



Glass Cabinets and Little Black Boxes: The Collections of H. H. Wilder and the Curious Case of His Human-Hair Samples

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Abstract Harris Hawthorne Wilder, a professor of zoology at Smith College, was trained in anatomy and physical anthropology in Germany at the end of the 19th century. He taught at Smith College, a private liberal-arts college for women, from 1892 to 1927. Not unusual for the times, his interests in archaeology and anthropology were very broad. He excavated sites in what can be considered, at best, dubious ethical circumstances and created a wide-ranging collection of artifacts, human remains, and anatomical specimens. One of the more curious collections was of human-hair samples, which included “specimens” from students at Smith College, his own family members, and a small subcategory he referred to as “ethnics.” We chart his proclivity for collecting many items of an anatomical, archaeological, or anthropological nature, and focus on his human-hair samples to contextualize the nature of these collections in terms of late 19th- and early 20th-century views on race, ethnicity, and gender in anthropology. We take the position that to understand this collection more fully it is essential to know the life and times of its collector, including his role in the academic history of the Connecticut Valley, and we suggest that Wilder himself was conflicted as to its meaning and purpose.

Extracto Harris Hawthorne Wilder, profesor de zoología en Smith College, recibió capacitación en anatomía y antropología física en Alemania a fines del siglo XIX. Enseñó en Smith College, una universidad privada de artes liberales para mujeres, desde 1892 hasta 1927. Como no era inusual en esos tiempos, sus intereses en arqueología y antropología eran muy amplios. Excavó sitios en lo que puede considerarse, en el mejor de los casos, dudosas circunstancias éticas y creó una amplia colección de artefactos, restos humanos y muestras anatómicas. Una de las colecciones más curiosas fue de muestras de cabello humano, que incluían “especímenes” de estudiantes de Smith College, miembros de su propia familia y una pequeña subcategoría a la que se refería como “étnica”. Registramos su proclividad a recopilar muchos artículos de una naturaleza anatómica, arqueológica o antropológica, y nos centramos en sus muestras de cabello humano para contextualizar la naturaleza de estas colecciones en términos de los puntos de vista de finales del siglo XIX y principios del XX sobre la raza, el origen étnico y el género en la antropología. Tomamos la posición de que para comprender mejor esta colección es esencial conocer la vida y los tiempos de su coleccionista, incluido su papel en la historia académica del Valle de Connecticut, y sugerimos que el propio Wilder estaba en conflicto en cuanto a su significado y propósito.

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Résumé Harris Hawthorne Wilder, un professeur de zoologie du Smith College, a suivi une formation en anatomie et anthropologie physique en Allemagne vers la fin du 19e siècle. Il a enseigné au Smith College, un

collège d'enseignement des arts libéraux privé pour femmes, de 1892 à 1927. Ses intérêts envers l'archéologie et l'anthropologie étaient, comme plusieurs autres à l'époque, très vastes. Il a excavé des sites dans des conditions que l'on pourrait juger comme moralement douteuses au mieux et accumulé une vaste collection d'artefacts, de restes humains et de spécimens anatomiques. Une de ses collections les plus curieuses était composée d'échantillons de cheveux humains, lesquels incluaient des « spécimens » d'étudiantes du Smith College, des membres de sa famille et d'une petite sous-catégorie appelée « ethnique ». Nous organisons sa propension à recueillir de nombreux articles de nature anatomique, archéologique ou anthropologique et nous concentrons sur ses échantillons de cheveux humains pour comprendre la nature de ces collections dans le contexte des vues de la fin du 19^e siècle et du début du 20^e siècle sur la race, l'ethnicité et le sexe en anthropologie. Nous sommes d'avis que pour saisir cette collection plus pleinement, nous devons connaître la vie et l'époque de son collectionneur, dont son rôle dans l'histoire académique de la vallée du Connecticut, et suggérons que Wilder était lui-même indécis quant à sa raison d'être et son dessein.

Keywords history · physical anthropology · hair · science · race · gender

Introduction

While in a collections storage room in the anthropology department at the University of Massachusetts Amherst (UMass Amherst) in 2004, Kirakosian noticed a large cardboard box on a shelf. Upon opening it she found a number of small, glass-covered boxes, each containing a lock of human hair. Being naturally curious, she examined some of the boxes and the labeling on the bottom of each. She brought them to Swedlund's attention, and thus began a collaboration on this collection that has continued intermittently to the present. These hair samples were from the collection of Harris Hawthorne Wilder, a zoology professor who taught at the all-women's Smith College in Northampton, Massachusetts, from 1892 to 1928. Wilder's hair samples have prompted us to consider many questions. How did this collection come to be? What was the motivation behind H. H. Wilder's interest in hair? And, how can we contextualize this collection in terms of the times in which it was

formed and the broader themes of material culture in American archaeology and physical anthropology? Following on the UMass Amherst archaeological tradition, what could these hair samples potentially tell us about issues of race, gender, and inequality?

Harris Hawthorne Wilder (1864–1928) was a professor of zoology and anthropology at Smith College in Northampton, Massachusetts, from 1892 until his death. He was fascinated by science and all things anatomical from a very early age, and established a considerable collection of both human and non-human anatomical “specimens” that were eventually housed in his laboratory and in the Smith Anthropology and Zoological Museum in Burton Hall, the biology building. Many of the human specimens and archaeological artifacts were deaccessioned by Smith College and given to UMass Amherst between the 1960s and the 1980s (Harris Hawthorne Wilder Papers 2019).

