EPISTEMOLOGY FOR A HUMANISTIC HUMAN BIOLOGY: THE CASE OF THE NEW YORK AFRICAN BURIAL GROUND PROJECT AT HOWARD UNIVERSITY

Michael L. Blakey*

EPISTEMOLOGY

A basic respect for the meaning of culture (that human perceptions, ideas, and behaviors are learned) demands us to accept that the human practice of science is thoroughly embedded within culture. The practice of science is the application of learned traditions that persist by a reactionary structure of rules, as for any other institution. It is a practice in which facts are interpreted by the perceptions of learned people who are enculturated and locally situated within a society. Science, as a coherent yet diverse complex of cultural traditions that vary both within and between nations, transforms by virtue of societal processes that challenge its facts and, more rarely, which challenge its structures. I believe that we are poised for making such a rare structural transformation which, for lack of a more transformed lexicon, will be referred to as critical and humanistic human biology.

A proposed critical and humanistic biology requires as its rationale, only that we assume science to be an intrinsically culturally embedded social practice. The abundant material evidence of scientific subjectivity, and the absence of evidence for complete neutrality or objectivity provides a scientific basis for the premise that science must be subject to learned values, beliefs, interests, and other defining characteristics of culture.

* Professor of Anthropology and Project Director, The W. Montague The Cobb Biological Anthropology Laboratory, Howard University, Washington.

Estudios de Antropología Biológica, x: 767-782, México, 2001, ISSN 1405-5066
When scientific facts, or even the structure of science itself, are transformed, transformation involves far more than the application of the rules of objectification (methods) that belong to science itself. Transformation of knowledge occurs by virtue of the dialectical interpenetration of science with the broader forces transforming the whole of society. The history of human biology is replete with material evidence of scientific transformations that were fostered by ideological contradiction, economic crisis, dominant political shifts, and war (Douglass 1950 [1854], Drake 1980, Allen 1975, Gould 1981, Bernal 1987, Blakey 1987, Baker 1998 and others). New data, methods, and technologies alone have often been incapable of halting the reproduction of knowledge which, subsequent to transformative societal influences appear idiotic in retrospect.

Thus, prevailing theory and results of research are customarily subject to sociopolitical judgements and choices. These influences are not simply imposed upon «objective scientists» from «the outside». Instead, such influences constitute our daily participation in the thought and action of our society. Importantly, if we as scientists are like other people in the conditions surrounding our thoughts and actions then we also are personally and institutionally responsible for them.

If scholars are to act responsibly, then perhaps it follows, that we must first acknowledge that a factor of «free will» (as qualified by culture) is intrinsic to scientific practice. Claims of objectivity negate the acknowledgment of human choice in decisions about truth. Our responsibility is negated even if the claim to «objectivity» is stated as a matter of degree since the existence of degrees of objectivity assumes the existence of absolute objectivity. That would be equivalent to acting in a manner approaching a godly state, if god itself had no demonstrable existence. Neither partial nor absolute objectivity is materially verifiable. Both ideas serve to essentialize and externalize the locus of truth beyond the means of human agency.

Here we are left with an unexpected question: How can the systematic use of evidence continue to avail the special benefits that are rightfully attached to science, if science is redefined as a branch of subjective, societal decision-making, rather than as the apprehension of universal truths. A rational collaboration of science and society can be struck if their intrinsic interdependency is first critically acknowledged and subsequently forged in a deliberate way that might be called, humanistic human biology.
A «critical» approach

A first scientific step toward a humanistic biology might well involve bringing material evidence to bear upon our understanding of how society and culture are influencing our perceptions, judgements, and production of facts. Biological anthropology might become a more critical science that reveals and explores its social and political influences with one hand, while raising a critical mirror to the broader society with the other. What we are confronting is the prospect of a way of knowing that takes its «culturalness» seriously, and in so doing simultaneously recognizes both the limits of a reified objectivity and the value of observable subjectivity. A science that does not ignore or deny its culturalness in order to reify its command of universal truth is freed to self-consciously apply subjective, yet realistic cultural lenses to the universe. Those interpretations may not be adequate for understanding all things at all times for all people. But with a critical science we would become more consciously aware of why that is so, and more aware of the subjective conditions that have guided interpretation.

