Petrie's Head: Eugenics and Near Eastern Archaeology

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In the annals of Near Eastern archaeological history and folklore, the life and achievements of William Matthew Flinders Petrie, even today, loom large. Petrie, whose gaunt, bearded image has been a familiar icon in archaeological textbooks for decades, is widely recognized by scholars as one of the founding fathers of the discipline. In that sense, he can be said to have helped establish the mainstream of a major branch of world archaeology. Petrie’s 1890 excavation at Tell el-Hesy in southern Judea is almost universally celebrated as the official date of the beginning of “modern” archaeological research in the Holy Land (e.g., Albright 1957:49–52; Wright 1957:23–25; Schoville 1978:87–89; Mazar 1990:11; Biran and Aviram 1993). Indeed, conventional wisdom credits Petrie with being the first to demonstrate the importance of stratigraphy and artifact typology in Near Eastern excavation methodology, thereby laying the groundwork for all subsequent mainstream Near Eastern archaeological research (e.g., Callaway 1980, Fargo 1984, Drower 1985).

There is no question that Petrie’s achievements within the discipline he helped create were impressive. From the time of his arrival in Egypt in 1880 at the age of 27 to his death in Jerusalem in 1942 at age 89, he excavated more than sixty of the most historically important—and richest—sites in Egypt and Palestine, published well over 100 excavation reports, general works, and monographs, and wrote almost 450 articles and about 400 reviews (Uphill 1972). His importance to Near Eastern archaeology, however, goes far beyond mere numbers. Dr. Valerie Fargo, project director of the renewed excavations at Tell el-Hesy (1970–1983), went so far as to assert that Petrie’s methodological innovations “formed the very foundation of the work of all who followed him” (Fargo 1984:222).

Yet like so many other founding fathers, Petrie has also become the subject of colorful legends, whose folkloristic exaggerations often obscure a realistic view of his intellectual contribution to Near Eastern archaeology. Generations of archaeology students have been treated to tales of his uncanny instinct for choosing rich sites that other scholars had rejected; of his some-
times tyrannical control of staff and workers; and his outlandishly spartan lifestyle in the field (Drower 1985). Perhaps the most famous of the Petrie legends is, at least at first hearing, unconnected with digging or discovery. For it has become an oft-told anecdote among students of Near Eastern archaeology and visitors to Jerusalem that beneath the headstone marked with an ankh-sign and simply inscribed "Flinders Petrie" in the Protestant cemetery on Mount Zion lies a body... without a head.

This is not just an archaeological ghost story. Although several bizarre and unreliable versions of the story of Petrie's decapitation are familiar to scholars who have lived or worked in Jerusalem,¹ the story does have a basis in historical fact. According to Petrie's student and biographer, Margaret Drower, when the elderly and ailing Flinders Petrie was admitted to the government hospital in Jerusalem in the autumn of 1940, he requested that—should he not recover—his head be donated to the Royal College of Surgeons in London (Drower 1985: 424). And so it was done less than two years later—at the time of his death. Petrie's head was surgically removed by the Jerusalem hospital director, placed in a jar, and preserved with formaldehyde. Because of the wartime restrictions on merchant shipping in the Mediterranean, it was not possible to send the jar to England immediately, but in the autumn of 1944, it finally reached its destination in London, exported from Palestine with the cooperation of the director of Palestine Department of Antiquities, Robert Hamilton—in a box labeled as an antiquity.²

Why did Petrie donate his head to science? Drower mentions two reasons (1985:424). First, she suggests, Petrie was anxious that his head be studied as a specimen of a "typical" British skull. For the second reason, she quotes one of the attending physicians as expressing the hope that a physical examination of the great archaeologist's brain tissue might be able to "reveal some of the reasons for the remarkable capacity and retentive memory" Petrie had, even up to the day he died. Petrie's decision to donate his head to science is today often dismissed as an old man's eccentric whim, but I hope to demonstrate in this paper that Petrie's deathbed wish was entirely consistent with his lifelong belief in the power of race and heredity. I will further argue that some of Petrie's most important archaeological interpretations and methodological advances were profoundly shaped by this belief. Moreover, I will suggest that the story of Petrie's head can today serve as a cautionary tale for how intellectual—or in this case, archaeological—mainstreams may conceal within them philosophies or ideologies that have, over the course of time, become discredited or marginalized.

