

Treacherous Evidence: Archival Documents and the Search for Peking Man

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ABSTRACT

The Peking Man skeletal materials, excavated in China in the 1920s and 1930s, disappeared in December 1941. The assumption that the fossils were acquired by the U.S. military has emerged as the core idea of what we call the “Standard Scenario.” We challenge this scenario by 1) highlighting the factual and chronological inconsistencies in the accounts of the loss of the fossils; 2) critiquing the casual and uncritical acceptance of personal reports lacking independent verification; 3) emphasizing the absence in official archives of supposed documents used to support the Standard Scenario; and, 4) reanalyzing a 1972 photograph used by some investigators to associate the fossils with the U.S. Marines. Our detailed forensic analysis strongly suggests the 1972 photograph is a deception. In addition, we present 5) a previously unknown document from U.S. State Department archives that indicates it is very unlikely that the fossils were delivered to American hands. We propose that there is no evidence the U.S. ever obtained the fossils and that any future investigations must be based on research into actual documents relevant to their loss. Our approach should invite mindful consideration of alternatives to the Standard Scenario that have been thus far ignored.

HISTORICAL CONTEXT

In 1918 the Swedish mining engineer J.G. Andersson recognized the fossil potential of Pleistocene deposits in China and began investigations at Choukoutien^s (now Zhoukoudian) about 50km southwest of Peking^s (Beijing). Soon he and his colleagues were taken by local villagers to the nearby “Dragon Bone Hill” and shown a rich trove of animal fossils weathering out of a limestone quarry (Boaz and Ciochon 2004: 7). The researchers determined that the animals were of extinct Pleistocene species and began excavating. Within a few years they had also found two human-like teeth. One of their collaborators was Davidson Black, a Canadian anatomist with the Peking Union Medical College (PUMC), a medical school established in 1915 by the Rockefeller Foundation. Black and Chinese geologist Weng Wenhao established the Cenozoic Research Laboratory at PUMC. Weng became director and Black, Honorary Director. Black (1926: 733) first described the fossil teeth, saying they were “man or a very closely related anthropoid.” Later, after a third tooth was excavated, Black (1927: 21) placed

the remains in a new genus/species of human (*Sinanthropus pekinensis*). This was just the beginning—all told, parts of about 50 individuals (Boaz et al. 2004: 546) were excavated over the next decade.

Today the fossils are classified as part of a widespread species, *Homo erectus* (Schwartz and Tattersall 2005: 547). The remains represent people who lived in China approximately 700,000 years ago (Shen et al. 2009: 198). The discovery of the fossils attracted worldwide attention because, at the time, they were almost the only prehistoric human remains outside Europe and were thought to be the material most able to shed light on early human evolution (Black 1926: 734; Boaz and Ciochon 2004: 1; Schmalzer 2008: 37). No other site in the world has produced as many *Homo erectus* remains (Rightmire 1990: 164; Shen et al. 2009: 198). Fully modern human (*Homo sapiens*) skeletal material along with artifacts were excavated from the upper portions of the site in 1933 (Boaz et al. 2004: 528). These remains (called Upper Cave Man) are dated to younger than 20,000 years (Kamminga and Wright 1988: 739). Figure 1 shows the loca-

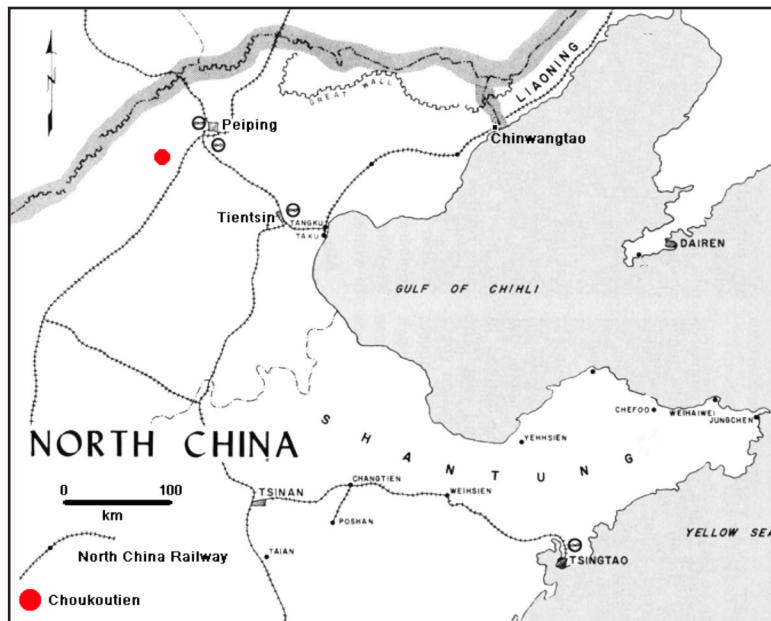


Figure 1. Map of Northeastern China in 1941, showing Peking (Peiping in this map) and the Choukoutien site just to the southwest, as well as other cities important to the discussion of the Peking Man fossils. Tientsin (100km SE of Peking) and Chinwangtao (200km NE of Tientsin). A portion of the Great Wall is shown in gray near the top of the map. Source: Frank and Shaw (1968: 538).

tion of Choukoutien with respect to Peking, as well as the cities Tientsin and Chinwangtao and the North China Railway. Table 1 lists names of active participants in the events through 1947.

Black was primarily responsible for the *Sinanthropus* publications until his death in 1934. He was succeeded by Franz Weidenreich, a German anatomist and paleontologist who became Honorary Director of the Cenozoic Research Laboratory. The researchers unearthed more skulls, teeth, and a few postcranial bones, and in several publications between 1937 and 1941, Weidenreich described the skeletal remains and evolutionary position of Peking Man. In 1943, while in New York, he published his final paper based on the original remains (Weidenreich 1943).

The skeletal materials were prepared at the Cenozoic Research Laboratory and in the Anatomy building. The fossils were kept in two safes near Black's office (Jia and Huang 1990: 168). Just before the Japanese attack on Pearl Harbor in December 1941, the fossils, including those from the Upper Cave, vanished.

EVOLUTION AND NATIONALISM

No new materials were added to the fossil assemblage between 1937 and 1949, a turbulent period that included the Second Sino-Japanese War, World War II, and the establishment of the Peoples Republic of China. Excavations resumed in 1949 and important skeletal material of the same nature continues to be recovered and studied (Boaz et al. 2004: 520).

Prior to 1941, the work had been a unique international cooperative venture, though at the time, many foreigners tended to downplay the central role of the Chinese (Manias 2014: 25). Nearly all the major finds at the site were

made by Chinese paleontologists, who also were authors on several publications from the Cenozoic Research Laboratory. Three of them (Pei Wenzhong, Yang Zhongjian, and Jia Lanpo) went on to become the founders of Chinese paleontology and paleoanthropology (Shen 2014: 116).

The Chinese have long viewed these fossils as evidence of the great antiquity and evolutionary continuity of Chinese ethnicity and culture (Hooker 2006: 64; Li 1997: 35; Sautman 2001: 96; Schmalzer 2008: 249). The disappearance of the Peking Man fossils was thus for the Chinese more than the simple loss of prehistoric specimens. Indeed, through the 1940s, the consensus of anthropologists worldwide was that humans had originated in Asia (Black 1926: 734; Howells 1949: 107), and at the time of excavation the Peking Man remains were thought to be ancestors of modern humans, or at least of modern Chinese (Boaz and Ciochon 2004: 1; Shapiro 1971: 74).

More recent research favors an African origin for all modern humans, though this question is not settled. Both genetic and fossil evidence is used to approach this question, and arguing from genetic studies of extant humans, the African members of *Homo erectus* are considered to be the primary ancestors of modern humans, including modern Chinese (Stringer 2012: 34). This idea is also favored by some Chinese scientists (e.g., Chu et al. 1998: 11763). A dissenting view (Templeton 2007: 1517) uses genetic evidence to suggest that South Asian populations of *Homo erectus* also contributed to modern Chinese ancestry.

The morphology of fossil material has been interpreted in a number of ways—some fossil evidence (e.g., Boaz and Ciochon 2004: 165; Clark 1993: 173; Rightmire 1990: 205) suggests that *Homo sapiens* of African origin replaced Asiatic *Homo erectus* in the last 200,000 years, but certain re-

TABLE 1. MAIN PARTICIPANTS IN RESEARCH, DISPOSITION, OR SEARCH FOR THE PEKING MAN FOSSILS.

Name	Position
PUMC Scientific personnel directly involved	
Davidson Black	Professor of Anatomy, Honorary Director of Cenozoic Research Laboratory
Franz Weidenreich	Black's successor as Honorary Director
Pierre Teilhard de Chardin	Paleontologist and advisor at Zhoukoudian excavations
Pei Wenzhong	Excavator and later Director of Cenozoic Research Laboratory
Yang Zhongjiang	Researcher and excavator at Zhoukoudian
Jia Lanpo	Field director at Zhoukoudian
Weng (Wong) Wenhao	Excavator and field director at Zhoukoudian; later Chinese Economics Minister
Hu Chengzhi	Technician in Anatomy Laboratory
Ji Yanqing	Technician in Anatomy Laboratory
Claire Taschdjian	Technician and Secretary to Weidenreich
Lucile Swan	Artist, assistant to Weidenreich
PUMC Officials	
Henry Houghton	Acting Director
Trevor Bowen	Controller
Mary Ferguson	Administrator
Agnes Pearce	Secretary of the China Medical Board (Rockefeller Foundation)
Japanese Military and Scientific Personnel	
Hasebe Kotondo	Anthropologist and military officer
U.S. Military and Diplomatic Personnel	
William Ashurst	Colonel, USMC; Commander of North China Marines detachment
William Foley	Medical Doctor, Lt. (jg), head of medical team at the U.S. Embassy
Herman Davis	Pharmacist, assistant to Foley
Hubert Schenck	Chief, Natural Resources Section, U.S. Army Occupation forces Japan, 1945–1951
Frank Whitmore	Staff geologist, assistant to Schenck
Walter Fairservis	Anthropologist, U.S. Army Intelligence officer
Richard Butrick	Civilian head of mission, U.S. Embassy, Peking
Albert Metze	Assistant military attaché, U.S. Embassy, Peking (Ashurst's subordinate)

searchers (e.g., Wu and Athreya 2013: 141; Qiu 2016: 219) interpret the Asian fossils as suggesting continuity between *Homo erectus* and *Homo sapiens* in China.

It is not our purpose to take a position on these hypotheses of human evolution; however, the possibility that

Peking Man was either ancestral or closely related to some modern humans makes it worth finding the original lost specimens. Though the Peking Man fossils are considered to be ~700 ky old, there may still be structural, protein, or genetic information within the fossilized bone that could be

valuable for understanding human evolutionary processes. Recent technical advances have made it possible to recover and sequence ancient proteins (1.7 million years – Cappelini et al. 2019: 103) and DNA (500,000 years – Allentoft et al. 2012: 4725; Meyer et al. 2016: 504; Orlando et al. 2013: 74). Teeth provide the best chance of successful Ancient DNA extraction because the cells are protected from degradation inside enamel, the hardest tissue of the body. Short sequences of DNA may still be available from the original fossils; extractable DNA and protein might reveal Peking Man's place in the history of the human species.

