

The Biological Anthropology of Living Human Populations: World Histories, National Styles, and International Networks

An Introduction to Supplement 5

by Susan Lindee and Ricardo Ventura Santos

We introduce a special issue of *Current Anthropology* developed from a Wenner-Gren symposium held in Teresópolis, Brazil, in 2010 that was about the past, present, and future of biological anthropology. Our goal was to understand from a comparative international perspective the contexts of genesis and development of physical/biological anthropology around the world. While biological anthropology today can encompass paleoanthropology, primatology, and skeletal biology, our symposium focused on the field's engagement with living human populations. Bringing together scholars in the history of science, science studies, and anthropology, the participants examined the discipline's past in different contexts but also reflected on its contemporary and future conditions. Our contributors explore national histories, collections, and scientific field practice with the goal of developing a broader understanding of the discipline's history. Our work tracks a global, uneven transition from a typological and essentialist physical anthropology, predominating until the first decades of the twentieth century, to a biological anthropology informed by postsynthesis evolutionism and the rise of molecular biology, a shift that was labeled "new physical anthropology." We place biological anthropology in a broad historical context and suggest how the histories we document can inform its future.

We open with a consideration of being both embarrassed and pregnant.¹ As any awkward speaker of a less-familiar language knows, some words that seem the same across languages are in fact amusingly (embarrassingly?) different. One example is the Spanish word *embarazada*, which means "pregnant." Wikipedia calls the word "a false friend for English-speaking students of Spanish who may attempt to say 'I'm embarrassed' by saying '*estoy embarazada*.'" We began to think about embarrassment—its ironies and its productivity—after the biological-anthropologist-turned-historian Michael A. Little, one of the key participants in our symposium, observed candidly during one session that when he first started teaching, "I never talked about the history of my field, because I was

embarrassed about it." That history is a history, at least partly, of ideas about racial difference, which as his embarrassment suggested produced an emotional state that silenced or negated certain questions.²

Graduate students of social anthropology are generally expected to read the classics of anthropological thought—Tylor, Morgan, Malinowski, Durkheim, Boas, Rivers, and Radcliffe Brown—even if some of the ideas promoted by these thinkers have ceased to be seen as central to the field (Ingold 2002; Kuklick 2008; Stocking 1968). Social anthropologists are expected to know the history of their own discipline. But PhD students in biological anthropology today are unlikely to read

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1. *Embaras* also has an evocative archaic meaning relating to a blocked river, a passage prevented by debris, or a point at which one is forced to slow down to navigate the water. It was an American term for places where the navigation of rivers is rendered difficult by the accumulation of driftwood. Like the nineteenth-century blocked river, the *embaras* that barred the passage of navigation of rivers, embarrassment is perhaps a point at which one is forced to slow down, navigate, and think carefully about how to move forward.

2. Perhaps embarrassment is a common experience in anthropology: Clyde Kluckhohn confessed to a "feeling of embarrassment" when he read the field notes of his student David Schneider, who was working on the islands of Yap in the 1940s, because they were so personal and confessional (and because Schneider was a remarkably reflexive field-worker; see Bashkow 1991).

the works of nineteenth-century leaders in the field—such as Samuel George Morton, Paul Broca, Geoffrey Saint-Hilaire, or Rudolph Virchow—or even to read twentieth-century physical anthropologists who were influential—such as Aleš Hrdlička, E. A. Hooton, Eugen Fischer, Arthur Keith, Leonce Manouvrier, or Rudolf Martin.³ Indeed, a new graduate student today in biological anthropology is more likely to start with technical training in skeletal biology, molecular genetics, or forensic science—the laboratory specialties grounded in experimental technique that have become so central.

