

T. Dale Stewart's Perspective on His Career as a Forensic Anthropologist at the Smithsonian

REFERENCE: Ubelaker DH. T. Dale Stewart's Perspective on His Career as a Forensic Anthropologist at the Smithsonian. *J Forensic Sci* 2000;45(2):269–278.

ABSTRACT: T. D. Stewart (1901–1997) is internationally recognized as an early leader in forensic anthropology. In a series of taped interviews in 1975 and in 1986, Stewart discusses his professional development. The interviews document his early education in Delta, Pennsylvania, his long career at the Smithsonian Institution in Washington, DC and aspects of his many contributions to forensic anthropology. His well-known careful editorial work and exhaustive, problem-oriented research approach may have been influenced by his early training in his hometown bank and his many years of apprenticeship under Aleš Hrdlička (1869–1943). Stewart describes aspects of the difficulties of working for Hrdlička, yet credits the work ethic established by him as a formative factor in his own prodigious productivity.

KEYWORDS: forensic science, T. D. Stewart, history, Oral History Interview

T. D. Stewart (1901–1997) is widely regarded as an early pioneer and internationally recognized authority in forensic anthropology. Because of his lengthy and accomplished scholarly and administrative career at the Smithsonian Institution in Washington, DC, Stewart was interviewed for the Oral History Project of the Smithsonian Institution Archives. This project sought to interview senior Smithsonian staff in an attempt to record their perspective on the Institution and their careers.

Stewart was interviewed by Smithsonian Historian Pamela M. Henson and Archivist William A. Deiss on 12 occasions between January and May of 1975 and once in September of 1986. All interviews were conducted in Stewart's office in the Department of Anthropology of the National Museum of Natural History, Smithsonian Institution. The approximately 13.5 hours of taped interviews covered many aspects of Stewart's life, professional development, accomplishments, and perspectives on the Smithsonian Institution. The taped interviews were edited by Pamela M. Henson, resulting in a 341-page manuscript with some photographic documentation.

The interviews covered broad areas of Stewart's development and career but include much unique information related to his contributions in forensic anthropology. The text reproduced here includes Stewart's perspective on his professional development, factors influencing his work at the Smithsonian and his general contributions relating to forensic anthropology. Note that some of Stewart's original language was edited for clarity to produce the

primary archives document. Although only edited excerpts from that document are presented here, the language has not been further altered. I have added topical headings and listed the manuscript page numbers that the published text is drawn from. The full manuscript version, with documentary tapes, is located in the Smithsonian Institution Archives, Number 9521.

The passages selected reveal insights into Stewart's education, factors that led him to working at the Smithsonian, his perspective on Hrdlička, his work with human identification for the military, his consultation with the FBI, and his activity in portrait art. Stewart was well-known as a hard-working, productive anthropologist, a thorough editor, a pioneer in forensic anthropology, and a master of detailed problem-oriented research. These interviews reveal some of the factors that influenced him and the work ethic and philosophy for which he is known and admired.

This material is available because of the foresight of the Smithsonian Institution Archives, Oral History Project, especially Historian Pamela M. Henson. Henson graciously made the transcript and tapes available and assisted this project. Other archives staff Bruce Kirby and William Cox were also especially helpful.

Early Development and Contact with the Smithsonian (pp. 1–8)

HENSON: Why don't you give me your birthdate and your place of birth?

STEWART: Yes. I was born June 10, 1901 in Delta, Pennsylvania.

HENSON: Now, why don't we start with your early life, education, college, and how you got started in the field.

STEWART: Yes. I was born in this little town of Delta, which is in a Welsh community. All of the people in this town with few exceptions—such as my family—were from Wales or descendants of the Welsh who had come there to quarry the slate. My generation was the third generation; that is, my pals neither understood nor spoke Welsh. Their parents understood Welsh, but didn't speak it, and their grandparents both spoke the language and understood it, as a matter of fact, spoke English very brokenly. So in three generations the language had pretty much disappeared, and my generation all regarded ourselves as straight Americans. This was an interesting experience to me, in retrospect, because my parents had come to Delta from Delaware. My father [Thomas Dale Stewart, Sr.] came there because he had a brother who had come to Delta as a Presbyterian minister; he was the minister in charge of Slateville Presbyterian Church. My uncle, Reverend Kensey Stewart, noted that the town needed a good pharmacy. So my father, being a pharmacist, was induced to come and set up a pharmacy in Delta, known as the Delta Pharmacy.

I went to school in Delta. The Delta High School was not strictly a high school in the modern sense; it carried the students from the

¹ National Museum of Natural History, Smithsonian Institution, Washington, DC.

Received 11 March 1999; accepted 11 March 1999.

primary grade right through . . . into high school and through high school. This was all done in one building, so that you got to know every student from the primary grade onwards. Every room had two grades in it, so that you always saw the grade ahead of you perform and knew what you were headed for. This was an interesting experience in another way in that the teachers continued on year after year, so that my primary schoolteacher, who was also my Sunday schoolteacher, stayed there the whole time that I was going to school and subsequently played a role in my life after I came to Washington. I went through the high school. . . . Well, I should say that I repeated one year; my father seemed to think that I was not mature enough to continue on to the second grade and had me stay a second year in the first grade. This was a handicap to me all the rest of the time I was there because constantly I was one step behind all my close friends and never succeeded in catching up.

However, I graduated in 1920 and was offered, immediately, a job in the local bank, First National Bank of Delta. This was probably due to the fact that my father and the president of the bank were old friends. Anyway, since the bank needed a new employee when I graduated, I was offered the job of runner in the bank. This job had very few duties connected with it; mainly, that I would have to open the bank in the morning and see that it was all in good shape; in wintertime, look after the furnace, come in on weekends and stoke the fires, and such things as this. But other vacancies . . . occurred in the bank immediately, and within a year I was made individual bookkeeper. In those days, all the checks and deposits were entered into a big ledger by hand. You added the deposits in your head and you subtracted the checks, and then at the end of the day (at each place you'd have put a little blotter in the ledger) and you'd check it out on the adding machine. If you were one cent off, why you stayed there until you found that one cent. Well, this was very good training, of course. I was on my way to becoming a small-town banker because I was living at home, and although my salary was a pittance, I was saving every cent of it. I had very little in the way of expenses, and it was a very pleasant life.

However, I should say that by the time I graduated from high school my father had died. The year that I started in high school, 1916, he died following a stroke. Mother [Susan Price Stewart] was sort of dependent on me because she was very deaf, and this was another thing that tended to keep me at home—I felt she needed me there. But, I had an old friend—rather, the family had an old friend—a man by the name of John [L.] Baer, who comes into the Washington picture, too, as I will explain. John Baer had been a divinity student. He'd gone to Lafayette College and had a general education, too, so that he was a well-rounded biologist and knew some chemistry. If my father was sick or had to go off somewhere on a business trip, he had often called upon Mr. Baer to come in and run the store. Mr. Baer could do that very well, even to handling simple prescriptions—things like this—although he wasn't a registered pharmacist.