In this paper we provide some biographical background on H. H. Wilder, situate the human-hair samples in his larger collection and body of teaching and research, and place the motivations and practices from which this collection resulted within the history of anthropological science. A further goal of this article is to problematize the scientific collection of hair from the standpoint of hair's meaning in the larger sphere of late Victorian and Progressive Era American culture. We argue that Wilder's hair collection most likely had a distinctive meaning for him personally as compared to his other anatomical and cultural objects, but that the hair samples are related to and not substantially different from mainstream practices of anthropologists in museums and academic programs in the late 19th and early 20th centuries. In this sense we provide yet another example, distinctive, but not unique, of the power of objects; about their meaning beyond their objective scientific value, and how they reflect and represent notions of difference in gender, race, and ethnicity (Stocking 1985; Pearce 1994; Peers 2003; Bouquet 2013). Our study of Wilder and his hair collection demonstrates how histories “are sometimes forgotten, sometimes memorialized, sometimes distorted, but always mobilized for a multitude of purposes” (Hall and Silliman 2006:2–3). Researching Wilder and his very material collection of hair engaged us with matters of scale, agency, materiality, meaning, identity, and representation, all themes shaping the way contemporary scholars come to understand the past in richly textured ways (Hall and Silliman 2006:7–15).

The Collector

Solon and Sarah Wilder welcomed their only child, Harris Hawthorne Wilder, in 1864 while living in Bangor, Maine (Harris Hawthorne Wilder Papers 2019). Solon was a music director, and Sally was the daughter of a physician (Pratt 1928:479). When Harris was four years old, the family moved to Cambridge, Massachusetts, to live with his maternal aunt, Lizzie Skinner, who was an “awe-inspiring figure” for young Wilder (Harris Hawthorne Wilder Papers 2019) (Fig. 1). Wilder’s collecting spirit was kindled early, and he received items from many family friends and acquaintances, including a human fetus from a physician (Wilder 1930). From a young age he appears rather obsessed with possessing human specimens for his growing collection—so much so that the first lines of a prayer he wrote when only six years old are as follows: “Our dear Heavenly Father, I want a human skeleton very much” (Wilder 1930). Several years later, in 1871, with his father’s health failing, the Wilders moved to live with Solon’s parents in Princeton, Massachusetts, where Solon died of tuberculosis in 1874.

In 1882, Wilder graduated from Worcester Classical High School, and, thanks to the financial support of longtime summer boarders at his family’s home in Princeton, he attended Amherst College. While there he majored in classics and zoology, studying under Dr. John M. Tyler (Pratt 1928:479) and Dr. Edward Hitchcock (Wilder 1930:72). After graduating in 1886, he taught biology in the Chicago school system for two years (Harris Hawthorne Wilder Papers 2019). When his paternal grandmother died in 1888, Wilder used his inheritance to attend the University of Freiburg, earning a doctorate in 1891 while working with Dr. August Weismann and Dr. Robert Wiedersheim. Shortly after returning to the United States, Wilder was appointed a zoology professor at Smith College thanks to a recommendation from his former Amherst College professor, Dr. Tyler.¹ Soon after joining the faculty, Wilder founded the zoology department and quickly raised

curriculum standards by requiring all zoology students to conduct both laboratory and fieldwork (Hamlin 2014) (Fig. 2).

At the turn of the century, while the department was growing and expanding, Wilder met Inez Whipple, one of Smith College’s first zoology graduate students. Born in Rhode Island in 1871, Inez graduated from the Rhode Island Normal School in 1890, later graduating from Brown University in 1900 and ultimately receiving her master’s in zoology from Smith College in 1904. They apparently fell in love after co-teaching “Anatomy and Physiology of Man” in 1906 (Harris Hawthorne Wilder Papers 2019). They were married later that year—he was 42 and she was 35 (Pratt 1928:480). The couple shared an enthusiasm for science and collaborated on many research projects. Inez was a scholar in her own right, becoming a full professor in Smith’s zoology department in 1914. They also traveled widely together throughout the 1920s for both teaching and research purposes, touring Egypt, China, India, Japan, southern Europe, and the West Indies.

Like many of his contemporaries, Wilder’s interests crossed the boundaries of anthropology’s emerging fields, taking particular interest in human biology and archaeology. He conducted fieldwork throughout western Massachusetts from 1904 to 1924 (Zimmerman et al. 1984) and taught numerous courses while at Smith, including “Animal Evolution” and “Human Evolution.” “Human Evolution” was soon renamed “Anthropology,” which introduced students to the comparative anatomy of “man” and allied mammals, comparative craniology and other racial features, prehistoric archaeology, ethnology, and the development of human culture (Harris Hawthorne Wilder Papers 2019). Wilder taught this evolution sequence for 17 years between 1910 and 1927. He taught at Smith for over 35 years, from 1892 until his sudden death of a cerebral hemorrhage on 27 February 1928 (Pratt 1928:479). He was also considered a pioneer in forensic science for his work on fingerprints and facial reconstructions (Wilder 1905, 1923b; Wilder and Whipple 1917; Stewart 1982; Buikstra et al. 2003). Wilder was esteemed by his colleagues and received many awards and honors for his work (Harris Hawthorne Wilder Papers 2019). Wilder was beloved by his students. He was remembered as a passionate and innovative teacher, even composing and performing amusing songs with zoological themes. His entertaining spirit went beyond the classroom; the Wilders welcomed guests at their home in town and at the “Wilder

¹ Smith College is a women’s college in Northampton, Massachusetts, founded in 1871. Growing out of the abolitionist movement, women’s colleges hoped to liberate disenfranchised groups and began to teach subjects to women that were previously constrained, such as law, science, mathematics, and philosophy (Smith College 2019). Although Smith College students certainly received an excellent education, it seems that decades of graduates did not tend to enter the paid workforce for various reasons. Regardless, Wilder taught rigorous zoology courses and showed no inclination to see women as inferior scholars.