THE ORIGIN OF THE STANDARD SCENARIO

The fossils have not been seen since they were boxed at PUMC at the end of November 1941. To explain their disappearance, a simple, unified, enticing hypothesis emerged—that the fossils were lost in U.S. Marine custody during their transfer from PUMC to the Marine barracks or to the U.S. Embassy in Peking, and/or during transport via train to a U.S. Marine camp on the coast for the purpose of shipping them to the U.S. We have termed this idea the “Standard Scenario.” The term is ours and has not previously been applied to the disposition of the Peking Man fossils.

If there is a Standard Scenario, there must be a trail of evidence pointing to its own emergence and history. The fossils were known to be lost by 1942 or 1943 after diplomatic attempts to locate them failed during the war (see Figure 3 below). In 1947 a U.S. military-authorized search was begun (see below). In May of that year the Chief of Naval Operations requested information from the Marine Commandant regarding the disposition of the fossils. The Commandant then contacted Colonel William W. Ashurst, former commander of the Marine forces in North China and of the American Embassy Guard in Peiping (Biggs 2003: 205; Lawrence 2010), for information. Ashurst (Commandant of U.S. Marine Corps 1947) stated:

During November 1941, several boxes were accepted by me from the officials of the Peiping⁸ Union Medical College, for shipment to the United States. These boxes were shipped together with other property belonging to the Marine Detachment, Peiping, China, via rail to Chinwangtao, China, in late November or early December in freight cars guarded by U.S. Marine Corps personnel. These materials remained in the cars at Chinwangtao awaiting shipment in the *SS President Harrison* to Manila, (Philippines) and were so located when the war started on December 8, 1941.

Between 1947 and 1952, there were no official or popular accounts of the fossils. In 1952, two articles were published in the *New York Times* within one day of each other—January 4 by Charles Grutzner and January 5 by Robert Plumb. The article by Grutzner states without documentation that the fossils had been in the custody of Marines and then were lost during rail transport from Peking to Tientsin. This article describes the fossils as being lost either by sinking in the bay near the city of Tientsin or by being taken by Japanese soldiers in the vicinity of Tientsin. The follow-

ing day, Robert Plumb published an article that included an interview with Ashurst, who, Plumb wrote, was the person “last known” to have the fossils. This article does not mention Tientsin but describes Chinwangtao as the fossils’ terminus.

Thus, the first two published newspaper accounts (Grutzner 1952 and Plumb 1952) differ in important ways and do not actually give evidence that the Marines had the fossils. Both accounts state that some boxes went from PUMC to the Marine compound in Peking, and from the Marines to either Tientsin or Chinwangtao. However, Ashurst told Plumb (1952) he did not verify that fossils were in his boxes. In addition, Ashurst’s statement about the final destination of the fossils is inconsistent with Grutzner’s article from the previous day (Grutzner 1952).

Of these two popular early accounts, Plumb’s article appears to be the one that contributed most to the Standard Scenario. A summary of his article follows:

- In 1941, Weng Wenhao, Director of the Chinese Geological Survey and later Minister of Economic Affairs, was concerned that if war began, the Japanese would control China and might take the fossils. He “pressed” Dr. Henry Houghton, Director of PUMC, to take responsibility for their safety.
- The fossils, constituting a “few handfuls of yellowed and fossilized bones,” were given to Ashurst by Houghton and “personally” placed into Marine footlockers along with Embassy documents; Houghton told Ashurst to treat the fossils as “secret” material. Ashurst did not check to see what might have been in the footlockers.
- The boxes were transported on December 5 by rail to Chinwangtao (Qinhuangdao) where the Marines were planning to board a ship to leave China before hostilities started.
- The ship never arrived at the port, and the Marines were thus unable to depart. The train, with cargo intact, was captured on December 8 by the Japanese. At about the same time, Ashurst surrendered his detachment to the Japanese in Peking; he and the other Marines were imprisoned for the duration of the war. Ashurst speculated in his interview with Plumb that the remains had been discarded by the Japanese at the rail station because the soldiers did not understand their significance. However, he admitted he actually did not know whether the fossils had been on the train.

There are two significant points to emphasize here—that there are inconsistencies in the first two published descriptions of the loss of the fossils (the articles by Grutzner and by Plumb); and that Ashurst did not verify that he had the fossils in his footlocker. We will expand on these investigative issues as our analysis unfolds. First, we will give an overview of the current lines of study.

FOLLOW-UP TO THE STANDARD SCENARIO

During the past 80 years, the story has gone through several periods of intense public interest. The loss and subsequent

post-war search for the fossils first made front-page news in the 1950s (Grutzner 1952). After a hiatus of 20 years, the Chinese next brought the story to the world's attention in the 1970s (Janus and Brashler 1975). Once again, in 2004 and 2010, additional work resulted in new interest in the fate of the fossils (Berger et al. 2012; Boaz and Ciochon 2004).

Major publications dealing with the loss of the fossils fall into two classes. The first includes accounts written before 1974 (e.g., Hawkes 1963; Howells 1967; Moore 1965) that present hypotheses based on (but not acknowledging) Plumb's *New York Times* article (1952). The second includes books appearing after 1974, written by people directly involved in the original events or making serious attempts to retrieve the fossils. These could be considered "primary sources" in the sense that the authors were writing from their own experiences. In order of publication these are *Peking Man: The Discovery, Disappearance and Mystery of a Priceless Scientific Treasure* by Harry Shapiro (1974); *The Search for Peking Man* by Christopher Janus and William Brashler (1975); *The Story of Peking Man* by Jia Lanpo and Huang Weiwen (1990); and *Dragon Bone Hill: An Ice-Age Saga of Homo erectus* by Noel Boaz and Russell Ciochon (2004).

Shapiro was curator of Anthropology at the American Museum of Natural History (AMNH) in New York; he also went to China in 1980 to search for the fossils among remains of the barracks at a former Marine camp in Tientsin (Tianjin). He used archival material from the AMNH in the parts of the book that dealt with the search. Janus was an American businessman whose trip to China in 1972 started the modern search for the fossils. His book contains mention of primary sources that might be important, but not in a way that the sources can be obtained or checked. Jia was one of the original researchers at Choukoutien in the 1930s, and at the time of his death in 2001 was one of the last surviving members of the team that worked with Black and Weidenreich. Jia and Huang's book has several chapters dealing with what may have happened to the fossils. Boaz and Ciochon are anthropologists who have published studies (e.g., Boaz et al. 2004) of the archaeological and evolutionary significance of the Choukoutien site. Their book (Boaz and Ciochon 2004) includes a discussion of the loss of the fossils and makes good use of original archival material from the Rockefeller Foundation and American Museum of Natural History.

Of the authors who have written of the events of mid-to-late-1941, only Jia and Huang (1990) and Shapiro (1974) were directly connected to the events they describe, and only Jia and Huang (1990), Shapiro (1974), and Boaz and Ciochon (2004) make adequate use of primary sources. Other recent popular publications (e.g., Aczel 2007; Edwards 2010; Pyne 2016; van Oosterzee 2000) also give detailed accounts, but these are based primarily on the four books above (Boaz and Ciochon 2004; Janus and Brashler 1975; Jia and Huang 1990; Shapiro 1974). They thus provide little additional documentation. In a search of the paleoanthropological literature, we found superficial statements of the fossils' disappearance in a number of textbooks.

OUR ANALYSIS

CRITIQUE OF SOURCES

The remainder of this article outlines our evidence that the Standard Scenario lacks adequate rigor to be repeated as a trustworthy narrative of what happened to the fossils. Our analysis is founded on four points:

1. The accounts of individuals involved in the events of 1941 are largely inconsistent with each other.
2. Official documents and other key communications referred to in the accounts do not appear to be present in archives where we had every reason to expect them to be found, given they were referred to by authors writing serious accounts.
3. We have discovered a previously unknown State Department archival document whose contents make it unlikely that the fossils were transported to the Marines or Embassy.
4. A photograph of supposed Peking Man fossils in an apparent Marine footlocker appears to have been intended to deceive investigators. The photograph has long been used as support for the hypothesis that the fossils were transported to the U.S.

The next section of this paper describes the events leading to the fossils' disappearance. Many of these events involved decisions made and actions taken (e.g., who was to transport the fossils, by what means, and to what locations) in accordance with diplomatic and military directives for which no documentation is known to exist. As a result, our analysis is almost entirely dependent on unofficial personal accounts. We use primary sources (i.e., first-hand accounts) wherever possible but it should become clear in the narrative that even among the primary sources, personal accounts are not always reliable—no two peoples' accounts agree completely, and even the separate accounts of one person do not always match the others that person has made. These challenges will become clear as our narrative unfolds.

THE DECISION TO TAKE THE FOSSILS TO THE U.S.

By early 1941 the Chinese, as well as the foreigners living in China, had become alarmed at the possibility of war between Japan and the U.S. Since the 1930s the Japanese had shown great interest in the Peking Man fossils, and Japanese army officers had often visited the PUMC in attempts to see them (Pei 1945b: 2). Officials at the PUMC were thus concerned for the safety of the fossils in the event the Japanese would take action that would lead to loss of the fossils. They corresponded regularly with Rockefeller Foundation officials during 1941 over how to safeguard them (Weng 1941). Their options were limited because the formal agreement between the PUMC and the Geological Survey of China stated that the fossils were not to be removed from China (Jia and Huang 1990: 54).

Thus, Henry Houghton discussed with Weng Wenhao the possibility that the fossils could be taken to a southwestern location in China (i.e., Chungking [Chongqing]),

which was the capital of the Republic of China and by 1941 also the location of Chinese Geological Survey offices (Weng 1941). However, Houghton and officials of the Rockefeller Foundation agreed that transporting the fossils to the southwest would be “difficult, if not impossible” (Loebenstein 1941). The alternative was shipment to the U.S. By the spring of 1941 Weng had capitulated and said that despite the agreement, the fossils might be taken to safety outside China (Weidenreich 1941).

At this point two narratives exist as to Weidenreich’s actions regarding the fossils. The first, documented by a letter from Weidenreich to Weng (Weidenreich 1941), indicates that Weidenreich considered taking the fossils with him when he left China. He realized, however, that he would have to pass Japanese-controlled customs and would not be able to hide the fossils in his luggage. He thus favored leaving the fossils in China. Shapiro (1971: 18) writes that Weidenreich also considered shipping the fossils to the U.S. as part of the Marines’ baggage. Even so, he states that Weidenreich “failed to convince” American Embassy and military officials of the value of this idea. It is still not known whether this approach was acted upon.

An additional narrative comes from information regarding Weidenreich’s citizenship status in 1941. Although he completed a “Declaration of Intention” to receive U.S. citizenship in November of 1939 (New York Records, 1794-1943), his application was not certified until 1944 (New York Index 1792-1969). This means that he was not a citizen when he returned to the U.S. a few months before the beginning of World War II. In addition, Wolpoff and Caspari (1997: 191) report Weidenreich was “stateless” at the time and therefore could not assume he would pass Japanese-controlled customs with the fossils. Finally, Wolpoff and Caspari (personal communication) interviewed one of Weidenreich’s daughters on this topic; she told them that Weidenreich’s trip to the U.S. in the spring of 1941 was to renew his American visa. These statements are consistent with Weidenreich’s lack of U.S. citizenship and suggest that he was justified in being concerned that Japanese customs officials would confiscate the fossils if he attempted to leave China with them.