Well, during the war—First World War—Mr. Baer decided he needed to do something to help his country. He was a very big man, very fat, so he wasn't eligible for the draft or anything like that. So he came to Washington, and worked in some of the war agencies. He would occasionally take me with him, and I got a chance to see Washington in wartime. I remember him taking me to some of the restaurants that had been established by the government to feed these extra people. The Food Administration had a restaurant in the block where the new Interior [Department] Building is, and you could go there and for fifty cents get a full dinner that was well prepared. At that time, the Interior Building on F Street had just been opened, and there was a cafeteria on the top floor. I remember Mr.

Baer taking me there. He lived with a family in an apartment (The Maury) at Nineteenth and G [Streets]—the building is now gone; there's a great big modern office building there (that whole square has been replaced; all that area has completely changed). But Mr. Baer ended up marrying my . . . primary schoolteacher, Mary Arnold. At first they lived in Mr. Baer's room in the same apartment and then they got an apartment of their own there.

Mr. Baer persuaded me that it would be to my advantage to get out of Delta and go to college. My father had always intended to send me to college, but I had gotten sidetracked into the bank. My mother agreed to this; she urged me to go, and so I came down to Washington. The Baers had an extra room in their apartment, and so I rented it from them. Here I lived with these two old friends from Delta. That first winter I was in Washington, 1922, Mr. Baer registered me at G.W. [George Washington University] and signed me up to the biggest schedule, I think, that he could conceive of. I was just loaded down! I remember I had chemistry and zoology and French—all things that my little high school in Delta lacked. It had no modern language, no modern science, and so I had to catch up with the city boys. I worked extra hard for this reason, and ultimately when I graduated from G.W., I was pretty much straight "A" all through.

By the way, at this time, Mr. Baer was working for the Smithsonian. He was serving in a temporary capacity; that is, he served at times as a substitute for the Curator of [American] Archeology, who was then Neil [Merton] Judd, and . . . at other times, he would substitute for Dr. [Aleš] Hrdlička, who . . . was the Curator of Physical Anthropology. But that first winter, one of the things that helped me, I think, was that after I'd gotten established in this room in the Baer's apartment, one day Mr. Baer came into my room and said, "How would you like to have a roommate?" He said, "There's a young man who's just come to the Smithsonian and is looking for a place to stay, and I suggested he come up and share this room with you. He would like to do that because it'd save him a lot of money." Mr. Baer spoke very highly of him and he turned out to be Henry [B.] Collins [Jr.], who had come back with Neil Judd from Pueblo Bonito [New Mexico], where Judd was excavating. Collins had been such a satisfactory employee that Judd brought him back to Washington to work on the collections. So, here I had this remarkable coincidence of being associated with two people from the Smithsonian, so that, you know, the conversation constantly was reverting to things going on at the Smithsonian, and when there would be a lecture or something of this sort, I'd go along. It seems that Collins, the year before, had graduated from Millsaps College in [Jackson] Mississippi, and his fraternity had sent him to New York as their representative to a fraternity conference . . . meeting. He stopped off in Washington—going or coming—and had gone around to the Smithsonian and inquired whether they had any jobs. He was sent over to see Neil Judd, who was doing the work at Pueblo Bonito. Judd took a fancy to Collins and said, "All right, if you can get yourself to New Mexico next spring, I'll employ you." So Collins went home and borrowed enough money for his fare to New Mexico, and he . . . well, ended up at the Smithsonian and has been here ever since.

The . . . next year, I remember, I was desolated because Collins decided not to come back to Washington that winter but to stay in Mississippi and work in the [Department of] Archives [and History]—historical archives—in Jackson. But in his place, Judd brought another workman from Pueblo Bonito, Karl Ruppert, who subsequently became one of the Mayan experts for the Carnegie Institution of Washington. So, this second year here I was exposed to this young man from . . . the Southwest—I think he was from New

Mexico [Arizona]. I remember that he had never been in snow, he had seen snow up on the mountains but had never been near it. One night that first winter, I remember waking up—something woke me up—and I looked around the room, and there was Karl sitting at an open window. I said, “Karl, what are you doing?” He said, “It’s snowing, and I’ve never seen snow falling before!” [Laughter] Well, Karl . . . was getting his masters from G.W.—or continuing his work for his masters at G.W.—and Truman Michelson was the professor of anthropology. So, I would go with Karl and his friends to some of these lectures, and eventually, I took Michelson’s course in anthropology.

In the early part of 1924, Mr. Baer came to me and said he had an offer to go to Panama to study the White Indians (so-called White Indians—the Cuna and Choco). This was a great opportunity for him, he felt. At that time, he was working in a temporary position for Dr. Hrdlička, and he said that Dr. Hrdlička would let him go if he could get someone to substitute for him while he was gone. His proposition to me was: would I substitute for him the rest of that school year? He’d be back at the end of the spring, or in the early summer. And I did. I switched from day school to night school. This meant dropping a number of courses at mid-term, but I did this. I remember I came down to the Smithsonian for an interview with Hrdlička, and he thought I . . . would be satisfactory because I knew how to operate an adding machine—he wanted me to do a lot of work tabulating figures for him. So, Mr. Baer went off to Panama, and I started working at the Smithsonian on a temporary basis, expecting the job to end around June. Before that time, Mr. Baer died in Panama. As I said, he was a big man. After he got down there, he got gallstones and picked up yellow fever and malaria, so he died. Hrdlička, at the end of that [employment] period, said to me, “Come back in the fall; the job will be open again in the fall, it’s only for the school year.” So, I came back.

But in the interval, in that summertime, I went up to Harvard [University] for summer school and finished one of my courses in mathematics and another course, I think, in organic chemistry. I did that because I’d become a friend of my French professor, Alan [T.] Deibert, who was a Pennsylvanian. He had taken pity on me, realizing . . . what I was up against, studying French . . . for the first time, whereas almost everyone in the class had some French. He gave me private tutoring on the side in French. I remember him one time giving me a Bible in French. He said, “Start reading it aloud.” Well, I knew the English [version], and so [the meaning] was rather clear, but he would correct my pronunciation. Well, all of this was very good. Anyway, that summer I got to see New England—Harvard. I went back the next summer. But the third summer I went to the University of Minnesota because my cousin (daughter of my father’s brother in California) was married to the professor of physiological chemistry there in the medical school [Jesse Francis McClelland]. While there I completed the psychology and political science courses I’d dropped. With all this going to summer school and night school, I was able to get my degree in mid-year 1927. Then I was eligible to take the Civil Service [Commission] examination for the job, and in this way I got the job of aide here permanently. But, that explains pretty much how I came to Washington from Delta, and how I came to the Smithsonian after being in Washington, and why I’m still in the Smithsonian. [Laughter]

Medical School at Johns Hopkins (pp. 9–16)

HENSON: What was your degree in at G.W.?