The particular philosophy so important in understanding Petrie's career is a late-nineteenth century racialist doctrine known as "eugenics"—a field of study, speculation, and biological engineering that was both popular and influential in England, Germany, and the United States until the Second World War (Higham 1965:150–153; Gould 1981; Kevles 1985; Proctor 1988). The term "eugenics" was coined in 1883 by Sir Francis Galton, a respected gentleman scholar in late Victorian England, world traveler and first cousin of...
Charles Darwin, who sought to apply the principles of "natural selection" to the improvement of the human race (Cowan 1972; Forrest 1974; Fancher 1983; Stocking 1987:92–96). Although eugenics did not arise within an established disciplinary framework, its influence was enormous, due both to the author's powerful social connections and the ideological implications of his work (Cowan 1985).

According to the genetic theory first detailed in Galton's most famous book, *Hereditary Genius: An Inquiry into its Laws and Consequences*, various racial groups possess varying levels of inborn intelligence and other mental abilities—linked to their varying physical characteristics (Galton 1869:336–362). The ability of each race, so the theory went, could be measured to provide a clear hierarchy of racial groups, ranked by such criteria as intelligence, moral character, ambition, and creativity. Like the phrenologists before him, Galton had no doubt that these qualities were manifested in physical characteristics, and could thus be documented and measured precisely. The significance of racial differences was, in the minds of Galton and his followers, enormous. The movement of history, they contended, was propelled primarily by hereditary inequality—with "superior" races naturally dominating the "inferior" ones.

Galton, however, did not envision this scheme of inequality and domination as static. He believed that uncontrolled interbreeding between "superior" and "inferior" races led inevitably to the degeneration of the former, and to their eventual conquest by yet purer and superior racial groups. The thrust of eugenics was therefore not strictly historical; its main field of interest was the future. Galton and his followers actively opposed trade unionism and social welfare legislation for the British working class and the "inferior" immigrant races (primarily Irish, Jews, and Italians) then streaming into the country. They believed that England could stave off impending, disastrous racial degeneration only by careful "weeding" of the national "germ plasm," as the nation's genetic pool was then commonly called (Kevles 1985). This weeding was to be effected through strict supervision of marriage and reproduction within the native British population and tight restriction of immigration from abroad. In arguments that would reappear repeatedly at times of economic stress, the eugenicists argued that the abolition of most social welfare legislation would not only reduce an unfair burden borne by productive taxpayers but also allow the supposed "laws" of competition and natural selection to work freely in British society.

William Matthew Flinders Petrie came to the eugenics movement through a circuitous intellectual course. A sickly child, Petrie was educated at home by his middle class parents. His father, a freelance surveyor, inventor, and active member of a nonconformist Protestant sect, imbued Petrie with a fascination for ancient history and a particular obsession with Piazzi Smyth's quasi-religious doctrine of pyramidology (Petrie 1874; Tompkins 1978; Drower 1985:27–30). Growing up as a largely self-educated polymath, Petrie was quite clearly out of the intellectual mainstream of Victorian England, where
university degrees had already been recognized as a primary criterion of academic respectability. Petrie had none. In fact, his decision in 1880 at age 27 to travel to Egypt at his own expense is ample evidence of his unconventional archaeological agenda. Deeply influenced by both biblical and historical determinism, Petrie was determined to undertake a detailed survey of the pyramids to assess their true symbolic or prophetic significance.