INTRODUCING THE PROBLEM OF LOST DOCUMENTS

It is not clear when in 1941 the attempt was made to convince the Embassy to send the fossils via the Marines (Shapiro 1971: 18), and no official documents indicate that the earlier caution about moving the fossils was abandoned in favor of taking them out of China. However, Pei Wenzhong (n.d.: 217) wrote that in November 1941, “Ambassador Johnson” sent a telegram from his office in Chungking to the Embassy in Peking, directing that the fossils be taken “to the United States.” The mention of this telegram creates its own challenges: Pei says that the American Ambassador in November was Nelson Johnson, but in May 1941, Johnson had been replaced as Ambassador by Clarence Gauss (Gauss 2020; Jia and Huang 1990). Even so, it would be very useful to obtain a telegram with this content, whoever had

the authority to write it. Pei’s statement suggests that transport of the fossils out of China was officially sanctioned, but no one else has referred to the telegram or produced the evidence for its existence.

ASSESSING THE MOVEMENT OF THE FOSSILS

The First (1937) Fossil Packing and Shipment

Pei wrote (n.d.: 217; 1945b: 1) that as a safety precaution during the Second Sino-Japanese War, Weidenreich twice in 1937 had sent the fossils to an American bank in Peking. He names two different banks that stored the fossils—the Bank of America (Pei n.d.) and the National City Bank of New York (Pei 1945b: 1). As far as we are aware, Pei is the only person to have suggested this transfer, and there is no evidence outside his articles that it occurred. Its primary significance lies in suggesting that there may have been a variety of plans among the Chinese for safeguarding the fossils.

Back to 1941 - Who Packed the Fossils?

Readers might wonder how *who packed the fossils* is important to the continuing search. We include the packing issue here because it is important for understanding the events leading to the next step—whether the fossils had indeed been transported to the Marines. In addition, the many conflicting stories as to who packed them embody the inconsistencies that influence understanding of the entire Peking Man story.

Jia and Huang (1990: 160) write that about six months after Weidenreich left China in April 1941, Pei directed that the original fossils be packed. The publications we surveyed give five different possibilities for the crucial step of packing the fossils for storage and/or shipment (it is still not known which of these two purposes was intended). We will list the possibilities in increasing order of probability:

1. Someone put the fossils into glass jars.
2. Trevor Bowen and Henry Houghton, officials of PUMC, packed the fossils into redwood boxes. Bowen was Controller and Houghton the Administrative Head of the College. Neither was a paleontologist, and neither had taken part in the excavations nor in laboratory preparation of the materials.
3. Claire Taschdjian, as assistant to Dr. Franz Weidenreich, packed the fossils into wooden boxes. She had begun to work with Weidenreich at the beginning of 1941, had studied biology but had no paleontological or archaeological training.
4. Pei Wenzhong, one of the site scientists, packed the fossils into wooden boxes.
5. Hu Chengzhi and Ji Yanqing, technicians and assistants to Weidenreich, packed the fossils into wooden boxes. Hu had earlier made the plaster casts Weidenreich had taken with him to the U.S.

The Glass Jars Possibility

Grutzner (1952) was the first to mention glass jars in his

New York Times article. He states that “the bones (were) put in glass jars that were then wadded down in two packing cases marked as officers’ clothing.” Twenty years later, Dr. William T. Foley, physician and head of a Marine medical contingent based in Tientsin, wrote in his memoir (Foley 1971–72: 6) that the fossils were “an assortment of old bones in a dozen or so glass jars.” It is virtually inconceivable that a paleontological crew would have packed them in glass. The Chinese, as experienced investigators, knew not to place fragile materials into breakable containers. In any case, a “dozen or so” could not have held more than a few fragments. All later references (e.g., Jia and Huang 1990: 175; Shapiro 1974: 151) to the fossils being in glass jars derive from these undocumented statements by Grutzner and Foley.

The Bowen/Houghton Possibility

Pei Wenzhong (n.d.: 218) wrote that Bowen and Houghton “took care of the packing” so that the Chinese could have deniability in case they were questioned by Japanese troops, and that Pei himself was not aware of the packing. But it is highly unlikely that the Chinese would have put so much care into the excavation and preservation of the fossils and then allow administrators to pack them. This would make sense only if Bowen and/or Houghton had to *re-pack* the fossils to preserve deniability (see below).

The Taschdjian Possibility

Two different and conflicting stories exist concerning Taschdjian’s dealings with the fossils. Shapiro (1974: 151) writes that she told him *she* had done the packing by placing the fossils into boxes in which they were “embedded in loose packing material.” According to accepted practice (Hester et al. 2009: 273), archeologists and paleontologists do not pack fragile fossils in loose material. However, Janus and Brashler (1975: 32) write that Taschdjian stated she wrapped individual fossils, put them into small cardboard boxes, and placed them into two redwood crates. She told Janet Cox the same thing for a 1974 interview in *Harvard Magazine* (Cox 1974: 23). Though this packing uses reasonable paleontological methods, it is unclear which of her statements is the correct one, and Jia, who knew her, states she did not box the fossils (Jia and Huang 1990: 160).

The Pei Wenzhong Possibility

Pei was credited with the discovery of the first Peking Man skull in 1929 (Aczel 2007: 140; Jia and Huang 1990: 64); he was experienced and knowledgeable and authored many books on the prehistory of China. He wrote (n.d.: 221) that at the beginning of November, “we did the packing in two white wooden boxes.” This statement sets up two major contradictions: Pei stated in the same document (n.d.: 218) that Bowen and Houghton packed them, and he also stated that he remained ignorant of the disposition of the fossils (n.d.: 218, 220). Even if Pei meant to say that he merely directed the packing, contradictions remain—he would not have been ignorant of the action, and the box color he describes does not match what Hu and Ji (below) wrote. The

most reasonable hypothesis is that the experienced technicians Hu and Ji actually packed the fossils.

The Hu Chengzhi / Ji Yanqing Possibility

Hu and Ji were Weidenreich’s technicians with years of experience in preparing and preserving paleontological specimens. Hu wrote to Jia (Jia and Huang 1990: 160) in 1977 that he and Ji had packed the fossils by first wrapping each in tissue paper, cushioning them with cotton and gauze, then overwrapping them with more paper. All of these were placed into small wooden boxes that were packed into large cases, each small box with layers of corrugated cardboard between to cushion them. Thus, all the fossils fit into two large unpainted wooden cases, “one the size of an office desk, and the other slightly smaller” (Jia and Huang 1990: 161). Hu does not state where the packing took place, but it must have been in the basement lab in the Anatomy building (Building B), where the fossils had been stored.

Though it is most probable that Hu and Ji packed the fossils, Jia reports this idea as if he had not known of it before 1977, and it raises an important question—why would Jia, who played such an important role in the discovery and study of the fossils, seem to be unaware of their final disposition? In this and other statements in his book, Jia studiously avoids mentioning that he had direct knowledge of what was happening at PUMC in the months before Pearl Harbor. This is puzzling in light of his statement (Jia and Huang 1990: 155) that he was during this time “entrusted to head the remaining personnel” in the Cenozoic Research Laboratory, so he should have known exactly what occurred. His written statements in 1990 thus mirror those of Pei, who stated that he was unwilling to be “implicated” in disposing of the fossils and was grateful to PUMC officials for keeping him out of the picture (Pei n.d.: 218).

Assuming therefore that Hu and Ji packed the fossils, the amount of material needed to be transported is fairly large and heavy—two wooden boxes, each roughly the size of an office desk. Any hypothesis claiming that all the fossils could be stored and transported in a smaller volume than this is therefore inadequate as an explanation of the fossils’ disposition.

TAKING THE FOSSILS FROM THE PUMC TO THE MARINES (OR WAS IT THE EMBASSY?)

The Chinese Perspective

Hu continues in his letter to Jia (Jia and Huang 1990: 161) that after he and Ji boxed the remains, they “delivered the two cases to the head of Controller T. Bowen’s office.” It is difficult to interpret the words “the head of” in Hu’s letter, but it sounds as if the boxes went to Bowen’s office at PUMC. This office was in the Administration building (Building F), some 100m away from the Anatomy building and connected both by a surface sidewalk and by an underground “passage” (Renshaw n.d.). One of these walkways must have been the route for the movement of the fossils. Hu estimates that the fossils were moved to Building F between November 17 and 20, and then to an “unknown

place” the next day (Jia and Huang 1990: 161). Hu ends by saying that after that delivery, “none of the Chinese knew what happened to them.” This comment is inconsistent with a statement he made later in the same letter (Jia and Huang 1990: 161), that the director of the PUMC Hospital claimed the fossils were put into a vault in Building F of PUMC. Houghton also wrote later (Hood 1964: 130) that they were put into a “vault in the hospital administration unit.” Building F is the Administration building (Foreign Missions Code 1921: 18).

Jia continues (Jia and Huang 1990: 161), “... It is known that on the day following the packing, the fossils were delivered to the U.S. Embassy located at Dongjiaominxiang in Beijing, and since then they have been missing” (note, however, that Jia stated the fossils went to the Embassy, and does not mention the Marines). Pei (n.d.: 221) also wrote that after he packed them, Bowen sent the fossils to the Embassy, to be given to the Marines for transport to the U.S. Note also that both Hu and Jia place transport of the fossils from PUMC a day or so after they were packed, while Li and Yue (2000: 243) state that the boxes were *picked up on December 4* by two Marines, who guarded them overnight and then on December 5 took them on their train voyage to Chinwangtao (see below).

As a result of these inconsistencies, it is unclear how much Hu, Jia, and Pei actually knew about the disposition of the fossils after they were packed. The variation in their accounts raises the possibility that there may have been intentional misdirection at the individual, group, institutional, or official (diplomatic and military) level. In any case, little of what they or others have written about the transport is useful. It is also unfortunate that none of them provide documentary evidence for the fossils’ delivery to either the Embassy or Marines, or their next destination. It is thus most accurate to say (Boaz and Ciochon, 2004: 50) that “... there is still not a single reliable account of a sighting of the fossils since they were packed by Hu and Ji in 1941.”

The Foreign Perspective

The foreign employees of PUMC also wrote personal accounts of their experiences regarding the fossils. These accounts are as problematic as those of the Chinese. Agnes Pearce reported to the PUMC Board on May 2, 1948 (PUMC Trustees’ Meeting 1948) the following results of a conversation with Mary Ferguson (Registrar of PUMC – here called MEF):

Dr. Houghton and Mr. Bowen, both, as MEF remembers, took them in the College car to the Embassy (Marines?)
[parentheses in original]

Ferguson also wrote in her 1970 book (Ferguson 1970: 85):

About December 6, 1941 the Controller accordingly personally delivered a locker trunk containing this material to Colonel W. W. Ashurst. It was put with the goods belonging to the Marines and taken to the port of Chingwantao (sic), where the whole shipment was awaiting loading aboard ship when war broke out on December 7/8, 1941.

Much later than the original events (March 18, 1973), Ferguson (1973) sent a letter to Shapiro describing the events in 1941:

From my office window I watched Mr. Bowen taking a locker trunk across the marble court to the front gate of the College to the car in which it went to the U.S. Marine barracks! Whether or not there was more than one locker trunk I cannot say - but I can vouch for there having been at least one.