STEWART: A.B., and well, the story goes on a little more, if you want to hear it, because once I got established with Hrdlička in

1927, he said, now, to succeed him, I would need to have the M.D. degree. I had registered as pre-med at G.W.—not having this in mind, of course—and so, I . . . decided I’d go on to medical school. Hrdlička said that he would give me leave of absence for the school year. Now, this was a continuation of what he’d been doing; this was why Mr. Baer was here. The man who had been Hrdlička’s aide (Paul [G.] Van Natta, who just recently died) was being allowed to go to medical school to prepare himself to succeed Hrdlička. So the job was open in the school year, you see, for some one to substitute for Van Natta. That’s why Mr. Baer could switch from Judd’s summer work to substituting for Van Natta for Hrdlička in the winter. So I continued as Mr. Baer’s replacement until Van Natta graduated from medical school in 1927. Then Van Natta decided not to come back, but to go into practice, and he practiced out in one of the suburbs of Washington all these years, until just a year or so ago when he died. So, in 1927 Hrdlička gave me this opportunity. He said, “Now, Van Natta decided not to come back.” He said, “If you want to succeed me, you will have to get a medical degree, but I will give you leave of absence to do this only if you will guarantee to come back.” So I said, “Yes, I’ll come back.” He gave me leave of absence, and I applied to Johns Hopkins [University].

Now, I applied to Hopkins because I had met two of their professors, both of them physical anthropologists. By being around here, I got to anthropological meetings—and I have just turned in a manuscript to Catholic University, which is going to publish it in a festschrift for one of their professors [Regina Flannery]. The title of my paper is, the “Growth of Physical Anthropology from 1925 to 1975.”² I make the point that I became a member of the American Anthropological Association in 1925, just a year after I started working for Hrdlička, because the American Anthropological Association met in Washington that year—downstairs in the [United States National] Museum’s lecture room. I became a member, and I attended the meetings. In the course of attending these and other meetings, I met Adolph [Hans] Schultz and William [Louis] Straus, Jr., from the Anatomy Department at Hopkins. Schultz was the only physical anthropologist then in a medical school. He was Swiss, and he’d been brought over by the Carnegie Institution and had been in their Embryological Department, and then he switched to the Anatomy Department in the Hopkins Medical School. He is now in Zurich; he’s still living.³ Bill Strauss is retired.⁴

I went over to Baltimore for an interview in the spring—April of 1927—just after I graduated; you see, I had to have my degree before I applied for medical school. In that spring, just at this time, Hrdlička had arranged for Collins and me to go to Alaska to study the Eskimos up on Nunivak Island at Bering Sea. When my appointment came for this interview at Hopkins, it was scheduled for after I was due to leave for Alaska. So I quickly got in touch with the Dean [Lewis Hill Weed] and explained the situation, and he said, “Oh, yes, that’s fine. You come over on Friday of this week.” When I went over, the first thing I did was to go around and call on Schultz and Straus, and then go to see the Dean, who was head of the Pediatrics Department. The Dean took me to lunch in the hospital restaurant, with all the interns and doctors . . . and I remember that his table was a big round one—I suppose there must have been a dozen people at that table—and here I was, this lonely applicant for entrance to medical school, surrounded by these professors and

² T. Dale Stewart, “The Growth of American Physical Anthropology Between 1925 and 1975,” *Anthropological Quarterly*, Vol. 48, No. 3 (July 1975): 193–204.

³ A. H. Schultz died in 1976.

⁴ W. L. Straus, Jr. died in 1981.

interns, and so on, in their white uniforms. I succeeded in making a satisfactory impression largely because I was so full of this trip that I was about to take.

I had . . . discovered so many interesting things about preparing for an expedition and what we were going to run into. One of the things we had had to solve was how we were going to get to Nunivak Island. It turned out there were only three ways we could get there. One was through the Coast Guard, which had Coast Guard cutters going all through the islands up there. The Coast Guard's reply was, "It's too shallow for one of our boats to get into Nunivak, so we can't take you." Next we applied to a trading firm that had headquarters in Nome [Alaska] and sent a supply boat to the trader on Nunivak Island once a year, in the spring, and they left from . . . Seattle [Washington]. Their schedule didn't happen to fit ours. Then we finally discovered that we could go in on a supply boat belonging to the Bureau of Education, which was taking supplies to the native schools. So we got passage on the boat, known as the Boxer. She had been a sailing ship but in 1927 had diesel motors—she had been built from the reparations obtained from the Boxer Rebellion [1900] in China. She was small and loaded down to the point where the cargo filled all the deck up to the top of the railings—there was no deck space to walk on. Our little stateroom—Collins and I shared a stateroom—had one round porthole, and the two bunks—one above the other—were across-beam. So you'd lie there in your bunk when the ship was rolling, and you'd see the porthole go down under water, and then as the ship rolled over, you'd see the sky. We . . . were on that boat for a good month! Went up the inside passage, across to Kodiak Island, over to Dutch Harbor, along the north coast to the Aleutians, up into Kakanak, Togiak, and Good News Bays, and finally northward to Nunivak.

I'm getting ahead of my story in that . . . we were being sent up there that year because Hrdlička had been given the Huxley Memorial Prize of the Royal Anthropological Institute which required that he go to London and give the Huxley lecture. The year before, he had started his campaign of expeditions in Alaska. He had been up all around the coast of Alaska in 1926, and he planned to go back year by year after that—in fact, he did, with the exception of 1927, when he sent Collins and me up there. For Collins, of course, 1927 was his first exposure to Eskimos, and from then on, he became the foremost authority on the Eskimos. He got a gold medal from the King of Denmark for his work up there.⁵

[BEGIN TAPE I, SIDE II]

HENSON: You were talking about your field work in Alaska.

STEWART: Yes. It's easy to pass over details that are probably essential to the story. One that occurs to me is that I dropped my references to Collins back after his first year in Washington. I said he didn't come back. Well, he did, after a year or two, and that's why he was around to go to Alaska. He went on to become . . . a permanent employee in the Division of Ethnology in the Natural History Museum. His office was right across the hall from Hrdlička's. We were rooming together, close associates, and that's one reason why Hrdlička sent us up to Alaska together.

I had to arrange to get back in time to enter medical school, and so, one of the things we did on the way up when we stopped . . . on Nelson Island, the island closer to the mainland than Nunivak Island, was to arrange for return passage. There was a school on Nelson Island with a couple of American schoolteachers, and there was also a trader there, an Eskimo trader. This trader had a boat, and so we negotiated with him to come over to the eastern

end of Nunivak Island at the end of the summer, when he had determined the date for the steamship *Victoria* arriving at St. Michaels, and we were at his mercy to get off of Nunivak! We got a little bit worried toward the end of the summer when he didn't show up, but eventually, one morning, we woke up and the boat was on hand. The trader had with him a Catholic priest who had set up a mission on Nelson Island, and the two of them took me over there in the boat. I lived on that boat until we reached St. Michaels. While we were on Nelson Island a storm came up and kept us there for several days. Then we went up the coast (I think the trader had one assistant), and eventually entered the southern mouth of the Yukon [River], across and out one of the northern mouths, and around to St. Michaels, where the ship was due to call in. Whenever we'd meet a boat going through the Yukon, we'd say, "Is the *Victoria* in yet?" We got, usually, a negative answer, "No, not in yet." So we were very hopeful that we would get there in time to make the *Victoria*. Sure enough, we got there, and I had time to pack all of the skeletal material that we'd collected. We had some three hundred skulls and skeletons. I spent a good part of the night packing them up and had them all ready the next morning when the ship arrived. They took us out on a lighter. It was very rough and they had to drop over—I don't know what you call this box that you get into and are swung up to the deck from the lighter. The waves were very high. I came back to Seattle on the *Victoria*. She blew out a cylinder before we got down to the Aleutians, and a Coast Guard cutter had to come and tow us into Lost Harbor, where they cemented a new top on the cylinder and we continued at reduced speed down to Seattle. Collins went his separate way and came out by the Yukon. He didn't have to be back at a set time.