As it happened, Petrie’s first project in Egypt completely undermined his faith in the theories of Piazzi Smyth, for Petrie’s meticulous survey of the pyramids ultimately proved that many of Smyth’s most important measurements were wrong (Petrie 1883). Yet while Petrie lost his faith in pyramidology, eugenics proved to be an attractive alternative with its own sweeping, deterministic theory of history. In fact, in 1880, shortly before leaving for Egypt, in response to Galton’s public request for information on the hereditary gifts of native Britons, the 27-year-old Petrie had written a letter to Galton detailing his own quite impressive mathematical ability (Drower 1985:68, 476–477). Galton, always on the lookout for examples of unusual intelligence, was duly impressed by the self-educated young man and subsequently described Petrie as a mathematical genius (Galton 1883:95).

For Petrie, eugenics offered a way to reconceptualize himself as an insider, not an outsider. And in the colonial atmosphere of Egypt in the 1880s, it was a powerful ideological tool. Just two years after Petrie’s arrival in Egypt, in 1882, the British invaded. The ease with which the British forces overran the country was widely seen (at least in England) as a substantiation of British racial vigor, a source of pride to all Englishmen, everywhere. Petrie, already a strong supporter of the idea of eugenics in the present, soon became one of its most eloquent advocates for the remote past. In 1883, after completing his Pyramid Survey, he was appointed an explorer for the British-funded Egyptian Exploration Society and in his early excavations at the Delta sites of Tanis, Naucratis, Nebesia, and Daphnae, he interpreted the great quantities of imported Greek pottery as evidence of earlier episodes of European and Middle Eastern racial contact, and conquest (Petrie 1890a:271–273, 276–277; Drower 1985:65–104).

In the meantime back in England, Francis Galton recognized the need for more extensive detailed statistics in order to substantiate his far-reaching genetic theories, and in 1884 opened what he called an “anthropometric laboratory” in London at the South Kensington Science Museum (Kevles 1985:14). In subsequent years, the skulls, height, weight, arm span, and even breathing power of thousands of visitors—schoolchildren, workmen on holiday, and vacationing families—were measured to provide a more accurate reading of the national “germ plasm.” Because Galton was convinced that racial types remained stable over millennia, he needed anthropometric data on ancient populations as well. He therefore obtained the services of the temporarily unemployed Flinders Petrie to collect accurate measurements and photographs of the ancient Egyptians, Libyans, Hittites, Syrians, Nubians, and Bedouin, as
they were depicted in relief on the various temple walls throughout Upper Egypt (Drower 1985:106).

The result of this eugenical expedition was Petrie's book *Racial Types from Egypt*, published in 1887, in which he began to apply Galton's modern ideas about racial mixture and the stability of types to archaeological material (Petrie 1887; see also Petrie 1888). Even after Petrie resumed his career of excavation—indeed for the rest of his life—the racial element remained central to his interpretation of ancient history and material culture remains. In 1887, he discovered a vast cemetery of Roman-period mummies with painted portraits at Hawara in the Fayyum and reported on what seemed to him to be the obvious mixture of native Egyptian and western anatomical types (Petrie 1888:130; Petrie 1889). And in 1888 in the Middle Kingdom levels at Illahun and the New Kingdom tombs at nearby Gurob, Petrie perceptively recognized the presence of Bronze Age Aegean pottery (Petrie 1890a:273–277; Petrie 1890b; Petrie 1891a). This was a truly impressive archaeological deduction, for Mycenaean pottery was still virtually unknown in Egypt and the Minoan culture of Crete would not be discovered for another twelve years. Yet for Petrie the principal significance of these pottery finds was racial: he termed the Aegean pottery "one of the great prizes we have been waiting for, the contemporary remains of the western races in their earliest contact with Egypt" (quoted in Drower 1985:149).

Petrie's initial historical theories in Egypt were based on a collation of finds from widely scattered sites. But his employment by the Palestine Exploration Fund in 1890 and his subsequent work at Tell el-Hes a in southern Judea confronted him with the challenge—and opportunity—of testing and ultimately illustrating Galton's theories of racial conquest and conflict at a site that had been continuously occupied for thousands of years. Methodologically, this was a challenge, for stratigraphical excavations—of the type pioneered in England by Augustus Pitt-Rivers (Thompson 1977) and by Heinrich Schliemann and Wilhelm Dörpfeld at the mound of Hissarlik (Döhl 1986)—were still within the realm of experimental archaeology. Petrie's achievement was not only to introduce these principles into Near Eastern archaeology, but to utilize them to bolster his racialist ideology (Silberman 1993).