Fig. 1 Harris Hawthorne Wilder. (Photo by A. J. Schillare, ca. 1894; courtesy of the Smith College Archives, Northampton, Massachusetts.)

Camp” on Mt. Toby. Wilder died at the age of 64, and Inez passed away the following spring.

Samples and Subjects

Wilder’s entire collection consisted of thousands of objects, only some of which found their way to UMass Amherst (Cole 1993). Many were zoological specimens of a variety of species, but he seemed to take a special interest in those of the non-human primates and, of course, human remains and cast material. Wilder and his wife, Inez (and some Smith students), were involved in the excavation, or retrieval from landowners and others, of numerous native human remains from the Connecticut Valley region surrounding Northampton, Massachusetts. These remains and any associated funerary artifacts residing at UMass Amherst have since been fully inventoried, reported, and

discussed with native stakeholders, and repatriated under the federal government’s Native American Graves Protection and Repatriation Act (U.S. Department of the Interior 2014).

His collection also included many scientific instruments for measurement and observation, including microscopes, anthropometric equipment, and fingerprinting equipment. Taken as a whole, it comprises a wonderful and powerful example of scientific collecting as it transitioned from the “cabinets of curiosities” of the late 17th and 18th centuries to those found in museums and academies of the 19th century, to the more systematic and “scientific” collecting that characterizes the late 19th and early 20th centuries. We return to this larger frame of reference below.

Wilder’s hair collection consists of three groupings: 29 were Smith College “alumna,” 4 were from the “Wilder family,” and 5 were “ethnics” (Fig. 3). Nearly every sample is housed in a small, black cardboard box with a glass top. A majority of these boxes are 3 × 3 in., while five are 4 × 5 in. (Fig. 4). On the back of each box is a label that includes the words: THE RIKER SPECIMEN MOUNT/Ward’s Natural Science Establishment,/84 College Ave. Rochester, N.Y., and on which information about the samples is written in pen. Although these constitute a collection today, these groupings were clearly collected at different times. The “Wilder family” samples were collected earliest, between 1874, when Solon Wilder died, and 1884, when Wilder was 20 years old. The “alumna” hair was collected from 1913 to 1922. Unfortunately, there are no clues as to when the samples referred to as “ethnics” were collected.

Interestingly, dozens of boxes include individual names (Fig. 5). This does make his hair collection different from his other collections, in which, not unlike research today, individuals’ names were kept confidential (Cole 1993:25). However, his inclusion of names on the samples has allowed us to learn the identity of many of these individuals. Samples 39, 40, and 41 were placed in envelopes and may not have been part of Wilder’s initial collection, as they were not recorded on the initial list, but found together in 2004. Two of these are labeled “Peruvian.” How Wilder acquired these is unknown. Also, two samples (28 and 29) are no longer part of the collection. This seems to have been noted by the omission of a check mark next to these samples by an unknown previous curator of the collection. The authors are unsure whether these particular samples were removed or missing before or after coming to the University of Massachusetts Amherst. Regardless, at the



Fig. 2 Professor Harris Hawthorne Wilder’s zoology-class laboratory in Smith College’s Lilly Hall, ca. 1895. (Photo courtesy of the Smith College Archives, Northampton, Massachusetts.)

time this paper was written, the Wilder hair samples totaled 38 on paper, 41 in theory, and 39 in reality.

We suspect that Wilder did not directly collect many (or perhaps even any) of these samples himself because they are not of a standard quantity or length. This adds to our belief that many if not all of the Smith College hair samples were given freely. For example, some are small snippets of hair, while others are larger clumps. If this had been a controlled sample or these hair samples had been *taken*, we assume Wilder would have taken or requested a certain number of strands from each individual for further study. With the Smith College students in particular, it appears that they might have clipped their hair privately and then offered it to Wilder. This would explain the varying amounts of hair in each sample, which would have depended on the owner’s discretion. This is also supported by the assorted hair ties within the collection. Most are tied with a thin black cord, although some are tied with colored ribbons.

We looked at the transcripts of all of the Smith College women who gave samples, although we were unable to find several. From these transcripts we learned that 17 of the 29 women took one or more zoology courses with Wilder between 1913 and 1922. Some additional subjects might have been asked for their hair because they were interesting “specimens.” For example, one “alumna” was described as having a mother who was a “Hawaiian princess” and a father who was “American,” while another was defined as a “twin of Helen,” although Helen’s hair does not appear to be in the collection.

Hair in the Victorian Imagination: How Full Thou Art of Memories, Severed Tress²

In order to better understand Wilder’s hair samples, it is important to consider the broader meaning of hair in the

² This is a line from the poem, “The Lock of Hair” (Sigourney 1860).