Ferguson believed she was describing the Peking Man fossils; however, this cannot be accepted as evidence as she does not indicate how she knew what was in the locker(s), nor how she knew where they were going. Perhaps the locker(s) contained personal effects of PUMC staff; it is not possible to know what it or they contained. Closer to the time of the events, Houghton was present on September 22, 1945, at the PUMC Trustees meeting (PUMC Trustees’ Meeting 1945), where this appears in the record:

... the case of sinanthropus (sic) material ... had been turned over by Dr. Houghton to the commandant of the American Marines in late November 1941 for transportation to the United States.

... neither Mr. Bowen nor Dr. Houghton knew what had happened to the case after it had been turned over to the American Marines.

Note that both quotes refer to a single case, whatever it contained.

Despite the uncertainty as to what transpired, the meeting Minutes continue:

Presumably, on December 8, 1941, it was among the Marine equipment assembled on the dock at Chingwantao (sic) awaiting transportation, all of which was seized by the Japanese military.

Despite the definitive character of this statement, its first word “presumably” must be kept in mind. There is no evidence either that the fossils were part of the Marine equipment on the dock or that they were seized by Japanese. Even so, it is tempting to take this 1945 statement by Houghton as evidence that he actually gave the fossils to Ashurst in November of 1941; it must be compared, though, with other recollections from 1961, as appeared in Hood (1964: 130):

They [the fossils] were taken from the safe in the Cenozoic Laboratory [in the College] and packed there at night by Mr. Bowen and myself in two foot-lockers. They were replaced, piece by piece in the safe, by the very accurate casts which were available. The lockers were then put in a large vault in the hospital administration unit. It is my memory that they were taken by Mr. Bowen some time in July to the Marine Guard [United States Embassy] and delivered to Colonel Ashurst, who agreed

to include them in his personal luggage whenever the guard should be recalled to the United States.

[the bracketed portions above were in Hood's original text]

Hood does not identify the source of Houghton's statement; this is unfortunate, as the account does not agree in any respect with other statements by Houghton referred to above. In addition, this is the only place where *anyone has suggested* that the fossils might have been boxed as early as July; given how much Houghton is credited with being involved in decisions regarding the fossils, it is unlikely he would have made such an elementary error. Finally, if the fossils had been transferred that early in the year, they could have been easily transported to the U.S., as American rail transport and shipping had not yet been prevented by the Japanese (Biggs 2003: 205).

In an attempt to determine the basis for Hood's quote, the authors searched the Rockefeller Archives for Houghton documents from 1961. We discovered only one: a transcript of an interview given in that year by Houghton to Mary Ferguson (Houghton interview 1961: 25). The relevant text is as follows:

And so, Mr. ... and I and Mr. ... went to the vault at night and packed these fossils and (sic) in the safe in the Cenozoic Laboratory in the Anatomy Building. We faced (sic – 'replaced') them all with the beautiful casts that we had. We packed them in these footlockers and Mr. Bowen took them secretly to Colonel Ashbrook (sic - Ashurst), ...

The ellipses refer to words that were unintelligible to the person who transcribed the interview; those details are not crucial but the rest of the statement differs in several ways from Hood's quotation. The most significant difference is the July date in Hood's book, for in the Ferguson interview, Houghton does not give the date he packed the fossils.

It is important to realize that Houghton was over 80 years old in 1961, and his lapse of memory with respect to Ashurst's name and the relevant dates is understandable. However, several of his comments are problematic—first, that two others besides himself were involved in taking the fossils out of the safe and packing them; second, that the Cenozoic Laboratory was in the Anatomy building; it was actually in Lockhart Hall, across the PUMC campus; third, that Bowen alone took the fossils 'secretly' to the Marines.

Houghton's two inconsistent accounts from 1961 make it difficult to know which of his other statements are reliable. And most important, if either of Houghton's accounts is correct, then many other people's statements are incorrect. All these accounts come from people whose statements make up the Standard Scenario. Because all these statements differ, it would be arbitrary to choose just one as *the correct* account describing the transfer of the fossils.

Finally, another account involving transfer of the fos-

sils from PUMC to the Marines differs in important ways from those above. Janus and Brashler state (1975: 52) that Trevor Bowen told Marine Investigator Albert Scalcione in 1945 that Bowen had taken three *boxes* (emphasis in original) to Ashurst at the Marine barracks in late November. Janus does not say whether Bowen revealed what he was transporting, nor does Houghton seem to have taken part in this delivery. Perhaps Bowen said more, and a look at the original interview might give important information; however, in a search of the National Archives we could find no such document by Scalcione.

To summarize, it is inconsistently reported that Bowen himself, Houghton himself, or Bowen and Houghton both, took a box (or boxes) containing something to the Marines. The contents of the boxes are never described, nor do any accounts suggest why it was assumed that the box(es) contained the Peking Man fossils. Nor is it indicated how PUMC officials knew what happened to the fossils after they left PUMC, especially the presumption that fossils were in boxes that may have been seized by Japanese military from the dock at Chinwangtao (PUMC Trustees Minutes 1945).

Given the volume of the original wrapped collection of Peking Man skeletal specimens (Jia and Huang 1990: 160), any transport of the fossils in a car would have to take several trips if they were put into one or more "locker trunks" (Ferguson 1973) that a single person could carry. It is unlikely that a car could have contained more than a small portion of the Peking Man material. No reports refer to additional delivery trips or explain how all the fossils could have been taken as a whole to the Embassy or Marines.

The next step is the apparent rail trip taken by the fossils and the Marines' equipment. We reiterate that no consistent evidence exists for the fossils' delivery to the Embassy or Marines, much less their transport by rail. Nonetheless, we must continue our analysis of the Standard Scenario by discussing the various versions of the train trip from Peking to the northeastern China coast.

Transport by Rail to Chinwangtao (or was it Tientsin?)

It is appropriate here to give an overview of the U.S. Marine presence in China in 1941. Two Marine regiments were based in China—the Fourth Marine Regiment was a large contingent in Shanghai and the smaller North China Marines was made up of the Embassy Guard in Peking and contingents in Tientsin and Chinwangtao. Personnel lists of all these Marine detachments have been published (Biggs 2003: 246; Crittenden 1995; Roster of Marines 1941). The Fourth Marine Regiment based in Shanghai had left China in November and the North China Marines were planning to depart China on December 10 (Biggs 2003: 205).

Ashurst gave two different accounts as to how the fossils had been shipped—as part of his personal baggage (Plumb 1952) and "...together with other property belonging to the Marine Detachment," (Commandant of the U.S. Marine Corps 1947). Ashurst may actually have believed he had the fossils, but we have two reasons for doubting that he ever received them—the *New York Times* article in

which Ashurst described his role (Plumb 1952) states that the fossils amounted to “a few handfuls of yellowed and fossilized bones.” The true fossils were dark in color and, as Hu’s statement indicates (Jia and Huang 1990: 168), the entire collection had a volume roughly equal to two office desks. By his own admission (Plumb 1952), Ashurst did not look into the boxes to see what they contained, so any statement he made regarding the appearance of the fossils is suspect.

In contrast, Mary Ferguson, in the same document cited above as primary evidence for the fossils having been given to the Marines, gives a different idea of the content of the shipment:

“The Peking shipment and the baggage of Marines in Tientsin – including that of Dr. Foley – were two different lots and I have myself never seen any convincing evidence that in the subsequent confusion and moving of personnel from one place to another they were combined.”

As we have said, there is no certainty that the original Peking Man fossils were in the boxes that are proposed to have come into the possession of the Marines or Embassy. It is thus not clear what actually traveled on the train, and it cannot be assumed, without specific documentation, that the fossils did.

Not only is there inconsistency regarding the contents of the shipment, nearly all the accounts regarding where the fossils arrived on their train journey are contradictory:

- Grutzner (1952: 16) and Shapiro (1971: 76) state they were removed before Tientsin.
- Ashurst (Commandant of the U.S. Marine Corps 1947; Plumb 1952) states they remained on the train in Chinwangtao.
- Foley (1971–72: 9) states they went into the Marine barracks at Camp Holcomb in Chinwangtao.
- Li and Yue (2000: 244) state they were put by two Marines, Sgts. Jackson and Snider, into a warehouse in Chinwangtao (see below).
- Shapiro (1979) states that two unnamed Marines “hid” them in Tientsin (see below).
- Berger et al. (2012: 1) state they were buried at Camp Holcomb after delivery to Chinwangtao by the same Jackson and Snider (see below).

These contradictions are emblematic of the casual and inconsistent way the Standard Scenario has been constructed. Despite the difficulties with accepting any of the inconsistent scenarios, they form the foundation for the continued belief that the Marines had the fossils in their control; the statements were also used as the basis for two recent fossil searches in China – by Shapiro and by Berger (see below).

Did the Fossils Reach Chinwangtao? The Bizarre Stories of Dr. William Foley

Foley gave two accounts of the fossils’ movements, an article he published in early 1972 (Foley 1971–72) and an inter-

view he gave to Shapiro (1974: 151) at about the same time. These sources overlap in content and contain the same inconsistencies evaluated below.

1. Foley’s article and Shapiro interview:
 - Foley states (1971–72: 6) that Houghton had asked Col. W.W. Ashurst to “smuggle” the fossils to the U.S. and that Col. Ashurst in turn asked Foley to take them from China to the Philippines and from there to New York.
 - Foley was at his home in Tientsin when the Japanese took over the city on December 8. His luggage had nonetheless already been shipped to Camp Holcomb in Chinwangtao, the port from which the Marines had planned to evacuate, with the luggage of the Marines medical group. Foley remained in Tientsin after December 8 and was allowed by Japanese soldiers to resume his medical work (Foley 1971–72: 9).
 - Foley’s assistant, Herman Davis, gathered Foley’s luggage in the barracks at Camp Holcomb. He did not know what was in the boxes (Foley 1971–72: 9). He and the rest of the Marines at the camp were captured and had to leave all boxes in their quarters; the men were ultimately sent to Tientsin, where Foley met them.
 - A week or two later, the Marines’ luggage was brought to Tientsin. Most of it had been ransacked, but Foley states that his luggage was delivered to him mostly intact, except for his anatomical specimens. He also states, “The footlockers assigned to me from Peking, I had not examined.” (Foley 1971–72: 10).
 - He then distributed his luggage to “various depositories”—the Swiss Warehouse, the Pasteur Institute, and unnamed friends in Tientsin. He does not state whether his luggage contained the fossils, but other authors (Janus and Brashler 1975: 45; Shapiro 1974: 153) have assumed it did. If so, the remainder of his statements below are impossible, as the fossils would not have been with him during his imprisonment.
 - He was then placed in a POW camp, along with Col. Ashurst and the other North China Marines. He says that the Japanese stored his luggage, including one of Ashurst’s footlockers that Foley said contained “the most precious of the fossils,” in a camp warehouse. He also says that though the Japanese searched the prisoners’ bags, “looking for *Sinanthropus* remains” (Foley 1971–72: 10), they did not find them. Foley does not say why the Japanese did not think to look in their own camp warehouse. Again, it is unclear why, if Foley “distributed” the fossils in Tientsin, they could have been with him in POW camps.
 - Even so, Foley claimed to have the fossils as a prisoner of war—he states that despite several searches by soldiers and moves to other camps, the “box escaped detection.” He finally lost contact with the box when he and Ashurst parted company in the last days of the war. He states that he never heard from Ashurst, nor did he expect to because he was a junior officer (Foley 1971–72: 10). He does not explain why, then,

such a junior officer was given the order to take these valuable fossils to the U.S., nor why the Colonel who had entrusted him with this task did not follow up on this order.