In the United States in recent years, several departments of biological anthropology (including Harvard's) have been reconstructed as freestanding departments of human evolutionary biology not tied to social anthropology, linguistics, or archaeology—that is, to any forms of humanistic analysis (although many others continue to maintain the four-field approach with varying levels of success and with mixed consequences for hiring and training; Borofsky 2005; Calcagno 2003; Segal and Yanagisako 2005). The training of biological anthropologists seems to often involve historical forgetting and little contact with past ideas of the discipline they are entering. It has been a discipline with a history that is often purposively disappeared, forgotten for a reason. As one of us, Ricardo Ventura Santos, has recalled, at some point seeing a photo of himself taking head measurements in the early 1990s with the technologies so long associated with racial narratives of difference and pathology became for him, again, “embarrassing.”⁴ Even in the arc of his own career, that of a biological anthropologist who went to work in a natural history museum centrally concerned with history and who has become deeply interested in the history of the field over the past decades, these simple technologies of human measurement came to carry a conflicted and charged meaning.

Of course, just as the same bones and bloods can move through different contexts, their meaning varying, their power changing, so too the same actions can mean different things: Noel Cameron's uses of human measurement in a birth cohort study in postapartheid South Africa (explored in the oral history that closes this volume) demonstrate the point. Sequencers and calipers coexist as tools of the discipline today, and even questions about group differences work differently

in an age of Internal Review Boards (IRBs), the recalibration of scientific race, repatriation rights, and massive global biobanking systems.

Thinking about disciplinary embarrassment, we propose here, can lead to a productive awareness of complexity, time-scales, and the legacies of social and political order: Little, once embarrassed by the history of his field, is now a skilled historian of biological anthropology (Little and Kennedy 2010). And the mistranslation at the English-Spanish intersection, of embarrassment in one language and pregnancy in the other, calls to mind a state of both confusion and incipient birth. We suggest here that the seed of something new is growing, in this case new ways of seeing a history that has vexed both historians and practitioners. We hope in this volume to begin to reconfigure the history of biological anthropology as a resource for moving the field forward.

The papers collected in this special issue of *Current Anthropology* were developed for a Wenner-Gren symposium that was about the past, present, and future of biological anthropology—“The Biological Anthropology of Living Human Populations: World Histories, National Styles, and International Networks”—held in Teresópolis, Brazil, in March 2010. Our goal was to understand from a comparative international perspective the contexts of genesis and development of physical/biological anthropology around the world. While biological anthropology today can encompass paleoanthropology, primatology, and skeletal biology, our symposium focused on the field's engagement with living human populations.

Bringing together scholars in history of science, science studies, and anthropology, we structured our discussions not only to examine the discipline's past in different contexts but also to reflect on its contemporary and future conditions. Our contributors have been guided throughout by a nexus of key questions about national histories, collections, and scientific field practice. Particularly relevant to us was the development of a broader understanding of the discipline's global, uneven transition from a typological and essentialist physical anthropology, predominating until the first decades of the twentieth century, to a biological anthropology informed by postsynthesis evolutionism and the rise of molecular biology, a shift that was labeled “new physical anthropology” in a famous 1951 manifesto by Sherwood Washburn (Washburn 1951). Washburn proposed that physical anthropology could now link the evolutionary synthesis to comparative functional anatomy. He presented the changes as revolutionary, a break with an unfortunate past tainted by typological racism. Physical anthropology, he said, had to become evolutionary, and adaptation, selection, and population biology should become its central problematic (Haraway 1989).

If this transition to a new physical anthropology has been relatively well described in the cases of North America and of certain European contexts, the same could not be said for other regions of the world. In some countries, such as the United States, this “new physical anthropology” continued to be practiced in anthropology departments, while in other

3. This conclusion is based on a somewhat informal survey of English-language graduate syllabi in physical/biological anthropology posted on the Web since about 2000. One thing is clear: what counts as physical anthropology varies a good deal, with some programs built entirely around archaeology, others focused on forensic training, and many on human evolution. It is not unusual for George Stocking or Stephen Jay Gould to be included as assigned reading in graduate training, but reading the primary sources in their original form, with the exception of Charles Darwin, is less common.