List of Human Hair Samples - H.H. Wilder Collection.

alumni	ethnics
✓1. Theodate Soule '17	✓31. Sora Baehre-Wiig (Norwe)
✓2. Helen Gulick '16 (no unknown)	✓35. Dorothy Neff (act 20) (Swiss-)
✓3. "Clarinda" Lowe (Hawaiian American)	✓36. Argale Kalfaian (Armen)
✓4. Elizabeth Hunter '16 (21)	✓37. A coolie
✓5. Antonette W. Clapp '17 (93)	?
✓6. Frances M. Putnam '16 (25)	✓38. Frances Flint
✓7. Anne Young '16 (23)	
✓8. Verona Rouse '16 (28)	
✓9. Margaret Alling '17	
✓10. Dorothy Sanjivyan '22	
✓11. Katherine King '16 (7)	
✓12. Esther May Merritt '17 (6)	
✓13. Katherine Wing '17 (no unknown)	
✓14. Pauline Starrett '15	
✓15. Nelle B. Ryan '15 (9)	
✓16. Gladys Atwell '17 (no unknown)	
✓17. Edith Dight '17 (18)	
✓18. Marion Sherwood '17 (3)	
✓19. Dorothy Carman '15 (31)	
✓20. Eleanor Wood. '16 or '17 (no unknown)	
✓21. Cornelia Bosch '18? (22?)	
✓22. Elizabeth Shirley '17 (12)	
✓23. Elizabeth Bardon '16 (4)	
✓24. Julia Renwick '17 (86)	
✓25. Isabel W. Harper '22 (1249) variation in color	
✓26. Margaret Woodward '14?	
✓27. Esther Crane SC grad stud psych.	
28. Veslis Seymour '17 (no unknown)	
29. Margaret Perkins '18 (hair of Helen '18)	} envelopes
<u>Wilder Family</u>	
✓30. Solon Wilder (father H.H.W.)	
✓31. Alice Hurd Skinner (cousin H.H.W., mother's sister)	
✓32. H.H. Wilder act 6	
✓33. H.H.W. Wilder act 20	

Fig. 3 The list housed with Wilder's human-hair samples; accession no. 1965-2-4041. (Image courtesy of the Department of Anthropology, University of Massachusetts Amherst.)

late Victorian period, which is when the earliest samples in the collection were taken and when Wilder was raised. During this period, hair was a prominent attribute and artifact. As today, hairstyles were a matter of artistic expression and class distinction; they could also signify

ethnic or racial identity. Unlike today, locks of hair were deemed more symbolic as mementos, keepsakes, expressions of affection, and an artistic medium. Hair of loved ones was kept in lockets, crocheted into jewelry, or used to weave elaborate wall hangings. These might



Fig. 4 Wilder’s human-hair samples; accession no. 1965-2-4041. (Photo by Alan C. Swedlund, 2015; courtesy of the Department of Anthropology, University of Massachusetts Amherst.)

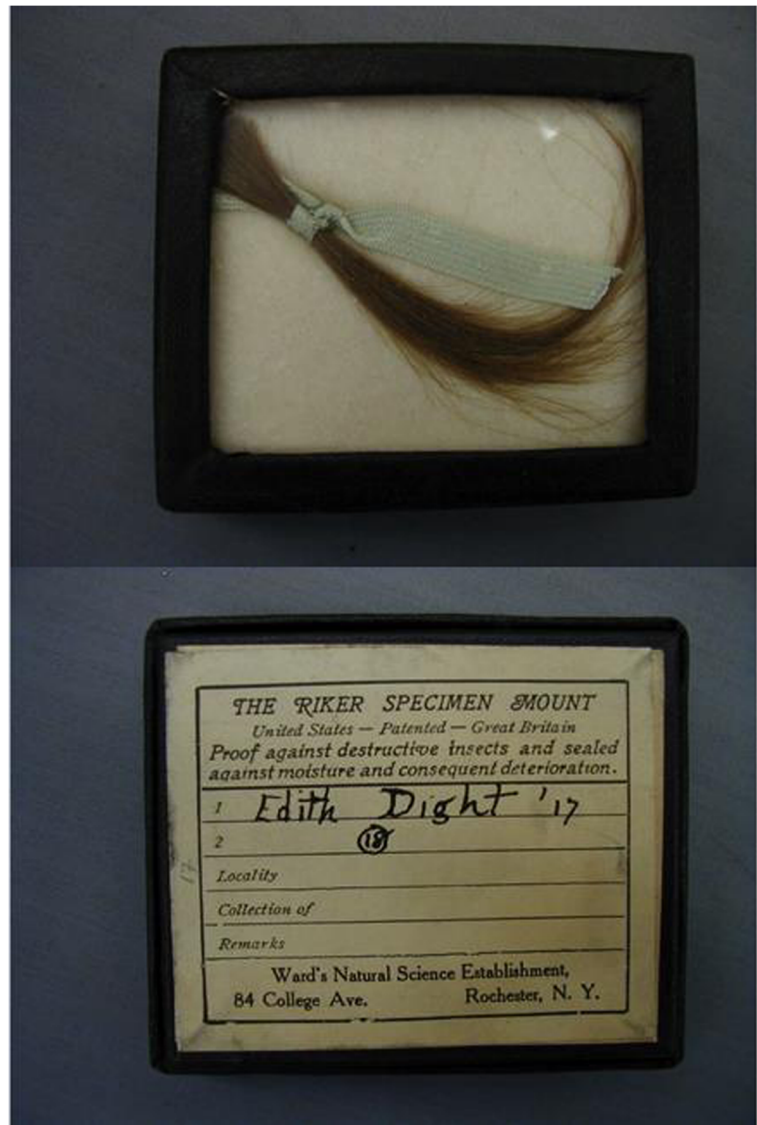
be augmented by ribbons, bows, beads, and other embellishments. Sometimes a person’s hair was displayed as an accompaniment to a photograph or a portrait of the revered person. During this period people might well ask someone for a lock of hair instead of an autograph.