I recall the first thing I inquired about on boarding the *Victoria* was the possibility of getting a bath! I hadn't had a real bath all summer. [Laughter] They arranged for me to take one way down in the bowels of the ship. When I got to Seattle, the first thing I did was to get a haircut, and go to the bank and inquire about how I might get some money from home because I didn't have any money to pay my hotel bill or railway ticket! Well, they told me to telegraph my bank and have the bank telegraph the money to the Seattle bank and follow it up with a bank draft. I did that, and in a day or so, I got the money. My bank was the one I'd worked in in Delta, and someone there went and told my mother that I was back in the country. She hadn't heard from me since April . . . of that year. I got back home in time to get to medical school on schedule. HENSON: Well, what type of work were you doing up there? Was it archeological or were you collecting specimens . . . ?

STEWART: Well, Hrdlička had . . . instructed me to get my hands on as many skeletons as possible and bring them back. Collins was supposed to do archeology and ethnology, whatever he could. There were ancient sites around Nash Harbor, and we did some excavating in them. I think not as much as we should have done, partly because Collins was new at this and was sort of feeling his way along and didn't see the need. I think he later regretted that he hadn't done more along that line. But we would make treks across the island to abandoned villages and collected the dead around those villages and any cultural objects that we could find. It was a remarkable summer there.

All of this—the arranging for all of this was in . . . the back of my mind back in April as I sat at that table in the hospital dining room wondering whether I was going to get into medical school. I was aware that I was doing most of the talking, you know, and it was about this trip—what I expected to do, and so on. Finally, the dean, towards the close of lunch, said he was going to have to get

⁵ Royal Danish Academy of Sciences and Letters, 1936.

back to work. He got up and said, "Now, you be here at such and such a date in September." That was his way of telling me I was in, you see. So, I went through the four years of medical school. I had to get a replacement of satisfy Hrdlička while I was gone. One of the people I got was Marcus [Solomon] Goldstein, who subsequently got his doctorate in anthropology from Columbia [University], but he was around Washington at that time going to G.W., and he would come in and substitute while I was gone. Marc, later still, worked for [the Department of] Health, Education, and Welfare—public health—and is now in Israel, retired. I had a letter from him this Christmas. But this . . . is some of the background leading up to my arrival here.

Well, to conclude this part of it, in 1931 when I came back from medical school, Hrdlička made me his assistant curator. In 1939 he made me associate curator, and then in 1943, while I was on leave of absence to Washington University, St. Louis [Missouri], teaching anatomy, he died. This was at the end of the war, when there was a shortage of teachers, and medical schools were going the year-round, so that I went there the first of July and taught to the first of January. After Hrdlička died, I was made curator succeeding him. I continued in this position until about 1960, when I was tapped for head curator—chairman of the department. I was only in that office a couple of years before Dr. [Leonard] Carmichael picked me for the director of the museum, in which capacity I served until 1965. Since then I've been in this office.

Smithsonian Work under Hrdlička (pp. 16–24)

HENSON: What type of work did you do for Hrdlička when you first started here?

STEWART: Well, this is an interesting part of the story because I came out of a year and a half of college. I'd had some zoology, but it was general zoology, and I remember the first thing that Hrdlička gave me to do. He came back from his office—the series of offices then comprising the Division of Physical Anthropology extended along the north side of the east court of the Natural History Building and were connected by a long corridor. I was in the back room, and there were some big tables there. On one of these tables was an array of skulls—I've forgotten now where they were from—but Hrdlička came back, and he said, "I want you to start by cataloguing these skulls." He said, "You go up to the head curator's office"—the head curator then was Walter Hough, and his secretary was George [D.] McCoy—"ask George for, oh"—looked over the table—"fifty numbers, and then, you take these"—he had some catalogue cards and he said, "you put a number on each card, and this first number you put on one of these skulls, the second number on another skull, and so on and fill out the card." He said, "Where there are skeletons with the skulls"—sometimes there were skulls and sometimes skeletons, whole skeletons—he said, "always put the number on the left side of the skull right up here," and he pointed to the spot, "and put the name of the locality under the number, and the sex. Then, for the bones, say this femur here, you always put the number on the distal end," and he turned and walked away.

Well, I went up to see George and told him what I wanted, and George heaved a big sigh and shook his head and said, "That man, he always does this!" He said, "How many skulls and skeletons have you got?" I said, "I don't know, he said to ask for fifty numbers." He said, "He always does that. He doesn't know how many he needs and he takes a round number, and not all are used, and then we have some numbers left over." I could see the point of that. He continued, "I reserve fifty for you, and then I give the next lot

to the next curator who comes in and asks for numbers, and if you don't use all your fifty, there's a gap in the records." Well, that made sense to me, so I went back and sorted out and counted the specimens. I then went up and got the right number and made George happy, and started cataloguing. But then I said to myself, "Well, now, which is the distal end of a bone?" I didn't know proximal from distal, so I solved that by getting a ladder and climbing up in the collections, and finding some skeletons that'd been numbered and seeing where the numbers were, and deciding this was the distal end of the bone. [Laughter] Then I remembered he wanted me to put the sex on the specimen also. I didn't know how to tell the sex of the skeleton, so I told this to Hrdlička, and he recognized that this was something he'd neglected to show me, so he came back and he sorted the specimens into males and females. [Background noise.] Well, I . . . learned in this way, by the apprentice method.

Hrdlička had in progress, at that time, a book on the "Old Americans."⁶ I had to learn what was meant by the term, "Old Americans," that they were "those Americans whose ancestors on each side of the family were born in the United States for at least two generations." In other words, all those whose parents and all four grandparents were born in the United States. Since most of the oldest arrivals were from the British Isles, these Americans were pretty much of British stock. He gave me great sheets of measurements in all sorts of series. He had a Virginia series, a Tennessee series, a West Virginia series, a laboratory series, and so on. These individuals had been measured by himself and by Professor [Robert] Bennett Bean at the University of Virginia, and perhaps others. Hrdlička was doing this book on the physical characteristics of this part of our population that he called the "Old Americans." I probably have a copy of the book up on my shelf. But what he was doing, he was analyzing one measurement at a time. Say he took stature, he'd measured the stature of all these people. He would call me into his office and he'd have a sheet of paper all worked out in tabular form with the headings in place. He'd have space for a series over here, and another one there, and I would have to list which series each was. He'd say, "I want you to take all the males, and I want you to divide them by age groups—twenty to thirty, thirty to forty, forty to fifty, fifty to sixty—and I want you to get the average stature for all the males in each age group, from each of the series, and fill in all these columns in this table." Well, I would take the measurement sheets to the adding machine, and I would work down the columns, looking at the age and stature, you know, by series, until I'd filled the table in. Then he would hand me another table, where maybe he had plotted head length. He'd say, "I want you to take all of the males who have a stature between 160 and 165 and find out what the average head length is, and then all those from 65 to 70, and do the same," and so on, you know. All that winter, I prepared these tables, and I'd take them in to him, and he'd write the text around them. By spring, we had this book completed.