4. The measurements were part of a restudy of the Xavante Indians from Central Brazil (see Coimbra et al. 2002). The investigation attempted to collect some of the same bioanthropological variables collected by James Neel and Francisco Salzano in 1962 in the same population (Neel et al. 1964), aiming at studying long-term changes in human biology and health.

countries, such as Brazil, it moved into biology departments (and genetics departments in particular) and in some cases into museums. In natural history museums, the transitions to the new physical anthropology were generally slower and more incomplete, with typological perspectives on human biological variability persisting far longer (Maio and Santos 1996, 2010).

Many scholars have pointed out in passing that physical anthropology has taken varying forms in different national contexts. Our suggestion in this volume is that a deeper understanding of the development of physical/biological anthropology across a broader range of national contexts can be both instructive and productive. We are not merely suggesting that the stories of Brazil, Norway, or Japan need to be “added” to the stories of Germany, France, and the United States; we are proposing that the entire enterprise looks different when the picture broadens. Recent discussions within anthropological circles in the United States, in which the fragmentation of anthropology is seen as a major problem, often fail to consider that in other countries with distinct anthropological traditions, biological anthropology has been practiced for many decades in isolation from other areas of anthropology.⁵

There are also some suggestive consistencies in the historical trajectory of the field around the world. The strong parallels in the development of physical anthropology in geographically and politically diverse contexts seem to provide evidence of a shared internationalistic agenda. The fact that key ethical issues have overlapped seems to point to some consistent ways in which objects and biological materials (things) configure relationships. Anthropologists as the overseers of identity (biological, national, ethnic, racial) appeared in our papers again and again in accounts of politics, professionalization, and biological theory. The movement of globalized knowledge (which changes as it moves) was inflected in explorations of journals, international agreements about race, borrowed methods, and ideas that reflected national relationships. The special status of the human animal was everywhere relevant. We found both tremendous heterogeneity and intriguing convergences in places as diverse as Portugal, Japan, Brazil, France, Iceland, and South Africa.

In our discussions, Gísli Pálsson proposed that anthropology as currently organized around two radically separated domains (biological and social) that are often in tension borders on being out-of-date and ethnocentric in its assumptions—humans are neither social nor biological, he suggests, but always both, and a discipline proposing to study human beings should be both as well. This remains a compelling argument in many departments of anthropology in the United

5. For example, Segal and Yanagisako (2005) do not draw on the practices and institutional structure of anthropology in other cultural contexts, in which the four-field model is not dominant, as a way of understanding and undermining its dominance in the United States (which is their goal).

States. From this perspective, biological anthropology, with its emphasis on understanding human biology in social terms, seems to occupy the privileged epistemic position in relation to social anthropology: all animals are biological, and there is no animal in which biology does not matter. Pálsson, himself a social anthropologist, calls into question the radical rejection of biology that is common in the anthropological narratives that explain human life and society. It is a radical rejection, of course, that mirrors a historical problem—roughly, the problem of race.

The word “race” is highly charged in ways that make it difficult to use without sounding as though one is engaged in an accusation, and much of the historical literature does sound a bit like exorcism. As one of our participants (Jean-François V éran) put it during discussions, in some circles today the word “race” can only be used to condemn racism. Yet the term also refers to something readily understood in many social settings all over the world. Race is not arcane or technically sophisticated, and it is not obsolete in the sense that race continues to play roles in real estate, education, political rights, criminal prosecution, the courts, the census, and the data collection of the World Health Organization. The vernacular wordplay “driving while black” used in the United States captures the social immediacy of race on any highway in the United States. The phrase mimics “driving while intoxicated” and is used as shorthand for a form of racial profiling: that is, the tendency for police in the United States to pull over and question drivers interpreted as African American (darker skinned) at a disproportionate rate.⁶

If the use of the word “race” is scientifically suspect (now replaced by ethnicity or population), it is nonetheless an instantly legible human category whether biologists talk about it or not. It was never simply an idea dreamed up by physical anthropology. Indeed, in medical terms, race is as relevant to health risks in societies around the world as sex or age.⁷ Denying that it has any transcendent biological genetic justification that can be linked to a hierarchy of values is appropriate, but such denials cannot be expected to eliminate the force and power of the idea in the everyday world. In this larger, wide-angle frame, biological anthropology is part of a legitimate and even pressing concern with the biological correlates of human social difference.