The methods of criticism include an examination of the social history of academic theories, methods or questions one has proposed. The ethical examination of the potential societal implications or application of the proposed research may also aid criticism. Diversity of perspective, of social, cultural, and political views, bearing on research issues should aid criticism; as would the democratization of scholarship by engaging in public debate over the significance, value, and design of research. All these methods will lead to choices of the kinds of research to be conducted, the value of which varies by whom and what it is that the research is being conducted to serve. Criticism that seeks out the influences of political ideology will likely find those influences, and criticism that does not probably will not be so revealing.

Democratization

Who should decide on the proper choice of options to which critique has led. Clearly, the researcher is always involved in decision making. Often funding and governmental agencies are also involved. For
these decision-makers' critical implications are often unexamined or unacknowledged. As such choices are availed, responsibility for them becomes more apparent. We are left with human responsibility rather than a search for neutrality and objectivity in the creation of our world. Ethically, the communities most affected by research should have a say, and if they are involved in the actual design of research, they may have a role which intensifies the critical process, democratizes knowledge, and empowers them in relation to funders and scholars. Who should decide the range of foreseeable interests to be served by one's research? Are any of these entities acultural, neutral, more legitimate, or unmarked?

Nature and Politics

Biological anthropology, like the natural sciences, has been most committed to an excessive focus on nature as the primary force and external agency in human affairs, relegating culture to an appendage or adaptation that serves biological motivations. This nature politic blinds us to social inequity and its solutions just as the notion of objectivity blinds us to our participation as scientists in the production of ideology.

An examination of political-economic forces affecting human biology requires a deepening appreciation of the historical power of political and economic institutions that subordinate nature and reorganized the biology of the populations we study. If we are to understand how society creates and organizes the most important aspects of biological inequity and variation, then biologists will need to work with and learn the languages of social scientists and humanists. In the United States massive barriers have been erected between these disciplines, maintained often by petty ignorance, chauvinism, and a lazy approach to careerism that easily acquiesces to the status quo.

Primitive assumptions of the Enlightenment which subordinate culture and impede self criticism, also impede the development of an appreciation of the role of political economy in the physical experience of the people we study. From my perspective that is because these are two wings of the same bird. Critique holds a critical mirror to the observer-political-economy holds a critical mirror to the observed.
Dialectically, these are one in the same process. An embrace of this process, however, would allow physical anthropology to transform itself while providing information relevant to improving the biology of human society in certain ways. The rewards might be like those for the modest country doctor respected by the people he/she serves. Without this process, biology walks the well beaten path blind to all but a natural order that cannot humanly be caused or humanely changed. That path is lined with institutional and corporate rewards. And therein reside fundamental political implications of each approach. The reactionary or progressive tendencies of the practice of human biology will depend on its definition and allegiances.

**Why «humanistic» human biology?**

If biology is human and therefore cultural (whether or not it is natural also) then biology and humanism need to be merged in order to comprehend such a reality. A humanistic science focuses on secular human agency in the construction of both the biology of society and the field of biology meant to interrogate it. The application of systematic evidence in pursuit of explanation is no less required of such a science (indeed the range of evidence becomes more biocultural and interdisciplinary). Material evidence is essential to, but not sufficient for, elevated critiques. Humanistic biology can and should be a science in that sense. Indeed, rigor is enhanced by the reduced mystification inherent in objectification; and undermines the paradoxical relationship between to self-criticism and the belief in one’s objectivity. The use of multiple methods and diverse data sets also creates opportunities to explore contradiction and verification of interpretations of research results. Such an approach gives social, cultural, economic, and historical specificity to the contexts of biological variation and its interpretation. Recommended solutions for society’s biological problems can be tested and refined more readily than with application-less Darwinian theory of the tentatively post-Eugenical world in which our field lives today. A world anxiously expecting the next century to be the century of the patented, commodified gene. In that world, the nurture side of the nature-nurture debate must also take on an evolved sophistication.
What might represent an alternative sufficiently powerful to serve as a strong competitor with the dangerously familiar biocentrism emerging before us? Perhaps it is a science which assumes that its practitioners and the rest of society share responsibility for the world they help create. This responsibility is for more than (but includes) professionalism and honesty. It should be considerate of the humane and humanitarian sensibilities, it is reflective, rational, and holistic in keeping with the Renaissance conceptualization of humanism that was unduly discarded by modernism. Both the increasingly popular realignment of specialized research into multi-disciplinary and inter-disciplinary programs offers opportunities for such biocultural research. And, as I will show with the example of our experience in New York, publicly engaged research that aligns with broad community interests opens a viable avenue for funding and public support that can compete with corporate sponsorship for the conduct of critical scholarship. If we accept a new alignment with grass-roots public support for anthropology, then we will also have to struggle with what it means to work for the lay public.

