviable image in the American, and even more so, in the West German press in the late 1950s and early 1960s. Hero worship was everywhere, and was even prominent in less friendly counties like Britain and France. Von Braun was the vindicated prophet of spaceflight, instrumental in launching the first U.S. satellite and the first U.S. interplanetary probe, and the most visible symbol of the space race with the Soviets—at least until gradually displaced by the astronauts. He was cast in the mold of scientific hero, with his Nazi past neatly explained away based on the standard accounts. As von Braun and his group of Germans had become central to American space efforts (they were transferred to NASA in 1960 to become the core of Marshall Space Flight Center in Huntsville, Alabama) it was easy to conflate von Braun's biography, and that of a tiny band of space true-believers who came with him, with his entire group. Journalists and book authors simply glossed over the fact that most of his 120-odd engineers, scientists and technicians had been hired or recruited during the Third Reich and previously had nothing to do with rocketry or

^{17.} Brian C. Etheridge, "Die antideutsche Welle: The Anti-German Wave in Cold War America and Its Implications for the Study of Cultural Diplomacy" in Jessica Gienow-Hecht, ed., Decentering the United States: New Directions in Culture and International Relations (Berghahn Books: 2007).

Bergaust, Reaching; Mainz to WvB, June 12, 1958, in file 208-7 WvB Papers, USSRC; Neufeld, Von Braun, 325-326, 346-353.

spaceflight. The set storyline was that the dream of spaceflight and landing on the Moon had arisen in the Weimar rocket and space societies, but Von Braun & Co. had to take a "detour" via military rocket development because that is where the money was. That detour continued in work for the U.S. Army, but then von Braun began campaigning for space travel in the 1950s, and the missiles he had developed became one of the foundations of the U.S. space program, leading ultimately to his group's central role in landing a human on the Moon in Apollo. Von Braun himself, together with close associates like Fred Ordway, went on to write space-history works in the 1960s and 1970s that fortified a spaceflight narrative privileging the Germans. Rip Bulkeley has rightly labeled this the "Huntsville school" of history.¹⁹

Detailing how the received version of the Peenemünde and von Braun story formulated in the 1950s was gradually undermined takes us beyond the scope of this paper, but it is instructive to look at a few key points. In the 1960s, the East German Communists tried several times to embarrass the United States and von Braun by outing his SS officer status and his involvement with Mittelbau-Dora. Julius Mader, a popular author who was a covert officer of the East German secret police, published Geheimnis von Huntsville: Die wahre Karriere des Raketenbarons Wernher von Braun (Secret of Huntsville: The True Career of Rocket Baron Wernher von Braun) in 1963, a book that was translated into Russian and other East-Bloc languages and circulated in nearly a half million copies. Out of it sprang a major feature film, Die gefrorenen Blitze (Frozen Lighting), that the East German official film studio released in 1967. But the Cold War divide was so strong that the book and the movie had very little impact in West Germany and none at all in the U.S., where they were almost unknown. Only slightly more effective was the East German involvement in the West German war-crimes trial in Essen from 1967-70 of three SS men from the Mittelwerk. The chief East German lawyer succeeded in getting von Braun called as a witness, but NASA, seeking energetically to protect the rocket engineer, got the testimony moved to the German consulate in New Orleans in early 1969 and successfully kept most of the press away. During the Apollo 11 Moon landing in July of that year, the famous columnist Drew Pearson wrote that von Braun had been an SS member in the context of otherwise praising him, but offered no proof as

^{19.} On hero-worship in West Germany and even in France, see Neufeld, Von Braun, pp. 323-24, 408-10. For typical products of the German-centered narrative see Ernst Klee and Otto Merk, The Birth of the Missile: The Secrets of Peenemünde (New York: E.P. Dutton and Co., 1965) (translation of Damals in Peenemünde); Wernher von Braun and Frederick I. Ordway III, A History of Rocketry and Space Travel (New York: Thomas Y. Crowell,, 1967); Ordway and Mitchell R. Sharpe, The Rocket Team (New York: Thomas Y. Crowell, 1979). On the "Huntsville school," see Rip Bulkeley, The Sputniks Crisis and Early United States Space Policy (Bloomington: Indiana University Press, 1991), 204-5. The classic explication of the "detour" thesis, based on a reading of the earlier secondary literature and not one scrap of archival research, is William Sims Bainbridge's The Spaceflight Revolution: A Sociological Study (New York: Wiley, 1976).