As our discussions developed, two key themes emerged. First, collecting materials and bringing them into relationship to each other in settings often distant from the point of collection has been and remains central to biological anthropology. Second, biological anthropology has played a pivotal

6. The ACLU account is at <http://www.aclu.org/racial-justice/driving-while-black-racial-profiling-our-nations-highways> (accessed October 12, 2010).

7. World Health Organization data are organized in these terms. See http://www.who.int/topics/womens_health/en/ (accessed October 12, 2010) and data on various ethnic groups, e.g., Hispanics at http://www.paho.org/English/DD/PIN/ePersp001_news02.htm (accessed October 12, 2010).

role in national identities, and national identities are still shaping what it means to be a biological anthropologist today. We want to turn now to these two themes and the questions they raise.

One of the results of the great voyages of discovery of the fifteenth and sixteenth centuries was a diffusion of materials and ideas across the globe. Naturalists from Europe sent back plants, animals, and artifacts that provided testimony to the unseen distant worlds they visited. Visitors who came to Europe from these distant places sent back their own stories of European capitals, kings, and technologies, and in some cases they rapidly and eagerly adopted these technologies, such as guns, as efficiently as they could. The surging movement of goods, people, and ideas across the globe, spanning the five centuries from about 1500 to 2000, is one of the great events in human history. Physical anthropology participated in this process, partly by bringing back to scientific centers materials and bodily objects, collections of bones, bloods, remains, and measurements that are truly impressive for their size, scope, and broad utility.

Physical anthropologists and the geneticists who increasingly worked with them in the field after World War II collected things that were saturated with meaning and overloaded with emotion and desire, things that spoke of death, relationships, power, and immortality. In papers here by Ann M. Kakaliouras, Trudy R. Turner, Jenny Reardon and Kim TallBear, and Pálsson, the quandaries of collection are illuminated across time and place. These objects did not have a consistent or stable purpose, but all parties coming in contact with them tended to view them as meaningful and powerful. This may be why we find ourselves interrogating such objects anew in the twenty-first century. It is genuinely unclear what to make of them or where they belong.

Beginning in the 1970s, many anthropological collections became the focus of repatriation debates with complex protocols and training regimens. Biological anthropologists now often become specialists in returning collected materials to populations from which they were originally drawn and in assessing which materials should be sent to which groups (Beisaw 2010; Fforde, Hubert, and Turnbull 2002; Rose, Green, Gree 1996).⁸ The old expertise—how to collect in the field—is now supplemented with new expertise—how to redistribute those same things to a field that is no longer the same. Repatriation has become a sort of “subfield of a subfield” of biological anthropology (of bioarchaeology), and the collections themselves have opened new problems as they require new kinds of professional identity.

Today, biocuration teams are called in to make decisions and redistribute goods. Repatriation ceremonies are performed before laboratory freezers, ancient remains are

8. Many fascinating details relating to the repatriation process are posted at <http://www.nps.gov/nagpra/> (accessed October 12, 2010). See also the various databases listing and characterizing materials held in museums at the NAGPRA site.

claimed by more than one constituency, and scientific researchers cannot assume that their interests will always come first. In addition, collections have a visibility they never had before as standards for IRB approval and consenting make the process both more open and more visible to those from whom materials are taken (Turner 2005). The molecularization of biology has also affected what anthropologists collect in the field. While DNA studies have not replaced studies of entire human beings, the analysis of DNA does play a growing role in biological anthropology.⁹ Compared with collecting whole blood, collecting DNA is in some ways “easier,” requiring only a cheek swab, and in some ways harder because it now occurs in an ethical climate that requires complex decisions about future use and storage. Biological anthropologists trained to use reflectometers (which measure reflected light from a surface), spirometers (which measure expired air as a test of lung function), and thermometers may now find themselves analyzing things that require new kinds of technological translation and that they can no longer experience directly through vision or hearing.