In addition, other sources quote different stories told by Foley that complicate his narrative:

2. Dr. Werner Sigg was the Swiss Ambassador to China from 1977 to 1982 (Bulletin 2010 :6). In 1978 he told Jia (Jia and Huang 1990: 184) that Foley, who had been friends with Teilhard, had related this story to him in 1977—Teilhard had the fossils and asked Foley to keep them at Foley's home. Sigg states that Foley did keep the fossils at his home, but hostilities started before he was able to get the fossils to the Marines at Chinwangtao. Foley had to flee and surmised that the Japanese captured both his home and the fossils. This recounting from Foley to Sigg is completely without corroboration and is inconsistent with other accounts by Foley (e.g., 1971–72).
3. Foley in 1980 gave an interview to the Japanese newspaper *Yomiuri* (Jia and Huang 1990: 186), in which he stated that “the plan was to put the fossils in my bag. The plan was top secret and only Ashurst and I knew about it and no third person knew about this secret mission.”

It is clear that these three accounts are mutually incompatible. There is no reason arbitrarily to accept one of them and ignore the others. In addition, reports by Ashurst do not corroborate *any* of Foley's accounts. Ashurst stated in his *New York Times* interview (Plumb 1952) that the fossils were loaded onto a train bound for the port city of Chinwangtao, the train arrived at its destination safely, and the boxes of fossils remained on the train. They were removed by Japanese soldiers (therefore, if Ashurst is correct, the fossils could not have reached Davis' barracks at Camp Holcomb). Even so, Shapiro (1974: 157) discredits Ashurst's statements; he accepts Davis' and Foley's accounts though Foley was not present, and Davis did not verify that fossils were in the boxes he received.

In the *New York Times* interview by Plumb (1952), Ashurst does not discuss his own imprisonment during the war and does not state that he ever had the fossils in his custody. Foley (1971–72: 10), however, says that Ashurst thought he had “the most precious of the fossils” in his footlockers. If Ashurst's lockers had the fossils when the two were in prison together (Foley 1971–72: 10), we presume Ashurst would have known that, and would have told Plumb. Both in the *New York Times* interview and in a statement to the unnamed Commandant of the Marines (1947), Ashurst nowhere suggests that there was an order, agreement, or secret mission between himself and Foley. Indeed, his statements do not mention Foley at all and Foley is the only source for the idea that Ashurst and he had any agreement between them or that Ashurst ever had the fossils with him. We are not accepting Ashurst's statements as correct; we merely suggest that following any path set out by Foley is a serious error. We agree with those authors (Boaz and Ciochon 2004: 43; Jia and Huang 1990: 181) who

have treated Foley's claims with suspicion.

The Voyage of Jackson and Snider

The final improbable account for the transport of the fossils from PUMC comes from a book in Chinese by Li and Yue (2000). According to these authors, the fossils remained at PUMC for two weeks after packing and were repacked into “redwood” boxes by an unknown person [a correct translation of redwood, however, refers to red-painted wood, not to the species of tree (Lingrui Gou, personal communication)]. This might be consistent with one of Pei's suggestions (n.d.: 218) but no Chinese eyewitnesses attest to this repacking and no independent records from PUMC or the Rockefeller Foundation have been located that even refer to this event.

Li and Yue (2000: 243) also report a “recently discovered” 1945 interview with a U.S. Marine, Sergeant Snider (no first name given), who had been a prisoner of war in Japan. This interview is not verified by any other source (Boaz and Ciochon 2004: 43), nor have we ever seen it mentioned in any documents. Nonetheless it has been mentioned by two sets of investigators (Berger et al. 2012; Boaz and Ciochon 2004) so we are including it in our analysis.

According to Li and Yue, Snider claimed that he and another Marine, a Sergeant Jackson, had in December of 1941 picked up two redwood boxes at PUMC on orders from their commanding officer, Marine Lieutenant MacLiedy. Snider said that he and Jackson believed the boxes contained the bones of Peking Man (Li and Yue 2000: 243). However, in the interview (Li and Yue 2000: 243), he is quoted as saying they did not know what was in the boxes.

More questions are raised by this account than are answered. First, the interview in question was asserted to have been done by a person named Shank, though this is an uncertain rendering from Chinese characters of the actual American name (Li and Yue 2000: 240). We wondered whether the interviewer referred to was Col. Hubert G. Schenck, who was the Chief of the Natural Resources Section of the Occupation Forces in Japan from 1945 to 1951.

We became aware of Col. Schenck because of his involvement with the curious story that the lost fossils had been discovered in Japan in the fall of 1945. In October, Schenck received a message from Professor H. Suzuki of Tokyo Imperial University that the Japanese had the Peking Man fossils and wished to return them (Suzuki 1945). Schenck directed his Staff Geologist, Dr. Frank C. Whitmore, Jr., to obtain the materials from Suzuki. When Whitmore did so, he discovered that the materials were not the fossils being sought but other bones, artifacts, and site records from Choukoutien that the Japanese had removed from PUMC shortly after the war began (PUMC Trustees Meeting 1945) After the war, Schenck returned to his position as Professor of Geology at Stanford University; we investigated his archives at Stanford's Hoover Institution and found no evidence that he had interviewed anyone regarding the Peking Man fossils.

Second, there is no record of Sgt. Snider, Sgt. Jackson, or Lt. MacLiedy on the rosters among the North China

Marines based in Peking, Tientsin, or Chinwangtao (Biggs 2003: 246; Crittenden 1995). In addition, no one on the lists of the Fourth Marine Regiment (Shanghai) is named Snider or MacLiedy (or anyone with variants of these names – Roster of Marines 1941). There were three Sgts. Jackson and a Sgt. Snyder in Shanghai but this regiment left China in November 1941 (Biggs 2003: 206). Thus, the relevance, as well as the very existence, of Snider, Jackson, and MacLiedy remain uncertain. Because of the undocumented scenario and the impossibility of identifying the characters, we propose that the Li and Yue account be discounted as evidence bearing on the search for the Peking Man fossils.

HISTORY OF SEARCHES FOR THE PEKING MAN REMAINS

Japanese Officers—1942–1943

Because the Japanese controlled North China in 1941, army officers (some of them also anthropologists) had access to PUMC and tried to see the Peking Man remains in storage there. Indeed, the day the war began, the Japanese army occupied PUMC and attempted to obtain the fossils. They found only casts (Pei n.d.: 219).

In 1942, Japanese officers questioned PUMC officials and eventually concluded that the fossils may have been moved elsewhere; they must have been told by someone at the PUMC that the fossils were thought to have been taken by Marines to either Tientsin or Chinwangtao. The Japanese thus began searches at warehouses in these two cities. These searches were in part carried out by the Kempeitai, the Japanese Military Police (Janus and Brashler 1975: 33), sometimes called the Gendarmerie. In 1945, Pei wrote (1945a: 3):

With their taking over of the (warehouses) at Chinwangtao, the Japanese Gendarmerie conducted a thorough search – only to draw a complete blank. On the assumption that the cases together with other confiscated U.S. property might have been sent back to Tientsin, the Nipponese sleuths extended their search to the latter city, only to declare, later, that nothing had been found.

Despite these declarations, however, the fact remains that their investigations suddenly ceased, and it was subsequently learned from a Japanese official that certain bones had indeed been found, but he emphatically asserted that these seemed quite recent and were in no way connected with the Peking Man.

Pei clearly implies here that the Japanese may have found the Peking Man fossils in a warehouse and had taken them to Japan. They then halted the search, disingenuously claiming that what they found were not the Peking Man fossils. The Japanese anthropologist Kotondo Hasebe, one of those who had visited PUMC, was given an opportunity by U.S. Occupation officials to reply to these accusations. He stated that the loss of the fossils is “the most regrettable lost (sic) for learned world” (Hasebe 1945). He also wrote that at the time of their disappearance he did not know the

Chinese and Americans were trying to ship the fossils out of China. He stated emphatically, however, that the fossils were not in Japan (Hasebe 1945).

A few years later, Pei also accused the Americans of having “stolen” the fossils and having taken them to New York. This accusation of Pei may have been responsible for the origin of the Standard Scenario. The response to his charge was prominent in Grutzner’s (1952) *New York Times* article, and his and Plumb’s (1952) articles may have been written as a defense of American actions. Though Pei played an important role in the discovery and description of the Peking Man material and was an important member of the international team at Zhoukoudian, he appears to have been following the party line (Grutzner 1952) in blaming foreign countries for the loss of the fossils.

Another line of investigation, not referred to by other authors, is the document search by Walter Fairservis in 1947.

Walter Fairservis—1947

Before the war Fairservis had been associated with the AMNH and had been a friend of Shapiro. During the war he was a 2nd Lieutenant in U.S. Army Intelligence, and later in life became Professor of Anthropology at Vassar College. During the 1930s, G.H.R. von Koenigswald had excavated skeletal material of another population of *Homo erectus* (Java Man) on the Indonesian island of Java. When the war started, von Koenigswald buried nearly all the fossils he had collected before they could be taken by Japanese soldiers who overran Java. One fossil skull [given the name Ngandong IX – (Huffman et al. 2010: 39)] remained in von Koenigswald’s possession and was taken by the Japanese when von Koenigswald was imprisoned.

Von Koenigswald thought this skull had been lost, but it had actually been taken to Japan and placed in the emperor’s collection in Kyoto (Huffman et al. 2010: 39). After being released from the POW camp, von Koenigswald was able to unearth and retrieve the buried fossils except for that one. Shortly following the end of the war, when Fairservis was still in Japan, he offered to find the Java skull that von Koenigswald thought had been lost (Shapiro 1974: 16). Fairservis located the skull in Kyoto and was able to return it to von Koenigswald.

Encouraged by Fairservis’ feat of discovering the Ngandong skull in Japanese custody, Weidenreich and the AMNH officially asked Fairservis in 1947 to investigate the loss of the Peking Man fossils and determine whether any documents could be found that might indicate where they were (Fairservis to Tansey 1947). Fairservis received numerous documents from the military, including the statement of Ashurst (Commandant of the U.S. Marine Corps 1947), and in turn wrote detailed reports to Weidenreich in August of 1947 and to Army General P.H. Tansey [Head of the Civil Property Custodian Section (CPC) of Supreme Commander Allied Powers (SCAP), Japan] in September. His requests for information from U.S. Occupation authorities and Japanese military sources resulted in several replies, but no actionable information (Fairservis to Tansey 1947).

Fairservis seems to have largely accepted Ashurst's original description (Commandant of the U.S. Marine Corps 1947) as the basis for his investigation. He took two approaches: 1) he assumed the fossils had been turned over to the Marines in Peking and had been sent by rail to Chinwangtao or another city. He also guessed 2) that the fossils may have been removed from the train by Japanese soldiers, though he had no information on where this might have occurred or where the fossils might have gone after that.

For point 1) he requested official information regarding Marine medical officers who might have been familiar with PUMC. Two medical officers, Eric Pollard and Leo Thyson, were asked what they knew about the fossils but they both replied that they knew nothing (Fairservis to Weidenreich 1947; MacKinnon to Fairservis 1947). Even so, Fairservis seems to have assumed that some Marine personnel had taken the fossils from the PUMC. In a letter to Weidenreich (Fairservis to Weidenreich 1947) he wrote:

(The Navy Department has) been questioning, at my request, *those officers involved in the transfer of the fossils from Peiping Union Medical College to the Marine Corps in December, 1941* (emphasis added). This latest letter states that both Comdr. Pollard and Captain Thyson, medical officers attached to the China Corps, have no knowledge of the matter.