to where he got this information. The rest of the American media completely ignored it. So entrenched was the apologetic life story that when von Braun died eight years later of cancer, his voluminous obituaries never mentioned that fact; many did not even bring up his membership in the Nazi Party.²⁰

The Essen trial, along with the publication of Albert Speer's memoirs in 1969 in German and 1970 in English, did contribute to gradually opening up the history the Mittelwerk and the Mittelbau-Dora camp system, notably in West Germany. A rising consciousness of the history of the Holocaust and the camp system worked in the background to make it harder as well to retail the old history of the German rocket program. When Ordway finally published The Rocket Team with Marshall Center writer Mitchell Sharpe in 1979—a narrative of the von Braun group dominated by the V-2 story—they could no longer leave out the underground plant, even if they did produce a rather one-sided and abbreviated treatment. That same year, Dora, the memoir of French resistance fighter Jean Michel, appeared in English translation, further opening up the topic, although the book had much less influence than the Rocket Team—or at least it did until it helped spark an investigation by the newly formed Office of Special Investigations (OSI) of the U.S. Department of Justice. In October 1984, it announced that one of von Braun's closest associates, Arthur Rudolph, had left the country and denounced his U.S. citizenship as part of a voluntary agreement to forestall a court trial over his denaturalization. He had to admit his early membership in the Nazi Party and his prominent role in the management of slave labor in the Mittelwerk. This announcement provoked a wave of headlines across the U.S. and around the world. Suddenly Nordhausen appeared in multiple American newspaper articles for the first time since April and May of 1945. Shortly afterward, thanks to the Freedom of Information Act and the work of freelance journalist Linda Hunt, von Braun's Party and SS record came out when his Army security files were declassified. The old history of the German rocket program, although still entrenched in many quarters, would never be defensible again. When the Cold War ended only five years later, making the former East German sites of Peenemünde and Mittelbau-Dora accessible, it only reinforced the trend. It opened the way to

^{20.} Julius Mader, Geheimnis von Huntsville: Die wahre Karriere des Raketenbarons Wernher von Braun (Berlin-East: Deutscher Militärverlag, 1963; 2nd ed., 1965; 3rd ed. 1967); Paul Maddrell, "What We Discovered About the Cold War is What We Already Knew: Julius Mader and the Western Secret Services During the Cold War," Cold War History 5 (May 2005), 235-58, esp. 239-42; Thomas Heimann and Burghard Ciesla, "Die gefrorenen Blitze: Wahrheit und Dichtung: FilmGeschichte einer 'Wunderwaffe'," in Apropos: Film 2002. Das Jahrbuch der DEFA-Stiftung (Berlin: DEFA-Stiftung/Bertz Verlag, 2002), pp.158-180. Neufeld, Von Braun, pp. 404-408, 428-429, 473; Kaul Antrag, December 4, 1967, and Hueckel to WvB, November 6, 1968, in Ger. Rep. 299/160, Nordrhein-Westfälisches Hauptstaatsarchiv/Zweigarchiv Schloss Kalkum; Pearson, "Prime Moon Credit is Von Braun's," Washington Post, July 17, 1969; WvB to Gen. Julius Klein, August 2, 1969, copy provided by Eli Rosenbaum/OSI.

a new, more complex and often contradictory public memory of the German rocket program in the U.S., Germany, and the Western world.²¹