Victorian writers fueled this obsession as well and most likely profited because of it, while focusing “so much attention on the physical properties of women’s hair: its length, texture, color, style, curliness” (Gitter 1984:941). Within Victorian literature hair is often regarded as powerful and is referenced pervasively. It was thought to show outwardly the internal characters of persons. Authors described and discussed women’s hair to excess and as an expression of their sexuality and sexual desires. In *Jane Eyre*, for example, a schoolmate of Jane’s is admonished for daring to have “immodest” curly hair. Her hair is summarily cut off as a warning to others, for only hair that is “arranged closely, modestly, plainly” is allowed at the school from that point forward (Brontë 1899:71). When women were imprisoned or hospitalized for offenses, such as prostitution, their hair was often cut off as well because of hair’s association with women’s sexuality and vanity (Logan 1998).

The Victorian culture of mourning placed considerable emphasis on bereavement and on expressions of condolence, consolation, and commemoration. If the embodiment of a deceased loved one in a memento or visual likeness was widespread in late 19th- and early 20th-century America, then probably no single item exemplified that embodiment more than hair (Harmeyer 2013). Literally a part of the deceased’s body, it carried the texture, color, and form of one of the person’s most distinguishing features. References even allude to the fragrant, lingering scent of a child or spouse. So popular was the collecting and embellishment of locks of hair from a living or deceased loved one that some women specialized in making hair jewelry and art. However, the Victorian fascination with hair ran deep and wide, extending well beyond mourning jewelry to feature among the living in expressions of friendship and intimacy.

A product of the time in which he lived, Wilder’s early fascination with hair and its relation to race is evident in his book, *The Early Years of a Zoölogist: The Story of a New England Boyhood*, where he recalls a boyhood friend because of his striking hair:

Fig. 5 A hair-sample close-up (*front and back*), Edith Dight '17; accession no. 1965-2-4041. (Photos by Alan C. Swedlund, 2015; courtesy of the Department of Anthropology, University of Massachusetts Amherst.)



He had long white hair, and it occurred to me what fun it would be to put my fingers in this, but in doing so, I overbalanced myself and rolled over on my back. I shall always remember how my fist looked, as I saw it from below, with wisps of Frankie's white hair clutched in my hand, also how he screamed. Perhaps this indicated that I favored the Secession, since Frankie was the Vice-President's son, associated with Abraham Lincoln. Mrs. Hamlin used to come over to my mother's and cry for fear that her husband would be assassinated, as many letters threatened. Hannibal Hamlin was very dark in skin and hair, and many Southerners thought that he had Negro

blood, but his little son's hair was light enough I am sure, because I tested it. (Wilder 1930:3)

Woven throughout the book, a continuing theme is hair and race, as he recollects one memorable haircut where "[t]he barbers were Negroes and I talked to them" (Wilder 1930:16).

Wilder had many boyhood friends, yet recalls a special female friend, May, who left a lasting impression on many of the boys in the neighborhood after she spent a summer in Princeton. Many of the boys gave her small gifts when she left, but, as Wilder (1930:35) states: "The more sentimental of them exchanged hair with her, and were quite desolate for a time." This exchange no doubt

had special significance when it involved the opposite sex. Wilder also remembers his father's death as he writes:

One night, when he went up to bed, he walked very slowly, a step at a time, and soon after I was sent for by my mother, who said that I was not to cry or make any disturbance. I was then put to bed in my grandmother's bed, and then, a little later, my mother came in to say that my poor father was dead. She cried like a little child, and then came the strange scenes following a death. (Wilder 1930:21)

Perhaps one of these “strange scenes” included cutting a lock of his father's hair, an act that might be regarded as macabre today, yet was common in the United States during the late 19th and early 20th centuries. We suggest that Wilder's scientific study of hair cannot easily be detached from indications of his early interest in hair and the wider cultural symbolism of hair during his lifetime.

Anthropology, Eugenics, and Anthropometry

As is well documented, Victorians also held a fascination with science and all its possibilities (Brantlinger 2011), which, at times, became entangled with their love of hair. Quite broadly, many felt “the methods and results of science were the primary avenues to the understanding and control of nature” (Paradis and Postlewait 1985:xii). Artifacts and human physical characteristics were facts that could be observed objectively, and they would reveal the natural order. As Gould notes, the fact that “science is rooted in creative interpretation” was an alien concept (Gould 2006:106). We know now that data were manipulated to prove that White males were the fittest and rested atop the evolutionary ladder.

Archaeology and physical anthropology gained wide acceptance during the Victorian period, displacing linguistics and ethnology with their bodies of data and more scientific trappings (Stocking 1987:262). The 1859 publication of *Origin of Species* had a revolutionary impact on anthropology because of Darwin's ideas and, more importantly, the distortion of his ideas by the social Darwinists, who corrupted Darwin's notion of fitness into the belief in “survival of the fittest.” Among the physical

anthropologists, hair became yet another trait that might typify racial and gender identity, and identify racial and ethnic differences that would speak to questions of fitness.