It is not clear whether Fairservis is stating that he thought Pollard and Thyson had been involved in taking the fossils from PUMC to the Marines. It is clear, however, that he thought the fossils had been taken from PUMC to the Marine or Embassy compound by U.S. Marines (rather than by PUMC officials). This would have been the place for him to provide evidence for such a transfer; he does not do so, nor does he refer to any documents to support his interpretation.

For point 2), he requested that U.S. occupation authorities locate the Japanese army unit that was stationed in North China as a way of identifying which soldiers might have seen (and taken) the shipment at Chinwangtao. Here also the Japanese and U.S. Occupation authorities were clear—no information about the Japanese army unit was available and no officials could give him useful information as to whether the fossils were in Japan (Tansey 1947).

Even though he recognized the lack of success of his investigation so far, he proposed he be given an additional mandate to question officials at PUMC and in the military government of Japan (Fairservis to Tansey 1947). We find no evidence that he was able to mount this second search.

Considering Fairservis' success with recovering the Java skull from Japanese custody, it is not surprising that he thought he might be able to find and recover the Peking Man fossils. Indeed, if the fossils had been transported to Chinwangtao, taken by official action of the Japanese army, and placed into a government level or scientific establishment in Japan, it is likely that Fairservis would have been successful. The fact that all official investigations in Japan turned up no information has been used as evidence that

the Japanese soldiers either destroyed the fossils or secreted them in an unofficial location (Fairservis to Tansey 1947). We suggest that before entertaining this possibility, investigators should be certain that the fossils were actually received by the Marines. Fairservis' investigation unfortunately does not shed any light on the matter because he did not confirm that the fossils actually had been received by any American officials.

Harry Shapiro—1980

Chinwangtao was not the only rail station important to the Standard Scenario. Though nearly all accounts of the movement of the fossils (e.g., Berger et al. 2012; Commandant of the U.S. Marine Corps 1947; Ferguson to Shapiro 1973; Foley 1971–72; Li and Yue 2000) describe them as going from Peking to Chinwangtao, Grutzner (1952: 16) and Shapiro (1971: 76) describe the train carrying the fossils as stopping at Tientsin. Shapiro writes:

... en route to Tientsin, the train bearing the marines and their baggage was halted by Japanese troops who ransacked the luggage, including the boxes containing the fossils. As a result, they were scattered and lost.

Though Shapiro provides no documentation for this, it is correct that trains actually did travel to Tientsin first, as the North China Railroad went from Peking to Tientsin and then to Chinwangtao (see Figure 1) (Biggs 2003: 12; Frank and Shaw 1968: 538). Throughout the 1970s, Shapiro maintained correspondence with Chinese scholars regarding the loss of the fossils. He eventually received information that prompted him to organize a trip to China to look in an area he thought would be advantageous to the search. In interviews in which he described his upcoming trip (e.g., Bartlett 1979), he would not publicly disclose the information he had received, but he did (Shapiro 1979) describe it to a Chinese scientist to whom he wrote before his trip:

As for the search for the lost fossils my information comes from a reliable source as far as I can determine. According to my informant 2 marines ... inadvertently acquired a footlocker containing the fossils, just before war was declared in Dec 1941. They were taken prisoner by the Japanese + transferred to Tientsin. Concerned for the safety of the fossils, they hid them. I was given the location + I should be pleased to bring the map given me by my informant.

Shapiro thought this lead was solid, and that there was a good chance he would locate the fossils in this way. He planned to search under buildings of the former Marine barracks at Tientsin, and he traveled there with the help of Chinese scientists in September of 1980. However, he was unable to dig because an earthquake in 1976 and new building construction on the site had altered the grounds (Shapiro 1980; Jia and Huang 1990: 182).

Despite his description, however, the reasons for wanting to search under the barracks are unclear: first, as he indicated, the train may have been ransacked *before* it reached

Tientsin; second, if the two unknown servicemen had “acquired” the fossils and been imprisoned by the Japanese, they would not have been able to hide the footlocker in the first place. Finally, *if* the fossils were on the train, and *if* they were taken off the train before Tientsin, then there is no way they could have reached the Marine barracks at Chinwangtao (see above) or could have been buried at Camp Holcomb (see below). It is thus unclear why Shapiro accepts that the fossils arrived at Chinwangtao (see above) if he made a trip to China to search at Tientsin.

Lee Berger–2010

A different lead was revealed more recently (Berger et al. 2012). In 2010, paleoanthropologist Lee Berger (University of Witwatersrand, Johannesburg, South Africa) received correspondence from the son of a Marine, Richard Bowen (not related to Trevor Bowen) who had served in Chinwangtao in 1947, six years after the fossils had been lost; he says he discovered a buried crate near the Marine barracks at Camp Holcomb. Richard Bowen stated that he found a “box that was full of bones” and quickly reburied it. Bowen was later of the opinion that the box contained the missing fossils. Hoping to find the location of the original fossil crates/footlockers, Berger went to China to investigate. He was able to locate several places where Bowen thought the box had been buried—these locations are currently under a warehouse and a parking lot in the port area and impossible to excavate.

This account sounds like it may be corroboration of Foley’s and Davis’ narratives, though Berger et al. do not mention either of these Marines. Instead (2012: 2) they tie the transport of the fossils to the undocumented Sergeants Snider and Jackson, who are reported by Li and Yue (2000: 244) as taking the footlockers with the fossils by train to Chinwangtao on December 5, 1941. This trip is not described as related to the transport of the rest of the Marines’ equipment and supplies, which occurred on the same day, and the actions, indeed the existence, of Snider and Jackson are described only by Li and Yue. Even so, nothing in Li and Yue’s account suggests that Snider and Jackson could have buried the boxes of fossils. It is thus uncertain who would have done so, or why they should have been buried at all.

SUMMARY OF EARLY SEARCHES

The leads presented by Shapiro and Berger may well be worth investigating, but the fossils would be in one of those locations *only if* they had been given to the U.S. Marines or Embassy and transported from Peking by undocumented pathways that are themselves not part of the Standard Scenario (the two unnamed Marines in Shapiro’s account and Snider and Jackson in Berger’s). The Standard Scenario speculates that the fossils reached the rail end at Chinwangtao and were captured by Japanese soldiers. If the Standard Scenario is correct, the fossils could not have been buried by anyone. These details may be moot, as we have found no clear evidence that the fossils ever were in the Marines’ custody.

Thus, the Standard Scenario and its alternatives involve several incompatible actions for each step:

1. That Ferguson’s (1970: 85; 1973) statement that the fossils went from PUMC to the Marines in Peking is accepted. Who took them there? Bowen? Houghton? Bowen and Houghton? Two unnamed Marines? Jackson and Snider? Who are Jackson and Snider? In any event, no evidence exists for these container(s).
2. That the fossils were placed as part of the Marines’ baggage. In this case the Standard Scenario ignores Ferguson [she stated (Ferguson 1973) that Marine and PUMC baggage were not combined (see above)]. Whether she was correct is not important. The point is that the Standard Scenario arbitrarily adopts only her first statement and ignores her second.
3. That the inconsistent stories of Foley and the uncorroborated account of Li and Yue are accepted as evidence that the fossils reached Tientsin or Chinwangtao. Attempts by Shapiro (Jia and Huang 1990: 182) and by Berger et al. 2012: 1) to look for actual boxes of fossils are based on the assumption that they were in the possession of Marines in either Chinwangtao or Tientsin and were for some reason buried in one of those locations. Which one and why?

No evidence is provided by any of the authors who accept the possibility that two Marines, on their own, unloaded the fossils either in Tientsin or Chinwangtao. The two Marines who “inadvertently” obtained the fossils according to Shapiro (1979) *could not be* the Jackson and Snider who Li and Yue (2000: 244) claimed had picked the fossils up at PUMC. In the absence of corroboration, the possibility that the fossils were delivered by individual Marines either to Tientsin or to Chinwangtao must be viewed with suspicion.

We sympathize with any readers who find it difficult to keep all this information straight. It is important to recognize, however, that the apparent complexity of this story occurs mainly because many of those retelling it have not been critical in their appraisals of the numerous inconsistent accounts of the Standard Scenario. Too many authors writing about the fossils’ disappearance have simply repeated the inconsistent and unverifiable personal statements of earlier authors. We hope our approach will turn out to be different—we have tried to follow all visible leads as far as they can be followed, and we have attempted to be skeptical about all proposals, including our own.

OUR INVESTIGATION

ARCHIVES

If “it is known” (Jia and Huang 1990: 161) that the fossils were delivered to the Embassy, then we presumed there would be some record in the documents of the U.S. State Department or Marines directing and implementing that transfer. The primary documents we wanted were a) evidence that Weidenreich was unable to convince the American Ambassador to China to authorize shipment of the fossils to the U.S. in military baggage (Shapiro 1974: 18); b) the

*Purport list
1973 roll 601*

FORM DS-46 10/12/45		DEPARTMENT OF STATE LIST OF PAPERS				893.9261
SUBJECT Paleontology - China.						
SUB NO.	FROM	DATE	TO	SUB NO.	PURPORT	
	<i>I have this doc</i>	Aug. 9	China (Chungking) <i>fe ad</i>	3	DO: Informs of no available knowledge of - but suggests Embassy make inquiry whether Swiss authorities should attempt to find -.	
<i>See list # 2</i>						

Figure 2. Portion of the U.S. State Department Purport List, microfilm at National Archives II in Bethesda, MD (Purport list 1943). This entry refers to the single extant document in the series relating to the Peking Man fossils (Confidential U.S. State Department Central Files 1943), obtained by the authors and included here as Figure 3). The black bar represents the other listed documents, relating to the Peking Man fossils, that had been removed from the archives in 1951. Handwritten notes were made by the senior author.

telegram from the U.S. Ambassador in Chungking to the Embassy in Peking (Shapiro 1974: 18) ultimately authorizing such shipment; c) Col. Ashurst's report of March 18, 1947 (Janus and Brashler 1975: 53) describing the delivery and rail shipment; d) military documentation of Janus and Brashler's (1975: 52) claim that the Marines and Army had commissioned reports on the whereabouts of the fossils after the war; e) Albert Scalcione's report (Janus and Brashler 1975: 53) regarding Bowen's transport of *three boxes* to the Marines; f) evidence (e.g., a shipping manifest) that a shipment of Marine supplies was transported from Peking to Chinwangtao, and that part of the shipment included PUMC boxes; and, g) the source for Houghton's 1961 statement (Hood 1964: 130) that he and Bowen took the fossils to the Marines in July of 1941.

We visited the three primary archival centers for this work—the National Archives II in College Park, MD, the Rockefeller Archives in Sleepy Hollow, New York, and the AMNH Archives in New York City. It seemed that somewhere in these organizations there should be letters documenting the process of the fossils' transport, or at least authenticating the discussions. We were not able to locate any documents in these archives relating specifically to points a) through g) above. This does not necessarily mean that the documents do not exist; it might simply mean that we could not find them using standard search criteria. Thus, though the evidence dealing with all of these possible lines of inquiry is still lacking, researchers interested in this topic would do well to focus on these so-far missing documents.

In spite of the fact that we could not verify Houghton's 1961 statement "g" as given by Hood (1964: 130), we were able to locate another 1961 statement by Houghton (1961), (see above), in which he gave information inconsistent with what Hood (1964) reported.