Two things predominantly shaped how the V-2 and the Third Reich rocket project was remembered in the first few decades after World War II: the prominence of ex-German rocketeers in the United States and their value to the West in the Cold War. Willy Ley, an anti-Nazi refugee, rose to fame in the U.S. and elsewhere as a science writer in World War II and after, and he offered a space-oriented perspective on German rocket history. Then von Braun and Dornberger arrived under Project Paperclip and provided their technical expertise to the United States; von Braun in particular then became a national celebrity in the 1950s through space promotion in Collier's and Disney, followed by his central role in launching the first U.S. satellite, the first American deep space probe, the first American astronaut, and the Apollo expeditions to the Moon. Von Braun became a national and Western asset in the Cold War struggle with the Soviets, one that the media wanted to protect even without official U.S. government efforts to manage his image. Since the Nordhausen and Mittelbau-Dora story and von Braun's SS membership were virtually unknown, in large part due to government secrecy, the received story of the German rocket program held up, even in the face of East German attempts to undermine it. Nothing so clearly indicates the shaping influence of the Cold War than that fact; two competing narratives of von Braun and Peenemünde arose on either side of the "Iron Curtain," especially after Mader's 1963 book, yet even in the free press of the West, very little changed. It took the rising consciousness of the Holocaust and the history of the Nazi camp system to begin to erode the traditional narrative. Holocaust consciousness also led to the formation of the Nazi-hunting Office of Special Investigations in the U.S., which finally broke open the story.

In conclusion, I would like to appeal to space historians to begin to pay closer attention to their own history. Some good historiographic overview articles have been written, but not many attempts have been made to write the history of space history, notably in its origin phases. This history will tell us much about the constitution and mentality of spaceflight movements. More than that, the growth of the literature on public and collective memory provides another rich field for exploration: how space history, which has been written mostly by space enthusiasts and friendly journalists throughout much of its existence, has shaped popular memories of rocket development and space

^{21.} Bernd Ruland, Wernher von Braun: Mein Leben für die Raumfahrt (Offenburg: Burda, 1969), 227–39; Albert Speer, Erinnerungen (Berlin: Propyläen, 1969), translated as Inside the Third Reich (New York: Macmillan, 1970); Manfred Bornemann and Martin Broszat, "Das KL Dora-Mittelbau," in Studien zur Geschichte der Konzentrationslager (Stuttgart: Deutsche Verlags-Anstalt, 1970) and Bornemann, Geheimprojekt Mittelbau (Munich: J. F. Lehmanns, 1971); Ordway and Sharpe, Rocket Team; Jean Michel with Louis Nucera, Dora (1975; New York: Holt, Rinehart and Winston, 1979); Hunt, "U.S. Coverup" and Secret Agenda; Bower, Paperclip Conspiracy; Neufeld, Von Braun, 474–75; Eli Rosenbaum/OSI interview, July 26, 2006.



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German-Born NASA Expert Quits U.S. to Avoid a War Crimes Suit

By RALPH BLUMENTHAL

A German-born space official who developed the rocket that carried Americans to the moon has quietly left the United States and surrendered his citizenship rather than face Justice Department charges that he had brutalized slave laborers at a Nazi rocket factory during World War II.

Announcing the action yesterday in a brief statement, the Justice Department said that the official, Arthur Rudolph, as director for production of V-2 rockets at an underground factory attached to the Dora-Nordhausen camp from 1913 to 1945, "participated in the persecution of forced laborers, including concentration camp inmates, who were employed there under inhumane conditions." A third to one half of Dora's 60,000 prisoners died.

The National Aeronautics and Space Administration, which had awarded high awards to Mr. Rudolph for his work for the agency from 1962 from 1963, had no comment on the Justice Department announcement. [Page A13.]

The announcement on Mr. Rudolph, who was brought to the United States in 1945 with Wernher von Braun and more than a hundred other Nazi German technicians and scientists, was negotiated in advance with Mr. Rudolph.

The announcement did not mention his prominent role in the United States space and missile programs. Nor did it say where he had gone. Investigators said it was West Germany.

Officials said it was unlikely that Mr. Rudolph, who is 77 years old, would face prosecution in West Germany as the statute of limitations has expired. Mr. Rudolph was not carried on an Allied list of war criminals drawn up after the war. Other officials of the rocket factory were convicted of war crimes and jailed or executed.

Mr. Rudolph's whereabouts in West Germany has not been disclosed. His lawyer, George Main of San Jose, Calif., declined to take a reporter's call

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More than anything else, the 1984 revelation of Arthur Rudolph's involvement in the abuse of concentration-camp labor undermined the traditional narrative of the German rocket program. (author's collection)

travel in the larger publics of the West and East—not to mention the rest of the world. Some pioneering work has been done, mostly on the United States, but a rich field of opportunities exists for those who are willing to use the tools of social and cultural history and collective memory to delve into the reception of space history, not only its generation.