DEISS: Where was he getting the measurements?

STEWART: Well, these had all been measured by himself and others, and so all that part was done, you see.

DEISS: Now, these were live people?

STEWART: These were live people, yes. He established this term, "Old Americans," and it's been widely used. Subsequently—being a member of the National Academy [of Sciences]—he measured all the members of the National Academy to show how they compared with the "Old Americans," you know, and things like that. These

⁶ Aleš Hrdlička, *The Old Americans* (Baltimore: The Williams & Wilkins Company, 1925).

were superior people he thought he was dealing with, you see. At Harvard, Gordon [Townsend] Bowles wrote his doctoral thesis on "New Types of Old Americans at Harvard," which was a study of how the students entering Harvard since the beginning of last century were gradually getting taller. They were "Old Americans," you know; the best people went to Harvard. Fathers sent their sons there, so he was able to show how much taller the sons were than the fathers entering Harvard, you see. Then, he went to the women's colleges—Smith, Mount Holyoke, and others—and got the same records there to show that the daughters were taller than the mothers. I have an exhibit on this subject . . . in my "Hall of Physical Anthropology" downstairs—part of these findings. But he was showing me one way you can write a book; with a little help, you see. I've always regretted—I've never had the help to work that way. I have always made up my own tables and then written around them.

But I learned another thing, I think, that first year or the beginning of the next year—that would begin in the fall. He had another project: a catalogue of crania of the collections in the division. This went through several parts.⁷ He personally measured all of these skulls, and he had piles of sheets of measurements of these skulls. Van Natta, who'd been working there in the summer, apparently had put all of this together in regular form. So, Hrdlička called me one day and gave me this great big sheaf of these forms filled out with measurements, and said, "Take them over to the editor, the Smithsonian editor, and arrange with him to publish the "Catalogue of Crania." Old Dr. [Marcus] Benjamin, who was the editor then, had an office, as I remember, right above the entrance to the A&I Building, the Arts and Industries Building. I went to him and explained my mission, and he threw up his hands. "What! Another manuscript from that man?" Then he proceeded to show me just what he meant. He said, "Now, look at this title, *Catalogue of Crania; U.S. National Museum Collections*. What crania? People want to know what it includes." He said, "We've got to have a sub-heading under here." So he went down through all of the-tribes or states represented and listed them. "And now," he said, "let's look down this column. Look where he has a decimal point, sometimes he follows it with zero, sometimes with a dash. That's inconsistent. You have to be consistent in these things. What are you going to have? Are you going to have dashes or are you going to have zeros? And look, now, the abbreviations, he's got some of these words abbreviated and some not, you've got to be consistent in this." He went through the whole manuscript and showed how from one sheet to another there was no consistency. He said, "I'm going to have to spend hours going through this, editing it to get it in shape." "Well," I said, "Dr. Benjamin, if I have anything to do with these catalogues in the future, I will heed your words of wisdom and see that you don't have so much work to do." Sure enough, Hrdlička got me started on the next one, and I had to put the whole thing together. He had made all the measurements—they were on little sheets—but I had to take them and put them all in order because they had to be by the increasing order of the cranial index. In other words, I'd look for the lowest cranial index (the longest head), put it first, and work down so that at the bottom would be the highest cranial index (the roundest head). Every sheet had to be done this way, you see, the males separate from the females, and all the numbers . . . checked. So, I learned a lot about editing just in that little

experience. From there on, when I did these catalogues for Hrdlička, they didn't need a lot of editing.

In 1925, Hrdlička went around the world . . . well, I don't know whether that is exactly true. I think he went through Europe, over to India, to Australia, and then down to South Africa and back to Europe—he probably didn't go all the way around—but it was a wonderful trip. He measured—I forget now—over a thousand skulls in Australia. He had the measurements on little pieces of paper of all sizes and colors, and just sheaves of these things. He gave all of them to me and said, "I want you to put these all in order as in our regular catalogue." When I studied them, I found that all the Australian states were represented—New South Wales, Victoria, Queensland, Northern Territory, and so on. But this wasn't stated. I'd have to find the locality that he had recorded, then go to a map and see which state this was in, and get all of this sort of thing done. I finally put it all together. . . .

HENSON: What made you want to continue in that work?

STEWART: Well, it was fascinating. I had these friends who were in anthropology. It was a job that allowed me to get my degree at the same time. Then, when Hrdlička said I'd have to have a medical degree to succeed him, I thought, "Well, I have a pre-medical preparation behind me, and so I can take the medical course, and then eventually, if I want to do something else, I have the medical training to fall back on." As a matter of fact, during the Second World War, I debated whether to go back into medicine because of the need for doctors. Then, in 1943, after a half year of teaching anatomy in St. Louis, I almost went into anatomy. I got along so well out there that they recommended me to head up the new department being created at Wayne State University in Detroit [Michigan]. I almost went there for an interview, but then I said to myself, "Well, why do I want to tie myself down to teaching, when I'm in this job where I don't have to be on hand any particular time of the year. I can go off on field trips any time, I'm my own boss, and the pay is good enough, and so on." So I just stayed on. . . .

What Hrdlička was Like (pp. 25–31; 83–84; 99–100)

HENSON: We were going to start today by talking about what the Division of Physical Anthropology was like when you came here, and Dr. [Aleš] Hrdlička. I thought maybe you could tell us what it was like when you came here for your first interview for the job. What were your first impressions of the man? Do you remember at all?

STEWART: Yes. Hrdlička was a very formidable person. He was Czech, of course, and he lived in the Old World outside of office hours. That is, when he went home, his home setting was that of . . . the Czech people; and he spoke Czech with other members of the family, when they came in. They probably spoke Czech to a considerable extent. He dressed in an old-fashioned manner; he had high, stiff collars that had to be specially laundered. The corners stuck out. He had this tie or series of ties of the type that hooked behind the collar and were ready-tied. He just would hook them on. He often had shirts that had sort of a dicky effect on the front that would be of a different color or a different texture. In the office he would often be in his shirt sleeves, except when he expected a visitor and then he might put on a linen jacket . . . he would be a little more formal. He wore his hair fairly long and combed back. He had a somewhat swarthy complexion and dark penetrating eyes. People never forgot his eyes, I think, when he would stare at them. . . .