The locations in which such materials are housed have also changed. Physical/biological anthropologists contributed to natural history museums for most of the history of the field, but to a large extent their collections today go to molecular laboratories at universities and other institutions. Perhaps most telling, such collections today have a commercial value (sometimes significant) that was less important in earlier periods.¹⁰ The management of collected materials, as Turner suggests here, may be the next great challenge for biological anthropology. The history of physical/biological anthropology can thus be seen as both a history of collecting and a history of redistributing. Collections are a flash point for understanding the discipline. These shifting contexts also resituate the role of biological anthropology in the construction of modern national and global identities, our second broad theme. A very complex picture is emerging in situations where the national interests that originally stimulated the work led to the oppression of some groups, and the same collections have now become resources to validate the rights of those who were originally disenfranchised. As Morris Low notes here, the Ainu people of the northern island of Hokkaido in Japan have recently (2008) been declared an indigenous people of Japan (although not *the* indigenous people). This classification overturned a century of research that was intended to show

9. These topics are drawn from a summary of Categories of Papers from the Human Biology Association Meetings (abstracts published in the *American Journal of Human Biology*) and the Society for the Study of Human Biology (abstracts published in the *Annals of Human Biology*) 2008 (*American Journal of Human Biology* 20[2]:213–241) and from a plenary session on evolutionary endocrinology with papers on early pregnancy (Pearl Lecture), placental hormones, inflammation, cortisol, ovarian function, emotion regulation, and several primate studies. The list was compiled for us by Michael A. Little.

10. For a helpful if incomplete overview of the biobanking system, see <https://brd.nci.nih.gov/BRN/brnHome.seam> (accessed October 12, 2010).

that they were, biologically, not a part of the Japanese lineage at all. But the research intended to exclude them ended up validating their status: physical anthropologists seeking to demonstrate the inferiority of the Ainu collected the materials and records that later established the Ainu's geographical and political claims. Similarly, in Norway, as Jon Røyne Kyllingstad's study suggests, the Sami were construed as "latecomers" with no particular claims on their territories. But skulls excavated by the Sami teacher and activist Isak Saba became crucial to scientific arguments in the 1930s that suggested that the Sami had an ancient history in northern Scandinavia (and therefore had ancestral rights), and these skulls were later used in public debates as evidence for the indigeneness of the Sami. The Havasupai—a group in Arizona who recently succeeded in a legal effort to reclaim their own DNA—explored in Reardon and TallBear's paper on the new "civilizing mission" of genomic collection, are only the most recent iteration of this traffic between science, entangled objects, land rights, and the construction of history where the living and the dead are both implicated, even conflated, in bones, frozen blood, and hair (Thomas 1991).

Whatever else it might be, physical/biological anthropology is also a part of the history of colonialism. It is one of a cluster of technical disciplines focused on studying places and people considered exotic that came into being in tandem with the engagement of European experts in an extra-European world of extreme natural and social diversity. Indigenous and native groups marked as living in a different "time" and lacking history (Wolf 1982)—and primate bodies that functioned as time machines in their own ways—became resources for a highly technical science of measurement, comparison, blood groups, and theoretical analysis after 1800. Like so many other scientific disciplines, physical anthropology developed networks of intellectual exchange that crossed national boundaries and ideas and that also reflected sometimes narrow nationalist sympathies and concerns.