In the past, the holism of the Boasians, the activism of African American anthropologists like Montague Cobb, and the anti-racism of Professor Comas were viable and competitive with the old racial determinism. To celebrate their legacies, a 21st century alternative might be discovered which can supercede some of the basic assumptions of science itself toward resolution of contradictions between objectivity and criticism, nature and environment, biology and humanism, science and society. The collection of essays edited by Professors Goodman and Leatherman (1998) should be noted as the most coherent set of proposals for the reformulation of biological anthropology that grapples with these same issues. The African Burial Ground Project in which I am currently involved has also been responsive to the realization that the practice of human biology is cultural, social, and political.

THE AFRICAN BURIAL GROUND PROJECT

The African Burial Ground of New York City was rediscovered in 1991 as a result of a Federal building project. The Burial Ground was used
by enslaved Africans who comprised 20% of New York City's population at the time of the American Revolution. It had been used for burial throughout the 18th century, and probably as early as the late 17th century.

Great public controversy surrounded the revelation of the site, because most Americans had been educated to believe that slavery had not existed in the northern colonies that would become the northern United States. Only the southern colonies and states were associated with slavery. Also, Africans were not previously thought to have had a significant presence in 18th or 19th century New York. The long-standing African American claim that their painful history and contributions were omitted and distorted by American education was also graphically supported by the discovery of a cemetery containing many thousands of the skeletons. Thus, the mere discovery of this site had controversial implications for the role of Euro-American scholarship and state-sponsored education in the production of an ideology which denied the record of the contributions and oppression of African Americans.

The African Burial Ground is also a sacred site for many African Americans who wanted it to be preserved as a memorial where they could pay respect to their ancestors, their history, and to themselves. The US General Services Administration sought to quickly remove human remains against public wishes. After 9 months of intensive political activism on the part of the «descendant community», African American leaders in the US Congress stepped in and required a process that empowered the African American community to have greater control over the site. Part of the original site was not to be built upon, and was preserved for a memorial and interpretive center that should be in place at the end of the millennium.

A team of anthropologists organized by Howard University (the leading African American research institution) gained approval for an extensive program of research whose initial results will be presented here. Informed by the efforts of indigenous peoples to gain control of their sacred objects and ancestral remains, our research team agreed with the full empowerment of the descendant community to pose research questions, evaluate our research design, and ultimately determine whether or not any research should be conducted. Thus the African American community became our «ethical
client» to whom we remain accountable along with the Federal Agency (the GSA) which funds the project.

As for the anthropological work itself, the African Burial Ground Project is perhaps the most comprehensive, interdisciplinary study of an American archaeological site. While physical anthropology, archaeology, and history comprise the core integrating disciplines, the full disciplinary range of our project extends from molecular genetics to fine arts. Such extensive research has not been funding in other situations where the public has not been empowered. The more than 10 million dollars required for our work has been possible only because of our allegiance with a broad sector of the public who see the project as belonging to them, and whose approval or discontent can sway votes in the elections of state and national representatives.

We have been able to take a more progressive approach to theory, also, because our ethical clients are more progressive than the mainstream of physical anthropology in the United States. We have rejected the use of the concept of race and substituted a search for the cultural identities of specific endogamous populations in Africa whose histories merge with that of the colonial New York and the formation of the African Diaspora in the Americas. This complex and comprehensive approach is a direct consequence of the political empowerment of the African American community and the distinctive epistemological traditions of its scholars.