Petrie, already becoming recognized as one of his generation's leading archaeologists, found Tell el-Hes a a perfect medium to illustrate his eugenical theories. By dividing the mound's deposits into discrete levels based on their characteristic pottery, he was able to outline several successive episodes of racial domination. And he saw in each of these episodes the eugenically predicted stages of conquest, *floruit*, and eventual decline. Because the site had been identified (mistakenly, as it turned out) with Lachish, one of the cities conquered by Joshua, Petrie not only associated a thick level of ash with that conquest, but added a eugenical commentary. "The invasion of the nomad horde of the Israelites on the high civilization of the Amorite kings," he wrote, "must have seemed a crushing blow to all culture and advance in the arts; it
was much like the terrible breaking up of the Roman empire by the northern races; it swept away all good with the evil; centuries were needed to regain what was lost..." (Petrie 1891b:17).

The evidence of pottery was, of course, central to this interpretation. In his unhesitating identification of pottery styles with racial or ethnic groups, and in tracing each type through a regular pattern of initial appearance, growing popularity, and eventual degeneration, Petrie provided another clear illustration of the ideology of eugenics and the mechanics of racially based history. His description of the various pottery types at Tell el-Hesy sound uncannily similar to Galton's racial description of the unwitting immigrant and working class visitors to the Anthropometric Laboratory. Petrie spoke, for instance, of "Jewish" pottery as the result of "a mixture of characters," noting that some of the earlier Phoenician forms had "deteriorated, or passed into a mongrel type..." The Amorite bowls, after the Israelite conquest, were represented by poorly made vessels, with "coarse, rough faces." And the earlier upright vessels with combed faces "survived only in a coarse type..." (Petrie 1891b:47-48).

While it is ultimately impossible to prove conclusively that Petrie's choice of these adjectives was directly influenced by his deep racial obsessions, it is unquestionable that race and racial conflict remained the primary emphasis of his career. Following his excavations in Palestine, Petrie returned to Egypt, and during the next twenty years, he refined his reading of the progress of ancient Near Eastern culture as a melodramatic Gilbert and Sullivan opera of racial destiny played out again and again throughout human history. He was by this time a thoroughly mainstream figure, acknowledged as a legitimate archaeological authority. In 1906, when Petrie was honored with the privilege of presenting the annual Huxley lecture to the Royal Anthropological Institute in London, he expounded on an unmistakably eugenic theme (Petrie 1906a). His lecture, entitled "Migrations," dealt with a subject crucial to his reading of history. Tracing the full range of Egyptian history that he had uncovered at sites like Meydum, Tell el-Amarna, Koptos, Naqada, Ballas, and Abydos, he saw an unending series of racial conquests, with the abler races in any given period, conquering and colonizing the exhausted ones.

Indeed, Petrie's parade of excavated physical types strangely mimicked the contemporary eugenic hierarchy of modern races, with the "hairy bushmen" of the Paleolithic period being ousted by the Berbers of the predynastic period. The Berbers were in turn conquered by a "dynastic race" from the Red Sea region, who were themselves displaced by the Sudanese at the end of the Old Kingdom. The Sudanese were followed by Caucasoid Hyksos, Nubians, Libyans, Greeks, Romans, and finally Arabs in the medieval period. Tracing the same sort of racial mixture and conquest in the formation of medieval Europe, Petrie argued that the contact and inevitable conflict of races, always described in purely anatomical terms, was the motive factor in all of human history.