At the same time, and less transparently, the enterprise began to engage with what might be called indigenous or subject intellectuals, people who were both studied by physical/biological anthropology—as persons who fit racial categories of one kind or another—and who participated in the enterprise of constructing these racial categories—sometimes as subject scientists, sometimes as scholars at the core, and sometimes as scholars at the periphery who had to deal with European- and U.S.-derived theories about "admixed" countries (where they lived and worked; Bastos 2007; Stepan 1991). Veronika Lipphardt's paper here looks at prominent Jewish scientists in Germany such as Felix Bernstein and Arthur Weinberg who played active roles in scientific fields that construed Jews as pathological. In the process, these scientists struggled to make their peace with both their colleagues and their roles in a conflictual scientific field. In a related way, as Warwick Anderson suggests here, the Maori biological anthropologist Te Rangi Hiroa, who also used the name Peter Henry Buck, operated with a dual identity, as a scientist and

a subject. Hiroa worked on Polynesian groups from about 1879 to 1954 and embraced an identity as racially mixed while actively studying Maori subjects and celebrating his ethnicity as a part of his methodology by turning "mongrel" into his own honorific (Allen 1994; see also Anderson 2005). Similarly, Caroline Bond Day, whose anthropological work is explored in Rachel J. Watkins's paper, understood herself as a mulatto, something she publicly explored in her fictional work and published essays, and as a scientist she worked on the impact of race-crossing—or, as her adviser Earnest Hooton termed it in his notes on her thesis, "miscegenation,"¹¹ a term that may sound benign in some contexts but in the United States evokes laws that criminalized marriages between European Americans and African Americans.

These stories ask us to notice who participates in making categories and collecting material and to notice their stakes in the enterprise. The polygenist and monogenist debates, exploring the question of the origins of different races, engaged elite naturalists and physicians who were coming to terms with the colonial encounter between people who were self-consciously modern and involved with science and "progress" and people who were not (yet). But the stories of evolution and racial hierarchy also engaged and interested those whose bodily traits placed them inside the scientific narratives, those people marked by biology who were, as our conference monitor and doctoral student in the history of science Joanna Radin has put it, biological enough to become the focus of comparative scientific interest.¹² The frequently uninterrogated notion that some people are "more" biological, whatever that might mean, has played a role in scientific constructions of race, gender, class, and ethnicity for at least two centuries.

In 1972, Jack Kelso complained that physical anthropologists were not reaping the boon of the postwar funding explosion in the United States because they looked too much like biologists to the social scientists and too much like social scientists to the biologists (Kelso 1972). Echoing his concerns, a 2003 special issue of *American Anthropologist* featured the painful reconstruction by biological anthropologists of their relationship to other (social) anthropologists at meetings of the American Anthropological Association, where many reported feeling "abandoned" by the broader professional group and shut out from the pages of traditional anthropology journals (Calcagno 2003). Some of the essays in this 2003 issue explored the missed communication between social and biological anthropology. Defending the study of human biol-

11. See the biographical sketch in her archival collections at Harvard at <http://oasis.lib.harvard.edu/oasis/deliver/pea00032> (accessed October 12, 2010; see also Alexander 1993; Williamson 1980).

12. Radin is completing a doctoral dissertation at the University of Pennsylvania in the Department of the History and Sociology of Science, working with Susan Lindee as her adviser. Her dissertation has a working title of "Life on Ice: Frozen Blood, Human History, and Biodiversity in a Genomic Age, 1950–2010." See also her interview with Jonathan Friedlaender (Friedlaender and Radin 2009).

ogy—apparently convinced that such defense was necessary—James M. Calcano said “name one species today for which the biology of that species is considered unimportant.” But of course the issue is not that human biology is unimportant. Rather, it is that thinking about human biology in the ways that biological anthropologists have historically taken as central, in terms of variation and difference, calls up histories that remain unresolved. Are these histories that remain embarrassing?

Like the planners of the “World Anthropologies” Wenner-Gren conference in 2003, who did not seek to construct an abstract model of what world anthropologies should be, we have not sought to construct an abstract model of what biological anthropology can and should be (Ribeiro and Escobar 2006). They found that although social anthropologists around the globe have clearly shared some theoretical and methodological concerns, they have also varied dramatically in their assumptions, methods, and field practices. These differences reflect specific local and national contexts in which they originated as well as particular links to the international networks in which they participated and their experiences in their field sites. The World Anthropologies group wanted to suggest the opportunities opened by pluralized power, which they identified as the central emerging global force of the last half century. Our own explorations illuminate the global historical path of physical/biological anthropology and suggest new opportunities that this history makes possible. Our contributors document how biological knowledge about human populations has been taken up in legislative spheres, used in political claims about rights, and “repurposed” in indigenous networks. They suggest that “center” and “periphery” are fluid categories that can be deployed as experts of different kinds negotiate authority. Our work in this volume looks at race as both a problematic and an opportunity. The biological details can document and challenge injustice rather than legitimate it, and the studied subjects of the past can be allies, experts, and scientists who have a profound stake in the technical knowledge that draws on their histories.