The tendency of forensic anthropologists to «race» skeletons would, if carried out, have created a naturalized, and essentialized identity called «Negroid» or «black»: a racial designation suggesting neither the attributes of culture nor of history. Thus had we simply followed that tendency we would have again denied the humanity of the early African founders of the US. Moreover, our dialogue with the community created a study whose purpose is to elucidate the origins, transformations, quality of life of our early African ancestors and to examine the ways in which they resisted slavery in 18th century New York.

On the question of origins, the historians have determined that at least 1/3 of New York’s 18th century African population was born in Africa and that most of the remaining 2/3 spent some period of time in the Caribbean prior to sale in New York. Shipping data provide information on the ports from which enslaved Africans of embarkation for New York. Our historians have begun to track the
locations of wars in the African interior that would have produced captives who would have been brought to those ports, helping track diverse societies of origin. In this way we have learned a broad range of West and Central Africans, among others, who are possibly among the dead.

Slavery had already begun in the Dutch city of New Amsterdam which would become New York when the English took it over in 1664. The Dutch imported captives mainly from the Congo-Angola region of West Central Africa who were Kikongo-speaking people. The English later increased importation from the West African coast stretching from Senegal to Angola. Of particular interest are the language groups including Mandinga, Soninke, Temne, Mende, Fulbe, and Serer speakers of Senegambia. In the Gold and Slave Coasts (including Ghana, Ivory Coast, Nigeria, Benin, and Cameroon) Akan, Ga, Ewe, and Fon (Ghana-Ivory Coast) as well as Igbo (Nigeria) were frequently traded, according to historical documentation.

408 human remains have been studied, of which 26 crania were sufficiently intact for craniometric analysis of 10 measurements used for comparisons with other populations. The centroid tendencies of the multiple discriminant function tests on these crania showed closest affinity to Ashanti (Asante) and other Gold Coast societies. While the craniometric data tell us only the affinity of a population, mitochondrial DNA provides probability estimates of the cultural affiliations of individual skeletons. Mitochondrial DNA control region sequences were determined for 32 skeletons. Nearly all of these samples cluster phylogenetically with African populations, leaving 3 unknowns for further study. The African groups include 5 Fulbe, 5 Benin, and the rest cluster with a Nigerian sample that includes the Igbo, Hausa, and Yoruba. We are continuing to refine these analyses, and recognize the need to obtain better Akan and Kikongo comparative samples for mt-DNA.

The archaeological data are modest, owing to the small number of artifacts in the burials. There are 25 individuals with modified incisor teeth, which historians have shown to be associated with African birth. This is more than twice the number of individuals with modified dentition of the entire archaeological literature of the Americas. This is partly the result of the large size of this population and partly because of its early period when. These filed teeth compare with
those of many of the populations previously mentioned, including the individual of Calabar origin in Cuba reported by Ortiz (1929). It appears that dental modification only occurred in Africa and was a practice which disappeared upon arrival in the Americas. We have begun using dental chemistry (elemental signatures and stable isotopes) to test the childhood locations of 300 individuals.

Two artifacts appear to be Akan, although we are exploring other possibilities. The waist beads worn by the woman of Burial 340 were buried with her as would be done among the Fante and Asante (Ashanti). A heart-shape symbol has been assessed by our African art historian as most plausibly the Akan adinkra symbol, «Sankofa», which means «retrieve the past in order to understand the present and plan for the future», «reclaim the past», revere ancestors, and respect elders (among other connotations).

These facts regarding origins have not only allowed us to characterize the cultures and previous histories of New York Africans. They have also aided in the study of resistance and the quality of life. For some reason, the evidence of the Akan presence is relatively rich. With regard to the Ashanti, historical documents show that they had been involved in the African revolt of 1712 and the alleged revolt of 1741 in New York. Indeed, these so called «Coromantee» had been identified as leaders of African rebellions throughout the West Indies, and had defeated the British in Jamaica by 1739. The English in New York appear to have attempted to reduce the risk of rebellion by: 1) executing men and reducing male importation from the Caribbean which tended to include rebellious persons as well as the old and infirm who could not easily be sold elsewhere, and 2) by importing a majority of women, adolescents, and children directly from the African continent who might be more easily controlled. If they proceeded as their West Indian colonial counterparts, they also sought to reduce the influx of Ashanti into New York.