By the time of his lecture to the Royal Anthropological Institute, Petrie
had begun to utilize his intellectual authority to become active in a wide variety of modern political causes, including the British Constitution Association and the Anti-Socialist Society (Drower 1985:342–343). He also took time from his purely archaeological work to contribute a volume to a popular sociological series called "Questions of the Day," in which he made his eugenical faith explicit (Petrie 1906b). Confidently equating mental and physical variations in various modern races, he ascribed the present social problems of England to racial degeneration brought on by communism, trade unionism, and misguided government assistance to inferior human types. He concluded the book with a utopian vision of a future, eugenically improved world in which "the equatorial races, tending to have less initiative and vigor than those of colder climates ... will tend to be each attached to a temperate land which will supply more energy to their development" (Petrie 1906b:103).

These ideas were further expanded in his book *The Revolutions of Civilisation*, published in 1911, which Petrie considered his most important work (Drower 1985:303–304, 428). "If the view really becomes grasped," he wrote, "that the source of every civilization has lain in race mixture, it may be that eugenics will, in some future civilization, carefully segregate fine races, until they have a distinct type" (Petrie 1911:131). This dogma of progress through the triumph of "fine" races was to guide his work for the rest of his life. All of Near Eastern history, he believed, was a function of interaction between biologically distinct races. In fact, near the end of his active field career, while digging at Tell el-Ajjul near Gaza, Petrie formulated and privately published a plan for the "revival of Palestine" in which he expressed the hope that "the various elements in this country will form a united whole" (Petrie 1937:6).³

Of course Petrie, like other supporters of eugenics, naturally believed that he himself was born of a "fine" race. Having proved to his own satisfaction throughout his archaeological career that the hereditary inequality of races was a key to understanding political and cultural history, Petrie hoped posthumously to serve the cause of racial science by allowing researchers of future generations to study his own quite exceptional head. Thus, he gave the deathbed order to his physicians at the Government Hospital in Jerusalem. This useless act of decapitation might be no more than a curious footnote to a brilliant archaeological career, were it not for the fact that Petrie's broader historical philosophy and archaeological interpretations were also permeated by dangerous racist assumptions. The practical consequences of such a doctrine, in theory and in practice, must be recognized by Petrie's scholarly successors today.

For by the time of Petrie's death in 1942, eugenics was no longer a harmless philosophy of progress; its racialist pseudo-science had become a warrant for racial discrimination and, ultimately, genocide. In England, the Eugenics Education Society sponsored the 1913 Mental Deficiency Act, with its sweeping classification of the "feebleminded" (Kevles 1985:99). In the United States, the Galton Society and the Eugenics Record Office at Cold Spring Harbor, Long Island were instrumental in the passage of the restrictive 1924 Immigration Act (Higham 1965:312–316). In 1933, racial legislation reached its
ultimate and most horrible form in Nazi Germany’s Eugenic Sterilization Law and aggressive policy of Rassenhygiene (Kevles 1985, Proctor 1988).

Revulsion at that final solution to “racial degeneration,” however, ultimately paved the way for the final fall of eugenics, both as a respectable social program and a mainstream scientific theory (Kevles 1985; Barkan 1988, 1992). In the 1940s, a reexamination of Galton’s statistics showed only a spurious correlation between intelligence and physical types (Kevles 1985:129–147). At the same time, the concept of “races” as distinct or even measurable entities was shown to be a dangerous oversimplification. In the 1950s, with the discovery of DNA and the beginning of research into population biology and the complexity of genetic inheritance (Haraway 1988), it became clear that the theory of eugenics had no basis in physical reality. Except for the continued loyalty of a small, fanatical following, eugenics was no longer considered mainstream science and was tossed on the trash heap of obsolete ideas.

Petrie’s head, floating in formaldehyde at the Royal College of Surgeons, could therefore offer only a cautionary lesson. No medical student or scholar, so far as is known, ever gained any scientific insights from it. Although Lady Petrie was assured in 1948 that “the brain has been the subject of concentrated study” (Drower 1985:424), the scientific basis for such an examination had been completely undermined. For while Petrie’s ability, intellect, commitment, and energy were undoubtedly great, those qualities were now seen as the product of family, environment, and opportunity, rather than membership in a phantom “British” race whose physical hallmarks could be recognized and measured in the folds of his cerebellum or in the size and shape of his skull.