The National Archives II provided two important unexpected leads. One was the Purport List (1943), microfilms containing lists of documents that exist in State Department files. An excerpt from the Purport List is given in Figure 2. This list contains a number of documents that describe

correspondence between Chinese and U.S. officials in 1943 regarding the location of the Peking Man material. The document titles make it appear that Chinese Government officials thought the fossils had been successfully removed from China and taken to the U.S., and they were communicating with the State Department about the details of that transport and the current location of the fossils. But because this list only gives the topics of the letters, it is not possible to tell whether the fossils were ever actually in American hands. Several of these documents had been removed from the State Department archives in 1951 and are now missing (Gustafson 1973).

We did, however, find one document (Confidential U.S. State Department Central Files 1943) from the Purport List still present in the microfilm records of the State Department. It is dated August 9, 1943, and we have included it here as Figure 3; its author is not given, but it is addressed to the American Mission in Chungking for transmittal to the Chinese.

The document states that the civilian head of mission Richard P. Butrick and the Assistant Military Attaché Albert F. Metzger were both asked about whether the fossils were given to Embassy or Marine personnel. Metzger states he has no information that they were given to the *Marine Detachment at the American Embassy*, and Butrick states unequivocally that they were not given to the *Embassy*. We take this letter to mean that neither the Embassy nor the Marines received the Peking Man fossils.

It is possible that neither of these statements is a decisive answer to the question as to whether the fossils were received by the Marines or the Embassy. Metzger might not have been in the loop, and may have been unaware whether his immediate superior, Col. Ashurst, took charge of the fossils. In addition, Butrick's statement could be literally true but not definitive because the Standard Scenario hypothesizes that the fossils went to the Marines and not to the Embassy. Perhaps Butrick as an Embassy official also was not in the Marines' loop. However, it is important to know that the Embassy and the Marine barracks were on

August 9, 1943

No. 359

To the
Officer in Charge of the American Mission,
Chungking.

The Secretary of State refers to the Embassy's despatch no. 1040 of April 1, 1943 enclosing a copy of a letter addressed to the Embassy under date March 30, 1943 by Dr. Wong Wen-hao in regard to the whereabouts of the "Peking Man" fossils which were formerly at the Peiping Union Medical College. Dr. Wong mentions a report that the fossils were entrusted to the United States Marines, in their evacuation from China, to take to the United States.

Inquiry has been made of the Navy Department and of Mr. Richard P. Butrick, who was in charge of the American Embassy at Peiping at the time of the outbreak of war. The Navy Department has replied that it has no knowledge as to the whereabouts of the fossils under reference, and has made available to this Department a statement of Major Albert F. Metz, United States Marine Corps, who was Assistant Naval Attaché at Peiping immediately prior to the outbreak of war. Major Metz states that he has no knowledge of the fossils having been turned over, prior to the outbreak of war, to the Marine Detachment at the American Embassy at Peiping for shipment to the United States, that most of the freight of the Marine Detachment had been sent to Chinwangtao by December 5, 1941, that reportedly all of this freight, with the exception of certain personal effects, was confiscated by the Japanese military authorities, and that any freight remaining in Peiping can be assumed to be in Japanese hands. Mr. Butrick has stated that the fossils were not turned over to the American Embassy at Peiping.

It is possible that more definite information may be available from Americans who are expected to return to this country from North China on the second exchange of American and Japanese nationals. If such information is obtained, the Department will again communicate with the Embassy in regard thereto.

It is suggested that the Embassy meanwhile might make informal inquiry of Dr. Wong whether the Chinese authorities concerned would deem it advisable for this country to request the Swiss authorities to attempt to find out the present whereabouts of the fossils. There would be involved in an approach of this character to the Swiss authorities certain difficulties. If the Chinese authorities concerned were, however, to indicate that they would be favorable to the making of an approach, the Department would then be glad to give the matter further consideration.

893.9261/3

Figure 3. State Department Archives, file 893.9261/3, dated August 9, 1943. Reply to a request from Chinese officials as to the current location of the Peking Man fossils, under the assumption that they had been given to the American Embassy in late 1941. Refers to statements by the civilian and military attachés at the Embassy. Military attaché states he has 'no knowledge of the fossils having been turned over' to the Marines; the civilian attaché states they 'were not turned over to the American Embassy.' Source: Confidential U.S. State Department Central Files (1943).

adjacent lots in Peking (Map of Peking Legation Quarter 1912). Butrick might not have been aware of some events in the barracks, but he would realize that making the definite statement that the fossils were not given to the Embassy would require him to rule out the Marines as a possible alternative. Indeed, Pei is quoted by Shapiro (1974: 21) as saying that the boxes were transferred first to the U.S. Embassy, then to the Marines. His statement is not evidence that this transfer actually occurred, but the fact that Pei could write it in this manner indicates he knew of the close relationship between the Embassy and Marines in Peking.

Thus, unless the statements by Metz and Butrick are intentional misdirection, this document throws significant new light on the question of what happened to the fossils.

It is now difficult simply to *assume* that either the Embassy or the Marines ever got the fossils. That event, if it occurred, will have to be demonstrated with better documentation. The statements in Figure 3 may be incorrect, but this is the *only U.S. Government document currently available* that addresses the question of the fossils' whereabouts, and its answer appears to be that the U.S. was not given the fossils.

A PHOTOGRAPHIC INVESTIGATION

Overview of the 1972 Footlocker Photograph

In New York in 1972, a photograph of a Marine footlocker was given to Christopher Janus, the American businessman. This photograph showed bones and a skull and was

said to contain the Peking Man fossils. Janus asked for advice concerning the authenticity of the materials in the photograph; of five professional anthropologists he consulted, two (Phillip Tobias and W.W. Howells) thought the photograph might be of one of the Peking Man skulls, specifically Skull XI. If the photograph were to show the *original* Peking Man material, then a case might be made that the U.S. military once had possession of the fossils.

No analysis has been made of this photograph in the almost 50 years since it was introduced as evidence in the investigation of the Peking Man remains. In a companion paper (DeVisser et al. 2021) we rectify this oversight with a detailed analysis of Janus' photograph. We summarize that analysis below.

Key Observations and Conclusions Regarding the 1972 Footlocker Photograph

- The skull in the photograph is *similar* to one from Choukoutien, though it is most likely a cast. The skull has significant differences in color from the original skull and the high-quality cast made in Peking at PUMC.
- All the postcranial elements are exclusively modern human and are from the left side of the body.
- A few of the bones are fragments of modern human skulls, very thin and light-colored; they could not have come from the excavations at Choukoutien.
- Several of the modern bones were intentionally altered; these modifications would only be seen in bones that are part of an anatomical study collection.

If the footlocker photograph were genuine, then the skull in Janus' photograph would have to be the *same original fossil skull* with which Weidenreich had worked in the 1930s. Comparison of the original with the footlocker photograph indicates significant differences in color and surface texture, features that argue against it being the original. For the reasons outlined above and detailed in our companion paper (DeVisser et al. 2021) we suggest that the footlocker and its contents are not genuine. Someone found a Marine footlocker of the type used in the war and placed a teaching cast of Skull XI into it, along with some straw packing material and other modern bones. Many casts of Peking Man skulls had been made (Grutzner 1952; Mann and Monge 1987: 3) and distributed during the 1930s. Teaching casts are made to show the same anatomical characteristics as originals, but surface details are modified, and casts are not always colored as the originals were. The two sets of bones were placed into a single context (the footlocker) solely to fool Janus. If our interpretation is correct, it suggests that the footlocker and its Peking Man skull cast should not be used as evidence that the actual Peking Man fossils ever were in the hands of U.S. personnel.

WHERE IS THE INVESTIGATION NOW?

Boaz and Ciochon conclude (2004: 50) that "there is still not a single reliable account of a sighting of the fossils since they were packed by Hu and Ji in 1941." We agree. This is the essence of our argument: *that the Standard Scenario sug-*

gests a possible pathway for the fossils without providing consistent evidence. We thus are not proposing where the fossils are, but rather where they are likely *not* to be. Taking this approach may appear negative, but by avoiding unwarranted assumptions, a more productive search is possible.

The evidence presented here reduces the probability that the American Marines or the American Embassy in Peking received the fossils from PUMC. It also suggests that the Standard Scenario is inadequate to give a clear direction for additional searches. We argue this based on four lines of evidence not known to or acknowledged by earlier researchers:

1. The accounts regarding movement of the fossils all have inconsistencies with each other. Thus, any person attempting to use only one of those accounts as evidence requires that person to arbitrarily disregard others.
2. Several crucial documents have been referred to as important for the China-U.S. connection (see above). Despite concerted searching, we were unable to find these documents in archives where we had every reason to expect them to be found. We did find other documents related to the fossils in these archives, so it is not clear why only the ones used to support the Standard Scenario appear to be missing. We suggest a concerted effort by archivists and historians to locate them; if these documents cannot be found, investigators should be discouraged from referring to them as evidence.
3. The 1943 letter from the U.S. State Department to the American Mission in Chungking (see Figure 3) is from sources at the U.S. Embassy and Marines *and is the only written evidence from that time dealing with the question of the movement of the fossils.* Its opinion, that they were not given to the American Marines or Embassy, should be taken seriously.
4. The photograph published by Janus and Brashler (1975) and Shapiro (1974), claiming to show a Peking Man skull, is almost certainly not a photograph of original Peking Man material. We suggest (DeVisser et al. 2021) that the photograph should not be accepted as evidence that Peking Man fossils were received by the American Marines stationed in China.

If our reading of the evidence is accurate, it is possible to conclude two things: that the search for the Peking Man fossils should focus on missing documents; and the real fossils might better be sought in a different place than people have been looking for almost 80 years. Recent inconclusive ground searches (Berger et al. 2012; Jia and Huang 1990: 182) followed leads that were based on speculative accounts.