Economics were also important to this trend which favored a much higher proportion of females in New York than were brought to the Caribbean. New York was near to the end of the trade route and most of the strongest people had already been picked over in the Caribbean in order to meet the rigorous requirements of work in the sugar fields. Our Diasporic approach has been required to understand New York City as part of a the economics and politics of a larger
Atlantic and Caribbean context. Most American bioarchaeology of this type is locally focused, and would have constructed a history of the slavery in New York.

Using a sample of the most accurately assessed individuals (117 under 16 years of age, and 88 males and 62 females 16 years of age and older) a number of patterns emerge. Census records show that African women out numbered men, yet there are relatively more men’s skeletons. Based on a small cemetery returns from a closely related African cemetery in New York, and speculative subadult sexing methods, we are convinced that many of the excess females are among the subadult skeletons of infants and young girls for which sex cannot be definitely assessed using skeletal morphology. If we had not relied on historical census data, we might have assumed that there were more males than females, as in other plantation societies. Our approach leads us to further investigate Y chromosome data to better establish whether or not female infants are dying at greater rates than males, which our subadult skeletal data suggest.

The care with which these burials were made shows that the Africans who attended the funerals cared for each other. The solid silver ear-bob which had been placed in the grave of one child might have been melted down and used profitably by the living. Instead it was given to the dead. An indication of their persisting humane values and, at least in some cases, a depth of care for children.

According to historical accounts, young women and adolescent girls were the most likely to have been imported and would usually have been brought directly from Africa. Our skeletal data demonstrate an unusual peak in mortality between 15 and 20 years of age that is especially pronounced in females. We believe that this age group is loaded with new arrivals who were simultaneously experiencing the stressful conditions of enslavement, arduous work, cold weather, and the health risks of reproductive age. Men show high mortality at most ages, and on average live three years longer than women. We are also seeing high mortality throughout the reproductive years in women, the vast majority of whom are dead by the age of 40.

In New York, as in much of the Caribbean, there is no natural increase in the African population while the trade in human beings is active. Yet unlike the Caribbean there is an excess of enslaved females which should have greatly enhanced the fecundity of New
York Africans in the 18th century. The observed high mortality of young women, and probably also of girls, helps explain that trend as observed in the New York census.

Furthermore, 81% of men and 60% of women from the African Burial Ground exhibit enthesopathy or extensive muscle attachment hypertrophy representing strenuous work involving muscles of the arms, legs, and shoulders. The skeletal distribution of enthesopathies in these attachments is similar for men and women, as is the distribution of degenerative joint disease at major joint complexes. Either women are doing the same work as men, or they are doing different work with the same muscles-joints, or a combination of both. There are some differences. Men do have significantly higher (chi square <.05) involvement of the wrist, knee, and hip than do women as a function of their overall higher mechanical stress. Men have high frequencies of arthritis in the lower back than women, and women tend to have more degenerative changes of the neck, associated with carrying heavy loads on the head. There are also 12 individuals, men and women, with fractures of the neck and head related to collisions or accidents while loaded axially. Women are probably experiencing work stress that would have amenorrhea effects that reduced their fecundity and fertility. Infant mortality is 18% of all mortality, representing the fate of many of the few children who were born despite the conditions that reduced the fecundity and survival of women. As one sees in 18th century Barbados (Handler and Corruccini 1983) the actual infant mortality might have been twice that observed in the skeletal record owing to differential preservation of fragile infant remains.