That is certainly not to say that Petrie’s severed head is today without interest to archaeologists concerned with the ideological development of their discipline. For while few contemporary scholars would openly subscribe to the racially based view of history and natural ability that so deeply influenced Petrie, the indirect impact of his eugenic thinking on Near Eastern archaeology endures. Even if no modern archaeologist would today speak of national “germ plasm” or favor laws to encourage racial improvement by sterilization or selective breeding, those ideas are still deeply (if unconsciously) embedded in the categories of significance of modern Near Eastern archaeology. Through the continuing use of Petrie’s basic methodology of distinguishing discrete strata often uncritically linked to invasions of historically mentioned ethnic groups, race remains a prominent (though scientifically unverified) element in reconstructions of ancient Near Eastern history (Silberman 1991, 1995). The impact of theories of timeless conflict between “East” and “West,” between “Desert” and “Sown,” between “sedentary” and “nomadic” populations, between “Semites” and “Indo-Europeans” still offer intuitive (i.e., non-empirical) and deterministic models of cultural change. In the continuing recognition of rise-floruit-fall cycles in pottery types, scholars still implicitly illustrate the “rise” and (presumably inevitable?) “fall” of ancient ethnic groups.

This type of racialist thinking would be considered laughably outdated
and marginal were it to be utilized in modern political science or sociology. Yet, strangely, it survives as an unspoken subtext of many mainstream Near Eastern archaeological narratives. Petrie's pioneering utilization of stratigraphy and pottery typology can not be easily separated from the larger ideology they served. Petrie's archaeological successors, who fondly claim him as a founding father, rarely recognize how much ideological baggage they have inherited from him. In their uncritical acceptance of Petrie's methodological innovations without due regard for his underlying ideological assumptions, modern Near Eastern archaeologists may be in danger of perpetuating the very same pseudo-scientific ideas about racial conflict and racial inequality that once filled Petrie's head.

Notes

1. I have been able to isolate two main variants of the story. The first ascribes Petrie's posthumous decapitation to extreme, eccentric egotism, suggesting that since he was convinced of his own genius, he made the bizarre deathbed request that his brain be preserved for future generations so that the physical hallmarks of superior intelligence might be studied and understood. Unfortunately, because of wartime conditions prevailing at the time of Petrie's death in 1942, it was temporarily impossible to ship the severed head in its container to England. According to the story, it was subsequently kept at the American School of Oriental Research in Jerusalem (now the Albright Institute of Archaeological Research), where Petrie had lived in his last years. Here enters a macabre, comic element: the container was supposedly kept in the school's refrigerator, or, alternatively, was stored among the artifacts of its study collection—becoming a prop for grotesque practical jokes and a source of horrified reactions over the years until it was finally shipped to England after World War II.

   The second main version of the "Petrie's Head" story ascribes the decapitation to the devotion of his wife, Lady Hilda Petrie, who, according to the stories lovingly kept her late husband's head in its container under her bed at the American School.

   Both versions are equally preposterous, yet they are, even today, half facetiously retold by scholars who readily admit that they cannot vouch for their historical reliability. For this information, I am indebted to Mr. Joseph Zias and Dr. Benjamin Sass of the Israel Antiquities Authority.

2. Verification of this unusual export permit has been located in the administrative records of the Palestine Department of Antiquities preserved in the Palestine Archaeological (Rockefeller) Museum in Jerusalem. However, the relevant file, ATQ/979, opened sometime between October 12 and November 20, 1944, and marked "Confidential" (according to the file list) has itself disappeared. I obtained this information in a personal communication from Dr. Benjamin Sass of the Israel Antiquities Authority on January 15, 1988.

3. It should be noted, however, that in this last attempt at social philosophizing, Petrie made no specific mention of selective breeding or immutable
genetic characteristics. In his appeal for Jews and Arabs to establish cooperative settlements and share in the appreciation of public parks and historical monuments as a means of establishing channels of communication, he provided a potentially non-racialist, if quixotic, vision of inter-ethnic harmony in Palestine.

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