Another idiosyncrasy that he had was against statistics. He couldn't abide higher statistics because, obviously, he didn't un-

⁷ Aleš Hrdlička, *Catalogue of Human Crania in the United States National Museum Collections*, Smithsonian Institution, from the Proceedings of the United States National Museum (Washington, DC: Government Printing Office, 1924, 1927, 1928, 1931).

derstand them. He wouldn't go to the trouble of learning to use them, and so the shortcut was to say they're no good. When I came to work for him, he wanted to be sure that I could tabulate the figures he was working on, but only to the extent of deriving simple averages. I would add up the total number of measurements and divide it by the number of individuals and come up with an average. The other statistic he used was an index, where you divide one dimension by another and get a ratio. Thus the cephalic index or the cranial index, was very valid and important to him. As I said last time, he arranged all the figures in his *Catalogue of Crania*⁸ by cranial index because he felt that it expressed an important characteristic of the skull. In meetings of the American Association of Physical Anthropologists, if anyone gave a paper where they went beyond the simple average, he would be sure to get up and condemn it. And he was regarded by many people as, you know, being very limited in his outlook on the field. As the younger people came along and learned more statistical applications, they looked down upon him for this reason. After he died, the new generation took over, and of course most of the publications in these days include really complicated statistical approaches.

HENSON: But you had learned some of that . . . hadn't you?

STEWART: I had learned some of that, yes, I had learned some of that, but I had to be very careful not to expose my knowledge to Hrdlička and never push him on these subjects because you could be sure to rouse some enmity in him for this reason. Hrdlička's old-fashioned ideas and his lack of awareness of how most Americans get along came out in many ways. Although he was a leader in the field, he would never accept any social obligations from his colleagues. He was never invited out to any social functions by them because he wouldn't accept it. For instance—this I know especially well—at Harvard Professor [Earnest Albert] Hooton and his wife always maintained an open house for the graduate students. Students were welcome to drop in any afternoon for tea, and it was a place where they'd get together and have open discussion; and if there were visitors around, they would be invited, too. So when Hrdlička would go up there to lecture, the Hootons would always try to get him to stay with them, but he never wanted to because he just wasn't comfortable in those circumstances. Yet they would insist on it to the point where he couldn't refuse very often; and to sort of make it more imperative, Mrs. [Mary B. C.] Hooton every year gave him a sizable sum of money, several hundred dollars, for his *American Journal of Physical Anthropology*.

I remember being told of an occasion where he went to a meeting in Cleveland, and of course in those days you went by train, so all of those going to the meeting from Washington were on the same train. When they arrived in Cleveland, Hrdlička was first off the train; he rushed out and hailed the only taxi in sight, went off without including anyone else. When the others managed to get taxis and go to this hotel where everyone was staying, they found Hrdlička at the desk arguing with the clerk and saying, "But I do not need a bath!" Apparently every room in the hotel had a bath with it, and he was trying to get one without a bath because it would be cheaper, you know. And he wasn't aware of how ridiculous he was making himself appear, you see, with all these other people standing around listening. These were some of his peculiarities.

Another I recall dates to 1925, when he went to Australia and South Africa and was measuring all the skulls out there. As I said

before, he sent his measurements in on slips of paper—whatever sizes and descriptions of paper he could get wherever he was working; he didn't take any along. And he was apparently put to it to send back his diary which he always kept on trips. What he finally did was to get some toilet paper and write his daily notes on this toilet paper so that he could put it in envelopes and mail it back. This was a forerunner of air mail stationary, I'm sure! But I remember his secretary, Mrs. [Mary S.] Clapp, who was English—a little old lady, a delightful person—coming into my office one day while Hrdlička was out there and waving a sheaf of this toilet paper, and saying, "Look what that man sent me!" Of course she had to transcribe all these notes written on this thin tissue with a pencil or something of this sort, you know.

He was just entirely unconventional in many ways. I got along with him all right simply because I didn't try to counter him. If he wanted things done certain ways I attempted to do them the way he wanted but would try insidiously to suggest ways of improving it. Sometimes I could do this by sort of reverse psychology, by saying, "Dr. Hrdlička, I think I recall you saying sometime ago that it would be better if we did it this way,"—try to suggest that the idea had come from him and then he couldn't refuse it. And lots of times this would work. He would listen then. He may not have remembered ever having said this, you know, but he didn't want to concede that he hadn't said it if it was a good idea! [Laughter] Sometimes I would present him with things *fait accompli* and he could see that it was maybe a good arrangement of whatever we were doing. And I could gradually institute some improvements in the accessioning system. I introduced the innovation of listing all the specimens that were to be catalogued, in detail, and then from that getting the indication of the number of accession numbers or catalogue cards that we would need and being able then to go to the head curator's office with this in hand and say, "Here's my list of specimens . . . I'll need exactly so many numbers." It all worked out neatly so that the people in the front office were happy and I didn't get Hrdlička in wrong. More and more he turned work over to me, took me into his confidence, but I always had to be careful to handle him with kid gloves. I think because I did get along so well with him, and we worked together, that it was for this reason he began pushing me ahead and complimenting me and so on. But it wasn't easy. . . .

He wrote to me at [Johns] Hopkins [University], and told me about it, and said he wanted me to come and give a paper. Well, I had written a thesis on the history of dental caries for my course in pathology. The students had been allowed to pick any disease the history of which we wanted to study. I'd always been intrigued by dental caries that I'd seen in the collections here in the museum, so I elected dental caries as my subject. The students had a month off from medical school . . . in that quarter of the school year, and used it to go to the Army Medical Museum to read up on the disease each had picked. At the end of the course each turned in a thesis, oh, sometimes of 100 to 150 pages. Professor [William George] MacCallum, the professor of pathology, was so thrilled with them—the project had been an experiment on his part—that he had them all bound together for the Welch Library at Hopkins. My thesis formed the basis for the paper I gave at Charlottesville that year. I called it "Anthropology and Dental Caries." I remember that on the train coming back to Washington I was sitting behind Hrdlička in the coach, and he leaned over and said, "That paper you gave was very good, but you made one mistake."

And I said, "Is that so? What did I do wrong?"

"You read it. Never read a paper. Always give it extemporaneously. You can make it so much more effective.

⁸ Aleš Hrdlička, *Catalogue of Human Crania in the United States National Museum Collections*, Smithsonian Institution, from the Proceedings of the United States National Museum (Washington, DC: Government Printing Office, 1924, 1927, 1928, 1931).

That was good advice. I tried after that . . . never to read a paper if I could possibly give it extemporaneously. Of course, there are occasions when a paper has to be formulated carefully because the time is so short that if you're going to get it said at all, you'd better construct it very carefully and read it. But of course Hrdlička was right; a paper given extemporaneously is more likely to hold the attention of an audience.

Well, at the organizational meeting in Charlottesville things didn't go off as smoothly as expected. The physical anthropologists got organized, but at the annual banquet of the anatomists, to which all the physical anthropologists went, the president of the anatomists, [Charles Rupert] Stockard, tried to ignore Hrdlička's presence. Stockard was noted for his irascibility, especially when he'd had a few drinks. In those Prohibition days, the anatomists saw to it that they were provided with liquor on these occasions. Down in the South, you could get bootleg if nothing else. So the older anatomists had all gotten together before dinner for drinks. I remember Adolph [Hans] Schultz, my professor from Hopkins, was one of them, and he could hold his liquor. But the president of the anatomists, Stockard, was pretty well under the weather when time came for the after dinner talks. He had it in for Hrdlička, who had been elected president, the first president of the physical anthropologists. Stockard refused to call on the new president of the new organization or even to recognize him. This got very embarrassing because different ones would get up and say something nice about Hrdlička and hint that the president should call upon Hrdlička, which Stockard would refuse to do. Finally when their host, Dr. Robert Bennett Bean, was recognized to say something, he found a way to get Hrdlička on his feet. This was the send off of the American Association of Physical Anthropologists. In retrospect, it's amusing, but at that time it was a rather traumatic occasion. . . .