Eugenics, which was seen as “an attempt to compensate for the failure of natural selection to operate under the social conditions of advanced civilization,” reached a fever pitch in the early decades of the 20th century in America and abroad (Stocking 1987:145). Even hair had a strong tie with eugenics. Because of its relation to the burgeoning field of anthropometry, early hair research took off during the second half of the 19th century. The scientific study of hair in American anthropology reached its peak in the 1920s, coinciding with the time of heightened interest in eugenics and in the identification of race (Hooton 1931; Gould 2006).

Wilder's training in Germany, and the fact that he acquired a *Haarfarbentafel* (hair-color table) from Germany for his lab (Fig. 6), suggests he was well aware of Eugen Fischer's 1907 classification of hair for racial identity purposes (Fischer 1907) and quite possibly of Fischer's eugenics project.³ In Wilder's book, *The History of the Human Body*, he notes that “there is much variation in the hair of the head, a character of considerable value in ethnology” (Wilder 1923a:102). Wilder also contends that “hair may be compared in a number of ways: general appearance, size and shape of the single hairs, color, length, distribution and amount, in all of which respects there are important racial differences” (Wilder 1926:317).

There are more references to hair in Wilder's published works, as well as descriptions of the way to measure and classify hair, which are probably best represented in his book *Pedigree of the Human Race* (Wilder 1926:318–319). He presented a population index for hair and described the process as follows:

This difference, is precisely obtained by measuring under a microscope the dimensions of cross sections of individual hairs, obtaining an average of many such measurements, and then expressing

³ Fischer was not the first to create a system for measuring hair-color variation (Broca 1865), yet Wilder refers solely to Fischer's system in his work. Fischer created the *Haarfarbentafel* “to help him determine the racial and hereditary characteristics of people” (Challis 2013:19). He gained some notoriety for his work on mixed-race populations in what is now Namibia, referred to as the Basters, some of whom he had sterilized (Challis 2013). Shortly after this work, he opened an “institute for racial hygiene in Berlin in 1908” (Challis 2013:19). There he continued to sterilize individuals of “mixed heritage” and has also been “linked to the Hadamar Clinic where the murder of the ‘incurably sick’ was carried out” (Challis 2013:19).

this in the form of a proportion, in which the length, or longer diameter, is taken as 100, and the shorter diameter compared with it. This gives the following:

$$\text{Hair index} = \frac{\text{shorter diameter} \times 100}{\text{longer diameter}}$$

Wilder also explains how “the thickness of the cranial hair has been ascertained” (Wilder 1926:321), continuing that it “is done by counting the hairs upon a number of square centimeters of scalp surface and obtaining an average. By this means it has been ascertained that the Japanese have upon the scalp 256–286 hairs per square centimeter, and the Ainu but 214” (Wilder 1926:321). However, it seems that it “has not been yet shown to have any definite ethnological significance, and is probably largely an individual character” (Wilder 1926:321).⁴ He goes on to explain that a “sample set of hair colors (*Haarfarbentafel*) representing 30 different shades, has been constructed by Fischer and is obtainable through Hermann of Zurich” (Wilder 1926:323) (Fig. 6). He also describes the general appearance of hair as straight, wavy, curly, or wooly.

We did go to some lengths to see whether we could correlate Wilder’s numbering system of his hair samples with any of the indexes or color-shade scales he described or may have been available to him. Circled numbers were on the backs of 17 “alumna” sample boxes.⁵ Of the 17 numbers, 16 are either one or two digits, ranging from 3 to 93. The 17th number was four digits (1249). This sample (No. 25) mentioned specifically that the hair showed a “variation in color.” When we sequenced the circled numbers on the 16 boxes so identified, we deemed “size and shape of the single hairs” as the most likely trait that Wilder was estimating with these samples. This was fairly evident when we placed the 16 hair samples in numerical order. The hair size and shape progressed from what we would call very fine to very coarse (from 3 to 93).

The numbers 1–38 are written in light pencil on the backs of the sample boxes, which is the same medium used for the checks next to the numbers in the



Fig. 6 Eugen Fischer’s *Haarfarbentafel* (hair-color table). (Photo, Bildarchiv Preussischer Kulturbesitz, Berlin/Fritz, Carl 1937/Art Resource, New York.)

paperwork found with the samples. This is a secondary series. All other information on the samples is labeled in black pen. In our opinion, these samples were numbered 1–38 some time *after* they were collected. Perhaps this happened as late as 1965, which is the year that the anthropology department at the University of Massachusetts Amherst accessioned the collection from Smith College.

The tendency to separate, categorize, and classify these apparent differences was no less a pattern for human hair than it was for other physical traits and for archaeological artifacts. Characteristic of most classificatory systems, for hair the categories themselves can become unstable and the methodologies imprecise, judgmental, and subject to inter-observer errors, or as De Matos (2013:125) explains: “[T]here was no numeric correspondence between one scale and another: different researchers used different scales, and there was no objective correlation between one author’s scale and another.” In addition, hair research, as it related to racial categorization, appears to have fallen out of favor in the United States soon after Wilder’s death. After reviewing several hair studies of the period, Earnest A. Hooton might have sealed the fate of racialized hair research,

⁴ Given Wilder’s training and the way in which “ethnology” was used at the time, it undoubtedly refers to evolutionary notions of racial and ethnic difference; see Stocking (1985:239–245).

⁵ To see the list of numbers, refer again to Figure 3 and see these numbers in parentheses after select “alumna” names. It is not entirely clear that these numbers were Wilder’s notations, although it does appear likely.

proclaiming that, while “hair color is a hereditary and non-adaptive character it is not very useful for purposes of racial diagnosis” (Hooton 1931:455).