Infectious disease frequency is high. Using a general index of infectious disease (including all categories of periosteal reaction, cloaca, and osteomyelitis). 86.6% of men, 82.3% of women, and 50.6% of subadults show evidence of recent or previous infection. Cases with lesions representing active infection (particularly reactive woven bone) are most prevalent among infants, adolescent females and young women. Only less than 5% had saber shin, a clear indication of treponematosis. While syphilis must be responsible for some of this finding, this particular population was probably more infected with the tropical disease yaws which, unlike syphilis, was common in west and central Africa in the 18th century. Our historian’s research on the condition of people as they are being shipped from Africa is
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of men had dental hypoplastic evidence of previous childhood malnutrition or disease. This is 15-20% fewer cases than in later 19th century African American populations. Those who had modified teeth (filing) and were most likely to have spent their childhoods in Africa had 17% fewer hypoplasia than other New York Africans, pointing to a less stressful childhood.

We were unable to find a single historical reference to the provisioning of enslaved Africans by the slaveholders themselves. With great fortune, a slave narrative of John Jea was recently published (Gates and Andrews 1998). Jea had been brought to New York from Calabar as a child of enslaved parents in 1773. Jea describes the diet as consisting of a quart of buttermilk mixed with corn meal and a few ounces of bread laced with lard each day. A little meat would be given once per month if the slave were fortunate. They worked, according to him, 16 hours per day. And he describes the murder of his infant by his wife, with a «hardened heart».

Yet it is clear that these Africans struggled to preserve their humanity. They stole time away from slaveholders in order to engage in trade in an underground economy, they organized rebellions, they adapted and yet also preserved parts of their traditional culture. They buried their dead with care in a space that our archaeological studies show was simultaneously used as a dump by the pottery factory and the tannery which Europeans had erected on its edge.

In 1991 the humanity of African Americans was again contested by the Federal Government's callous treatment of the African Burial Ground. We worked with the descendant community to restore ancestral history while others work to restore the sacred nature of the site. The reburial ceremony planned for the year 2000 or 2001 will attract international involvement from throughout the African Diaspora. We are dedicated to providing our ethical client with information necessary to assure that the memorial will not be a tomb for the «unknown Africans». Information that will help complete the picture of the history and identity of the United States as a whole. While this is also potentially dangerous terrain that can clash with convenient ideologies of US national identity, something about the public embrace of this cemetery has eclipsed the obstruction of truth and humanity. In 1995, a royal Ghanaian delegation visited our laboratory and the Burial Ground to poor libations and apologize for
the role played by «some African leaders» in fostering the slave trade. They used the adinkra symbol, Fahankra (to reunite the house) as their banner, seeking through atonement to re-establish cultural, political, and economic ties with African Americans. In the Cobb Laboratory, we showed them the possible adinkra symbol, Sankofa, which can be read as meaning that one can correct ones mistakes.

As for our potential impact on domestic attitudes and relations, we recently discovered that the African Burial Ground had penetrated deep into popular culture when a New York Magazine article described the new generation of Barbie Dolls and Barbie books. «The books have her sleeping on an Upper West Side [New York] futon, shopping thrift stores, and helping fight a developer’s plans to build on a slave burial ground (Marcia Biederman, New York Magazine, September 27, 1999, p. 17)». Do not let anyone tell you that this kind of archaeology does not work.

ACKNOWLEDGEMENTS

The findings of the African Burial Ground Project reported here are the result of on-going collaborative research. My thanks to all of the investigators who have generated these data. Also thanks to the organizers of the X International Colloquium on Physical Anthropology «Juan Comas» for inviting me to participate and for providing the generous support that allowed me to do so.

REFERENCES

ALLEN, GARLAND E.
1975 Genetics, Eugenics, and Class Struggle, Genetics, 79: 29-45.

BAKER, LEE D.

BERNAL, MARTIN
BIEDERMAN, MARCIA

BLAKEY, M. L.

COBB MONTAGUE, W.

DOUGLASS, FREDERICK

DRAKE, ST. CLAIR

GATES, HENRY L. AND M. ANDREWS

GOODMAN, ALAN H. AND THOMAS L. LEATHERMAN

GOULD, STEPHEN J.

HANDLER, JEROME AND ROBERT CORRUCINI

KIPLE, KENNETH F. AND V. H. KING

ORTIZ, FERNANDO
1929 Los afrocubanos dietinellados, Archivo Folklórico Cubano, 4: 5-25.