I remember . . . and this is something I haven't spoken of before . . . [Aleš] Hrdlička, being an M.D., was frequently called upon for medical advice by the staff, and he maintained a drawerful of remedies that he had used when he practiced medicine in the 1890s in New York City. One of his standbys in his medical supplies was a big jar of citrine ointment. I have forgotten now the composition of citrine ointment, but it was a bland sort of stuff. It was dark colored. Hrdlička had a lot of little ointment boxes, and if a staff member came in—maybe requesting something for arthritis or pyorrhea or whatever—he'd dispense a little box of this stuff. His instructions were to rub it on, you know, locally. It was generally felt this was an ideal treatment for everything from dandruff to fallen arches. Mrs. Shuman had been one of the people who constantly came in for some of this citrine ointment, but there came a time when she and Hrdlička had a falling out. I guess she spoke up a little too frankly or something of the sort. I recall that she came to me, and she said she just couldn't go and ask him for more of the citrine ointment. She needed some, and she asked if I would go in and steal some out of his case for her. And I said, "Mrs. Shuman, if he ever caught me taking anything out of his medicine cabinet, my name would be mud." She was quite annoyed at me, that I wouldn't do this for her. . . .

Study of Korean War Dead (pp. 128–130)

Well, then in 1954, the army asked for my services for the identification of their war dead from North Korea—my service was not the actual identification but for obtaining from the war dead enough criteria to help physical anthropologists improve their determinations of ages of unknowns. That is, no one had ever gone

through, in a careful fashion, the skeletons of young men seventeen years and up in age. Such individuals are always buried by their families and never seen in a skeletonized form. So all that was known about the age changes in skeletons was what had been learned from X-rays of the skeleton, which doesn't really substitute for the gross skeleton, and on the other hand, from the individuals of thirty-five years and up who turn up in the dissecting room. So most of our information had been culled from the latter sources and was very unsatisfactory for identification purposes. I succeeded in convincing the Army's Graves Registration Service that they would be remiss if they did not improve their identification techniques. I had used the same argument on them when they decided to take Dr. Mildred Trotter out to Hawaii after the Second World War to work on identification problems. She was able to do research on stature and for the first time give us tables and formulae which would accurately identify the stature of unknown individuals. So she had really broken the ice there in the matter of the attitude about research on the war dead. The army had felt that doing research on these remains would be something that would be frowned on by the relatives, and they didn't want to bring the program into any disfavor. Well, I argued that it was worse, on the other side, that if it could be shown that they weren't using the best methods for identification, they could be accused of not properly identifying the war dead.

So we took a chance on this. They asked for my services. I remember when we talked this over, they said, "Who could best do this?" I began naming different individuals, and finally they said point-blank, "What about you?"

I said, "Well, I've never had any military service. I've heard of people such as Dr. Trotter who had a hard time from the military getting permission to do the type of research they wanted to do, and I wouldn't take on this program unless I had prior assurance that I would be given red carpet treatment and get all of the help I needed to carry out the mission."

Well, they said, "What do you think would guarantee this?"

"Well," I said, "a letter from as high up in the military as you can arrange to the Secretary of the Smithsonian asking for my services and assuring me that I would get full cooperation."

The next thing I knew, Dr. [Alexander] Wetmore, the Secretary of the Smithsonian, was reading to me a letter to this effect from the Secretary of the Army indicating on it that a copy would go to the commander of the post out in Japan where the work was being done. So, I felt that this was an adequate guarantee. Then the question came up, what were the financial arrangements to be? Well, the army wanted the Smithsonian to transfer me to its service for the period involved. What they wanted to do was to up my grade to put my salary on what they considered the proper level. My level in the Smithsonian was far below that. Also, there was the differential. For overseas service you got extra and the Smithsonian quickly realized that, if this was agreed to, I'd have to be brought back here at the higher salary. You know, you couldn't just degrade a person. So the Smithsonian said no to that arrangement, and they furloughed me to the army. In other words, I was simply to come back at my same salary. . . .

Reflections on Career (p. 134)

So I, myself, feel that I've been very fairly treated, and I would say also that I'm amazed at how well the government retirement system treats its annuitants. I'm getting as much from my annuity now as I got when I was on salary here. This is hard to beat, you know. I see people in the medical professions making tremendous

salaries while they are active, but working like dogs and often not living long enough to enjoy their savings. So I have no complaint with the government system, and yet I have been in a position to compare my situation with those of my colleagues. I came up under Hrdlička, who expected his assistant to work. I had to account for every hour of my time, and he would see to it that I had a very good excuse for not being present or not working. I liked my work. I catalogued thousands of specimens when I was under him, and I thought nothing of, at the same time, coming in on weekends or at night and taking down those tiers of drawers looking for specimens I needed for my research. So I felt that the year was unsatisfactory if I hadn't six or eight publications to my credit, you see. Well, I would have had to do this to get a couple of hundred, you see. . . .

Attitude Toward Research with Collections (p. 164)

Well, this I think is my attitude toward work in the museum. I always tell my colleagues, "You won't get any new ideas, really new ideas, unless you go to the collections and look at the real evidence. If you depend on the literature for this sort of information, you are seeing that evidence through other people's eyes and the chances are, if you look at it yourself, you're going to see more than they saw." So the objects and the generalizations tie together, and I make it a point, whenever and wherever possible, to look at new material in the hope of getting some new ideas. . . .

Consultation with the FBI (pp. 165–166; 170–172)

STEWART: I know that the Justice Building was being built around the time when I came back from medical school in 1931, because I was very much interested in the progress of the construction. I remember seeing them putting in the piling as the site was excavated, and then gradually raising the floors and putting all of the stonework in place. Well, when that was finished the FBI moved in on the top floor, and if they had been coming to Dr. Hrdlička before that time, I was not aware of it. . . .

Well, this new building's presence across the street made it easier for the agents in the FBI laboratory to come over to us for help when they had skeletal material to be identified. I have no recollection, or any way of knowing, how often they came to Dr. Hrdlička because he was very secretive about this. He sort of felt that this was not for public notice, and so he wouldn't tell me. However, occasionally I would be aware of a visitor talking to him on forensic matters. Then when he retired and then soon died I, as the new curator, began getting visits from the FBI agents asking me to help them with their identification problems as Dr. Hrdlička had. Of course I was quite willing to do so. We went on from there. I've always been able to sort of gage the rise in homicides by the frequency with which the FBI agents would come in, and I'm aware that from the time I took over in '42 up to the time when I left the department their visits increased in frequency. Then when Dr. [J. Lawrence] Angel took over this role I was impressed that he seemed to be getting more cases than I had been getting when I left the department. So the rate of the receipt of this type of material has steadily increased, and I'm sorry that I never kept an exact record of this so that I could cite figures. I would like to be able to say how many cases I handled, but I never really tabulated them. I just took them as they came and dealt with them individually.