Figure 4 is our reconstruction of possible routes the fossils might have taken. It begins with the only certainty—that the fossils were packed. The fossils may have been put in Bowen's office at PUMC or they may have been transferred to the vault. No one knows what happened next. Three possibilities are reasonable—that they stayed at PUMC; that they went to the Chinese Geological Sur-

Flow Chart – disposition of the Peking Man Fossils

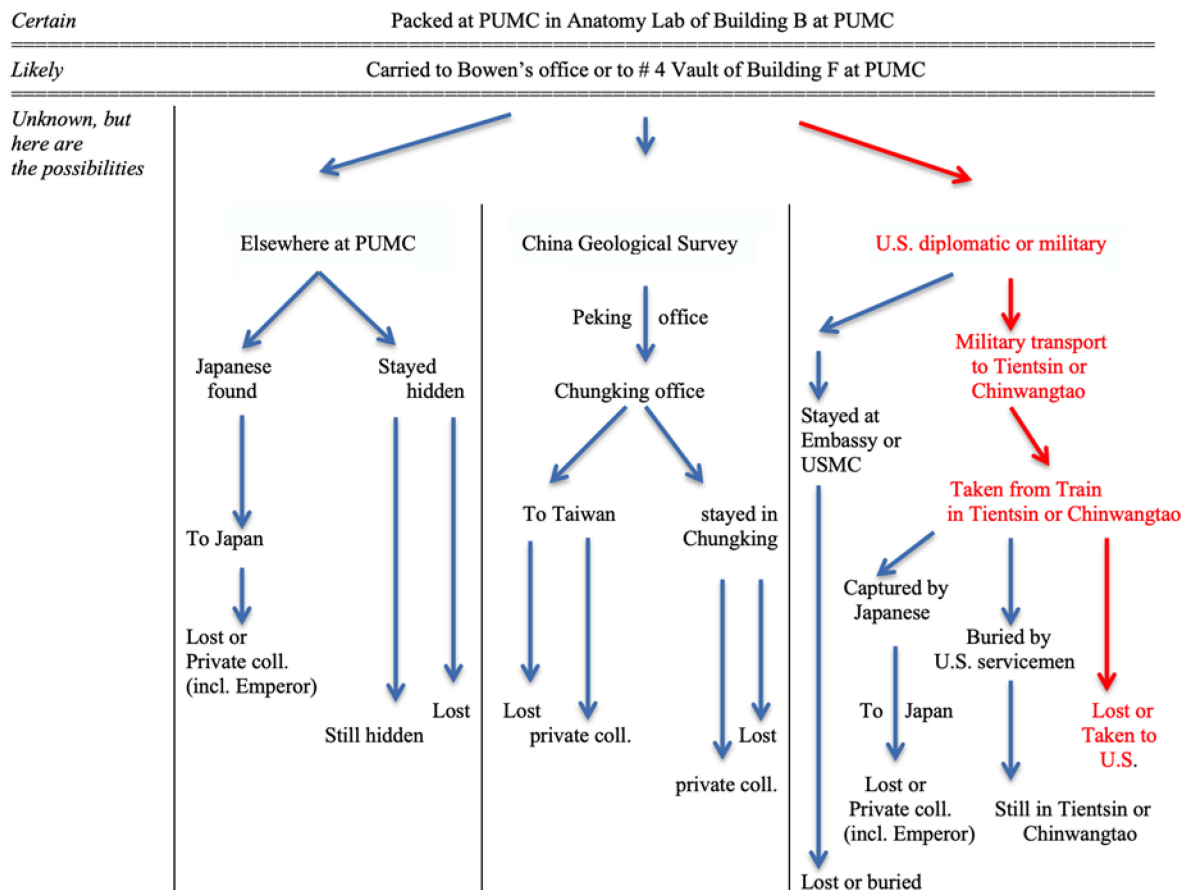


Figure 4. Flow chart of possible events related to disappearance of Peking Man fossils. The red text and arrows represent the Standard Scenario, just one of several possibilities for the handling and movements of the fossils. None of the alternatives (blue) may be correct, but at present they have not served as bases for investigation.

vey in Peking or in Chungking; that they went to the U.S. Embassy or Marines. We have left out other unsupported speculations, such as the various accounts involving Foley (1971–72; Jia and Huang 1990: 183) because of their fatal internal inconsistencies, and Li and Yue's (2000: 244) account of Snider and Jackson because their statements are not compatible with any other information and we cannot verify the existence of these Marines.

The only one of the three possibilities that has been widely accepted by investigators is the scenario for transport to the Embassy or Marines. However, this possibility has not been supported by primary documents. The other locations (PUMC and Geological Survey of China) have not been seriously investigated, perhaps for good reason—since 1941 these offices have been continuously occupied by Chinese scientists. It is unlikely that the Chinese themselves have failed to look in likely locations at the PUMC or the Geological Survey; it is also unreasonable to charge that they know they have the fossils but are not saying so.

As Figure 4 illustrates, however, two of the three sites allow other possibilities—that Nationalist Chinese took the fossils to Taiwan, or that Japanese soldiers or scientists took

charge of the fossils and transported them to Japan. Even so, it would not be advantageous for Nationalist Chinese or Japanese officials to continue to harbor the fossils, and they would have been returned to Beijing long ago if their whereabouts had been known. We thus do not suggest that the fossils are either in Taiwan or in Japan.

The Standard Scenario seems to have as its null hypothesis that the fossils went to the Marines or Embassy and then on the train. We cannot say this hypothesis has been disproven, but it is so full of inconsistencies that it seems not to be a fruitful basis for additional investigation. We propose a new null hypothesis—that the fossils are still at some other uninvestigated location in Peking. Future researchers might effectively direct their work at testing this hypothesis before investigating (or hypothesizing) additional possible sites outside of China. We are not saying that the fossils are in China; we are simply proposing that without better evidence, investigators should not assume that the fossils were removed from Peking.

But how might a new investigation be conducted? Howells (1967: 168) once called the fate of the fossils “anyone's guess.” We think that the search has for too long been

based on guesswork rather than a careful investigation of documentary evidence. We acknowledge that several authors have made concerted good-faith efforts to follow up on clues that might lead to the fossils, but their efforts have been impeded by earlier guesswork. The personal accounts contemporary with the fossils' disappearance are largely inconsistent with each other so that relying on them leads investigators astray and into "amateurish" sleuthing (Shapiro 1974: 173); this means that investigators have had to use unreliable information. The possibility that archival sources may help has been largely uninvestigated.

If the fossils are in Peking, the most likely location is a hiding place that was chosen for a good reason in 1941 but that in the years since has been forgotten. Two Peking locations that have never been mentioned in the search literature are the underground passage (Renshaw n.d.) between the buildings at PUMC, and the bank(s) in Peking to which Weidenreich took the fossils twice during the early days of the Second Sino-Japanese war (Pei n.d.: 217; 1945b: 1). As unlikely as these places are as present hiding spots for the fossils, they have the advantage of not being the subjects of inconsistent accounts, and as far as we know, no recent investigators have either mentioned them or followed them up. If the locations (passageway and banks) are still extant, we suspect they will not require archaeological excavation.

CONCLUSIONS

Our use of the term "treacherous" in the title reflects the untrustworthy nature of the ideas misused (perhaps inadvertently) as evidence by people who have sought to tell the story of the disappearance of the Peking Man fossils. What has emerged as the dominant Standard Scenario is arbitrary, inconsistent, and lacks reliable documentation. We are not saying that the Standard Scenario is wrong. We are only calling attention to its inadequacies as illustrated by internal contradictions and the lack of corroboration by existing archival evidence. Thus, the hypotheses making up the Standard Scenario are merely speculative. Despite all the ambiguity, it is certain that there is *one explanation, not many*, for the fossils' disappearance. It has not helped the investigation for authors to describe a variety of possibilities without evaluating the quality of the information employed and eliminating unsupported hypotheses.

Ashurst's interview in the *New York Times* (Plumb 1952) is important for the origin of the Standard Scenario. Nearly all the popular accounts simply repeat his statements, though they are internally inconsistent and there is no evidence that he actually had the fossils. Ashurst may even have *thought* the fossils were turned over to the Marines or Embassy and that he had them. But he never verified this point. Thus, not only do the many accounts actually reflect only one original source, but it is not even known whether the fossils ever left the PUMC (Boaz and Ciochon 2004: 50). The simple fact is that no-one directly involved with the fossils ever verified that they were in any of the containers supposed to be used for their transport.

Because of this lack of care in confirming information over the past eight decades, the historical problem of

the disappearance of the Peking Man fossils has been transformed into an ongoing drama. It captured peoples' imaginations because it became an open-ended narrative that allowed it to be presented as a "mystery." This seems to have led investigators to regard it as requiring less careful scrutiny than other scientific problems. Good science has sometimes been abandoned to embrace the sensational aspects of this case, to the point that the intriguing question of the location of the fossils has stopped being a historical-anthropological-scientific challenge and has become just another story to tell.

It is not clear what should replace the Standard Scenario. We suggest a new process beginning with the fact that the last-known location of the fossils was at the PUMC. None of the searches elsewhere in China (Berger et al. 2012; Fairservis to Weidenreich 1947; Shapiro 1979) and in the U.S. (Janus and Brashler 1975) have been based on official documentation. We thus propose that any future searches for the fossils should be based on actual documents that: 1) provide evidence for the designation of responsibility for movement of the fossils, their reception and storage; and, 2) point toward locations to which the fossils might have been taken after packing. Currently there are no such documents; however, the fossils were at one time at other location(s) in the city of Peking, such as the bank(s) in which Weidenreich in 1937 stored the fossils during the Sino-Japanese War (Pei n.d.: 217; 1945b: 1).

In addition, we urge that critical attention be paid to the specific historical context of this situation and how it may have affected the character, presence, and absence of documents. War-time decision making on the part of governments and military forces is particularly influenced by security needs and fears, where misdirection and deceptive ploys are adopted to protect valued information and goods. Such practices and protocols are well documented (Daniel and Herbig 1981). In recent years, archives have opened up to public access potentially relevant materials that had long been classified as confidential and secret (e.g., Pedro Loureiro Collection). Initial inquiry into these sources suggest that there is a wealth of new information yet to be mined.

If any documents provide promising leads, then on-the-ground searches may be warranted. The time is long overdue to take a different approach, and we hope this analysis provides a scientifically sound baseline for future investigations.

ENDNOTES

[§] Comments on the forms of Chinese Place names used: In this article, we use the English transliterations of Chinese place names that were current from the 1920s to the 1940s because that is how all documents we used refer to them. In each case the modern version is also given at first use (e.g., Chinwangtao and Qinhuangdao). The name for Beijing is a special case, however. Both Peking and Beijing are written with the same Chinese characters and both mean "Northern Capital." The letters P and k vs B and j are only differences relating to local pronunciation, and the current use of Beijing in English simply means that the northern pronunciation is used by English speakers. Peiping, however, is a different word from either Beijing or Peking, and means 'Northern Peace.' The latter name alternated with Peking from 1928 to 1949. Thus, the documents we cite in Figures 1, 2, and 3 refer to Peiping.

ACKNOWLEDGMENTS

We dedicate this paper to the memory of Dr. Frank C. Whitmore, Jr. (1915–2012), friend and source of much intriguing information about the history of the Peking Man investigations. Frank played a role in the early search for the fossils during his work as Assistant Staff Geologist with the U.S. Army in Japan in 1945–46 (Grutzner 1952; PUMC Trustees Meeting 1945). Several years' correspondence plus meetings with him in 2000 and 2006 encouraged us to follow up on inconsistencies of personal accounts and to investigate as yet unknown archival material.

We also wish to thank those who assisted us in the research for this work: the late Dr. Milton Gustafson, National Archives II; Carla Braswell of the Richard Nixon Presidential Library; Monica Blank, Margaret Hogan, and Thomas Rosenbaum of the Rockefeller Archive Center; and, Gregory Raml, American Museum of Natural History Archives. Richard Francis-Bruce gave thoughtful insight and encouragement in the early stages of the research; the text benefited from thoughtful comments by Sherill Roberts. In addition, we had informative and profitable discussions with Gary Sawyer and Drs. Kenneth Mowbray and Ian Tattersall of the Anthropology Department of the American Museum of Natural History in New York. Rich Schmidt, Director of Archives and Resource Sharing, Linfield Library, advised us on archive use; Dr. Christopher Keaveney, Linfield University Professor of Japanese, assisted with translation of Japanese texts, and Lingrui Gou, Linfield University student, assisted with translation of Chinese texts.

CONTRIBUTIONS

MR was the originator of the study conception and design, to which ED and JM contributed. MR obtained archival sources and wrote the first draft, after which there was shared collaboration with ED and JM on editing and analysis. JM was the primary contributor to the formulation of broader historical and anthropological contexts. All authors read and approved the final manuscript.

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