These samples have defied simple categorization for several reasons. First, they represent at least three different contexts. While these human-hair samples could be seen as a relatively coherent collection as compared to the larger collection of Wilder’s, which included zoological objects, Native American archaeological and human remains, as well as reconstructed human busts and collections of fingerprints, they are complex in origin and purpose. Secondly, the hair samples are hard to categorize because Wilder appears to have collected hair somewhat indiscriminately, collecting only 29 hair samples from his students over a decade, but also adding family members and “ethnics.” Why did he collect only 29, when he must have known that “accurate” hair studies “must be extended to a very large number of individuals” (Ellis 1902:27)? These samples also elude understanding of his classificatory interests because Wilder never provided laboratory notes nor published anything on them. Perhaps these hair samples simply filled a niche in which Wilder collected these oddities or pieces of interest in his pursuit to catalog the complexities and unique variations within the human species. In this sense, they were more like a collection of various beetles in a cabinet of curiosities than a scientific collection.

As noted, to our knowledge, Wilder never published anything directly focused on his hair samples. Perhaps the sample was deemed too small or the challenges too large for his liking or due to his many other research interests, including the physiology of amphibians, the science of dermatoglyphics, anthropometry, and southern New England Native Americans (Cole 1993:7). Was it possible that Wilder was trying to come up with his own system for measuring and categorizing hair in some way, which he abandoned? Two years after he likely collected his last hair sample, Wilder and Pfeiffer (1924) published a paper on the bodily proportions of 100 Smith College women. Had Wilder let go of his interest in women’s hair to take up this new larger project—the anthropometry of women’s bodies?

The intersection of race, age, class, and gender cannot be ignored with the “alumna” samples. While Wilder may have seen his hair samples as specimens to add to his collection, it is also important to reiterate that, when these samples were collected, a lock of hair was likely never *just* a lock of hair. Perhaps to Wilder his

simple request for hair was innocently and exclusively a request for a scientific specimen. Nevertheless, it was minimally also about race and gender. For Wilder’s Smith College students, his requests for hair may have been deemed primarily as volunteered participation in a scientific study, but, assuredly, to at least some of those young students and even to Wilder himself, the request was encoded with other meanings as well. Students attending a women’s college in the 1920s would have been well aware of the sentimental meanings of hair, at least, and perhaps their parents also had locks of their hair in a Bibles, scrapbooks, or diaries.

Related Studies

A related study that came to our attention while doing this work is by Laura Peers (2003), writing about Beatrice Blackwood’s collection of Ojibwe hair housed at the Pitt Rivers Museum in Britain. Blackwood, who had collected her samples between 1924 and 1927 while conducting fieldwork in the United States, spent her time with the Ojibwe “measuring skin color, taking hair samples, obtaining genealogical data on her subjects, taking photographs, and making notes” (Peers 2003:80). While there are many theoretical parallels between Wilder’s and Blackwood’s samples, one difference is that Blackwood collected only Native American hair samples (mainly from children in boarding schools), while Wilder collected hair samples mainly from young adult women of predominately European descent. Peers’s work has made us reconsider individual agency in relation to these two collections. While we have argued that the “alumna” likely felt compelled to give their hair to Wilder or, through their educations, came to share his values of collecting in the name of scientific inquiry, Wilder’s samples cannot be compared to Blackwood’s samples, which were certainly taken from minors who had been forcibly removed from their families (who had also been forcibly placed on a reservation) and actively assimilated. Hair cutting in many native cultures also signifies mourning and likely was a rather confusing and traumatic experience for native boarding-school children. Hair as memento and keepsake was largely a Western/Victorian phenomenon not shared by native tribes.

Like Wilder, Blackwood also showed ambivalence toward her hair samples upon returning from the field. This may be due to her realization that they had little

research potential. Like Wilder's samples, Peers (2003:80) explains that, while "collections embody the intent of their collectors, this one suggests a great deal of ambiguity, and changing meanings and intentions over time." Taken together, Wilder's and Blackwood's collections are perfect examples of the collection of human specimens as part of ethnographic or other anthropological work. With this said, it appears as if both researchers were more interested with the "process" of collecting and possessing samples for their research potential vs. actually conducting and presenting their research. In other words, was the end result to possess samples, to gather data, and to grow their collections? Given the fact that neither collection led to any publication, should they be seen as personal curios rather than scientific specimens?

The Broader Intellectual Contexts of Wilder

This case study serves as a prismatic lens that has helped us see how the history of anthropometry was connected to key themes within historical archaeology, as outlined by Hall and Silliman (2006:7–15): scale, agency, materiality, meaning, identity, and representation. With our case study, we also see these themes intersecting in unique ways.