I found this practice very intriguing, and I developed some rules for dealing with it. I quickly made up my mind that I should not let the agents tell me where the cases are from because that biases one's opinion. . . .

I also learned from experience that if you're going to go on the stand and testify, you need to be able to report your conclusions against a background of knowledge as to what you're talking about. For instance, in age determinations from epiphyseal union, all that was available until the late 1950s was a table that Dr. [Wilton Marion] Krogman had produced for the FBI back in the late 1930s based on dissecting-room skeletons in Cleveland. Since few skeletons of young people were included, he had to estimate from X-rays and other means what happens in the growth of the young skeleton that gives you an idea of age. Growth takes place at the ends, or the epiphyses (caps), of the long bones, and the epiphyses of each bone solidify with the shaft always within limited ranges. By knowing just when they grow together, you can look at these points and estimate the age fairly closely.

Well, it was dissatisfaction with the basis for this method of aging that led me to suggest to the Army's Graves Registration Service that following the Korean War they let me examine the remains of the American soldiers and relate these growth changes more closely to age. Not only were these soldiers young, but their exact ages were known. You never see skeletons like that otherwise. So here was a unique opportunity, and that's why I succeeded eventually in persuading the army to send me over to Japan to work on these remains. Now my findings there are used widely, I think, as the best evidence on aging of adult American young. Also, the data showed that there's a considerable range of variation in the age of union of any epiphysis—more than Krogman had detected. You have to be very cautious about saying on the basis of epiphysis how old any individual is; you have to say he's somewhere between two points in an age range because we know that this process—the solidification of the epiphyses—takes place over a period of sometimes five years or more, and so you can get some individuals where this has already happened at the beginning of, say, the five year period, and others where it is only beginning to happen at the end of that period. You don't know where a particular unknown is in that range, and so you can be off by several years in your estimate. It's wisest just to admit this.

So I suppose that I've done as much as, or more than, most of the other American physical anthropologists to promote new information in the applied field relating to forensic matters. I've been able to do this to a large extent because of working with documented skeletons. The National Museum is an especially good place to carry on this sort of work. Now that we have the Terry Collection, we have a large series of documented remains from the American white and Negro population. We also have fetal and early pre-natal remains from hospital sources, and then, of course, we have archeological material which fills in some things the other series lack. So I find working here in the National Museum very advantageous for studies either historical or applied.

HENSON: Now, does the government status of the Smithsonian . . . do you think that had anything to do with the FBI coming here?

STEWART: Yes.

HENSON: Would the FBI have gone, let's say, to the American Museum of Natural History in New York?

STEWART: They could just as well . . . not just as well because it would have meant a trip to New York.

HENSON: Yes, but let's say if they were in the same part of the country.

STEWART: If they were across the street from the American Museum, they would have gone there rather than come down here, I think. There's only one question in my mind—would the American Museum have said, "Yes, we will do this for you, but we'll charge you for it."

HENSON: But what was the arrangement?

STEWART: We have never charged the FBI a cent. Our idea has always been that we are another government agency. We are supposed to give service to other government agencies. In return the FBI has always insisted that, if we need any help from them, they will reciprocate. In the early years before we had an X-ray machine, I did not hesitate to call them up and say, "I have a specimen I'd like to get X-rayed. Can you X-ray it for me?" And they'd always do it. . . .

Drs. Hrdlička and Stewart Assisting Smithsonian Staff with Medical Problems (pp. 184–186)

You wanted to mention also his role of doctoring here and when he came to the Institution. I had mentioned earlier that he maintained a supply of drugs that he dispensed. In addition, he was always available if anyone took sick anywhere in the department, or in the museum as a whole or in the Institution and would, when telephoned, immediately go and do whatever he could. [Background noise] Well, as far as I know, he had no license to practice medicine in the District [of Columbia]. Nor did I when I came back from medical school, but I found myself doing the same thing. In other words, if he wasn't available, I would get the call. If I got the call first, I would always try to get the caller to try to get Dr. Hrdlička because he outranked me and I thought he might feel that he was being bypassed. I didn't relish this job of first aid because of the pitfalls of not having a license to practice, and I soon adopted the policy of telling the caller to also call for an ambulance because I didn't know whether it was serious enough to warrant that, but at least I couldn't be charged with not doing the best I could. There were a couple of occasions that are perhaps worth recording.

In the days before the modernization of the museum in the sixties, the Division of Mammals was located on the ground floor, Constitution Avenue side of the west part of the main building. Nearby were some offices in which the members of the fish and wildlife branch of the Department of the Interior were stationed. Among them was an elderly scientist whose name I no longer recall—I've thought of him a number of times [Arthur Holmes Howell]. He was just a casual acquaintance so the name never really got fixed in my mind, but I recall coming back from lunch one day in 1940, and there was a call for me to come down to his room. Apparently they'd been trying to get either Dr. Hrdlička or me. I went right away, and as it happened Dr. Hrdlička and I arrived on the scene at the same moment. I deferred to Dr. Hrdlička and motioned

to him to take over. The gentleman was lying on the floor. Dr. Hrdlička, who by that time had had his first heart attack, apparently was very conscious of the heart as being a vulnerable organ when you got to that age. So he got right down on his knees alongside of this gentleman and put his head on the gentleman's chest to listen to his heart. While he was doing that, I was standing looking at this gentleman and I noticed that one side of his face was sagging, the arm on that side was flaccid, and the leg on that side also was flaccid. This reminded me immediately of a lesson that had been impressed on me in medical school—how the first thing you did was to carefully stand off and look at the individual, sometimes if you got too close you could miss signs that were visible at a little distance. We had had this impressed on us during a hospital "ward-round" when we were asked to examine patients. Of course we all got our stethoscopes out and began listening to the patients' lungs and hearts because it was a tuberculosis hospital. When the attending physician came around, he said to us, "Well doctors, what'd you find?" Well we began describing all the sounds in the chest. He said, "Didn't you see anything that's different?" We said, "No." He said, "Stand over here and look at that man." When we did—there was his whole chest, pulsating up and down—he had an aneurysm in there that we had been too close to see. This all flooded back on me, and when Hrdlička got up from the floor, shaking his head as if to say, "Poor man, he's had a heart attack," I said, "Doctor, come here and look. Notice that face, that arm, that leg." Hrdlička turned on his heel and walked out. Here was his student pointing out to him a medical fact that he had missed, and he must have been humiliated by it. [Laughter] Well, that was one of our rare encounters in this field. . . .

Stewart, the Portrait Artist (pp. 333–334)

Mrs. [Julia] Stewart's—first Mrs. Stewart's—aunt introduced us to painting. I took up painting then, and my wife went to the Corcoran Art School along with our daughter [Cornelia E. Stewart Klatzo]. Both graduated from there and I didn't; I learned from them. So I've been painting ever since. I have hanging on my wall here a portrait of Dr. Hrdlička that I did from a 1936 photograph that appeared in *American Magazine*.

Additional information and reprint requests:
D. H. Ubelaker, Department of Anthropology
MRC 112, NMNH
Smithsonian Institution
Washington, DC 20560