Though we have focused on one collector, H. H. Wilder, and one part of his vast collection, we have highlighted the larger forces at play. To be clear, Wilder was one of several academics and amateur naturalists and archaeologists, working in the Connecticut River valley at this same time, who were active in excavating and analyzing human remains with a similar racial lens (e.g., Edward Hitchcock, Jr., of Amherst College and George Sheldon, amateur archaeologist and historian of Deerfield, Massachusetts). Wilder thus is representative of both a local community of collectors as well as a much larger European American fraternity. Since our chance encounter with Wilder's hair samples over a decade ago, we have attempted to situate this collection within both its local and more global time and place. Key outcomes to which this research calls attention are the complex and misguided history of anthropometry and the collecting, measuring, and typologizing frenzy that took hold in, but was also influenced by and extended well beyond, the Connecticut River valley; see Bruchac (2007) and Ewen and Ewen (2011). The early 20th century was a temporal extension of the

scientific positivism and data-collecting practices that characterized most of the century preceding. The study of racial and sexual variation was nearing its zenith in anthropology. No datum was too small or too trivial, even fingerprints and earwax were fair game for collection and racial classification (Kidd 2006). However, in the broad spectrum of scientific data collectible from the human body, hair possessed a special place. This collection also opens a window to the "scientific" theories surrounding race and ethnicity in the late 19th and early 20th centuries. During that time, the color and form of human hair were of considerable interest, as they were related to racial and geographic distributions. European races and "ethnics" were evaluated for the color, texture, waviness, and bodily distribution of hair. Hair was "straight," "wooly," "wavy," "fine," and "coarse."

Creating expansive collections and sound typologies was a broader goal of anthropology at this time as well, and was the focus of each of the subdisciplines of anthropology. These typologies have long been historicized and critiqued, although their mark remains (Hart 2004; MacLaury et al. 2007; Pauketat 2007; Ewen and Ewen 2011; Kirakosian 2014; Sussman 2014). As Kirakosian (2014:9) has argued: "Typologies should have *sharp* boundaries and *consistent* definitions as they are meant to communicate complex concepts quickly and easily." With hair color, we see fuzzy boundaries at best, around which researchers historically debated, as with the break between brown and blonde hair. The history of each subdiscipline in anthropology shares a peculiar fascination with color as well, whether related to linguistic terms, soil, or race. Was it not the complexities of color that drove Franz Boas to the Arctic and a life-long pursuit of the cultural situatedness of these and other seemingly natural categories (Müller-Wille 1998)? Wilder lived in a typological heyday, where everything, from pottery and projectile points to bones and hair, was being studied and typologized to assess race and culture, often with fraught results.

When thinking in terms of scale, we also are reminded that each hair sample came to represent, for Wilder and others, a much broader group of individuals, as is seen with his labels "Armenian," "Hawaiian princess," and "Norwegian." As such, Wilder's collections appear to be somewhere in between a "cabinet of curiosities," defined as "unsystematic and idiosyncratic in composition" (Ames 1992:50), and the scientific-anthropological collections that came much later. These later anthropological collections focused on

“comparative themes” and were presented “as if they were specimens akin to those of natural history” (Ames 1992:51). Wilder’s hair samples also show “a classificatory impulse” that is more in line with “the Victorian museum, in contrast with the unruly randomness of the Renaissance cabinet” (Pascoe 2005:60).

Although largely writing about the collecting of native human remains, Margaret Bruchac (2007:107) sees collectors at this time, including Wilder, as having “deep emotional attachments to their collections.” Although we cannot be sure, Wilder may have added some of these hair samples to his displays when he founded the “Smith Anthropological and Zoological Museum,” although these largely contained native materials and human remains, as well as zoological specimens (Bruchac 2007:115). We also agree with her insights into the nature of collecting, leading many collectors in the Connecticut River valley and beyond to fetishize their collections. Many collectors at this time saw their specimens as “stand ins” for (and even the embodiment of) living people or ancestral communities, able to speak on their behalf (Bruchac 2007:106–126). These samples, although taken from one person with a particular ethnicity, came to represent the whole ethnicity—as with any type, differences were *maximized* between the types and *minimized* within a type. Wilder clearly objectified living people and ancestral communities throughout his career, seeing them as “specimen rich.” From here, we argue Wilder saw hair as one of many human traits potentially holding the answers about human diversity, which only he and other trained scientists could coax out through proper study.

Conclusions

The hair samples had many meanings for many people, and it is undeniable that hair, more generally, continues to fascinate and evoke meaning into the 21st century. For Wilder, we have braided a complex story about this collection over the past decade—where his collection serves as a moniker for science, while it is also a sentimental collection that linked him to many chapters of his life, as a son, a teacher, and a world traveler. The collection combines evidence of his boyhood fascination with

hair, an attempt to be systematic to aid his understanding of “hair science” and hair classification, and, quite possibly, a confounded effort to both collect samples from his students while, at the same time, perhaps picking those subjects on both convenient and sentimental grounds.

Identifying his subjects by name is a complicated issue in these times of protecting the rights of human subjects and ensuring anonymity to individuals participating in a research project. However, by identifying his subjects by name Wilder gave us a window into his research that has permitted us to learn something of who they were and their relationship to Wilder as a professor and scientist. He may also have thought that, as privileged young women at a private women’s college, their status protected them from any adverse impacts of their participation. Moreover, their status may have earned them the right to be named, as opposed to individuals deemed as “Other,” as would be the case with the Peruvian hair samples. Situating these women as subjects generates questions we aim to pursue in our own future research.

For the women of Smith College the effects, if any, of this genre of study would be negligible, but that would not necessarily be the case for other subjects. While these and other collections share a certain existential physicality, the trove of tools, manuals, photographs, reconstructions, exhibits, and archival records are all part of an anthropometric stew. Their material traces are only part of the legacy left behind, however. In many of the subject and descendant communities from which these objects and remains were drawn, the effects of this misguided science have had damaging social, psychological, and spiritual consequences.

These are the ways in which Wilder’s hair samples speak to us. For us, these hair samples have considerable research potential, although certainly not as Wilder initially intended. Through this collection we have come to know the collector much more so than the collected.

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