The Origins of Physical/Biological Anthropology

The subject of human biological variation and difference has attracted keen observers for as far back as our historical records take us. The late Frank Spencer’s remarkable 1997 encyclopedia of physical anthropology includes references to the ideas of Anaximander, Albertus Magnus, Tocqueville, and even Mark Twain as well as entries on many prominent figures in the history of biology since 1700, from Linnaeus to Robert Chambers to Ernst Mayr, many of whom would not have called themselves physical anthropologists (Spencer 1997). Relevant ancestral fields of science could be construed to include anatomy (a key domain around the world in terms of training), medicine, all forms of natural history and field

collecting, and all kinds of racially oriented sciences. Biological anthropology addresses questions with a long, complex lineage.¹³

The disciplinary configuration that looks roughly like modern physical/biological anthropology, however, has its origins in the nineteenth century in the United States and Europe, especially Germany and France. Most practitioners were trained in medicine and were concerned in one way or another with human variation, anatomy, difference, racial classification, and evolution. Training and research programs began to thrive in these centers and then spread out, first to other European nations—to Italy, Scandinavian countries, Czech and Slovak regions of Eastern Europe, Poland, Belgium, the Netherlands, Great Britain—and then beyond to Israel, Latin America (Mexico, Brazil, Argentina, Peru), Russia, South Africa, Japan, China, Australia, and New Zealand. The nascent field seemed to find receptive audiences everywhere in the nineteenth century, often mediated by someone trained in Europe or the United States—someone who brought the methods and language and theories and training standards of physical anthropology to a new setting and applied it there, sometimes in only a short visit of a few weeks. Physical anthropology was easy to plant and easy to grow, which raises intriguing questions about what the consistent cross-cultural appeal might have been. Studies of the history of physical/biological anthropology have been dominated by practitioner-scientist historians, some very skilled, some with a limited understanding of what would count as a historical argument. One of the more interesting resources we found was the International Association of Human Biologists Publications on Histories of Physical Anthropology, a series of papers written by anthropologists about their own national experiences and covering the development of physical anthropology in many nations (see Roberts 1997).¹⁴ These are all relatively short and often autobiographical, but together they reveal some trends and they are rich testimonials for any historian interested in understanding the global development of physical anthropology. Practitioners continue to play a key role in assessing and making sense of the history of the field, but they are now joined by a growing cadre of scholars trained in the history

13. Some of the entries in Spencer’s two-volume encyclopedia constitute very helpful starting points for any historian interested in the field. The treatment of interdisciplinary field research in several entries provides a critical guide to the key field projects in the twentieth century; entries on particular national contexts (including Finland, Cuba, New Zealand, and many others) give a quick guide to institutions and leading scientists around the world; the discussion of paleoanthropology attends to theories and collections and includes many helpful references. Like all encyclopedias, the work is long on facts and short on analysis, but it is unquestionably a crucial resource (Spencer 1997).

14. A partial list of the occasional papers on the history of physical anthropology in different countries written by members of the International Association of Human Biologists, including Great Britain, the Netherlands, Belgium, Brazil, Italy, Czechoslovakia, Germany, Italy, Poland, and former Soviet Union, may be found at <http://www.worldcat.org/identities/lccn-n89-222553> (accessed September 15, 2011).

of science, technology, or medicine or in political or cultural history who have begun to recognize the centrality of physical/biological anthropology to a range of traditional historical concerns with global knowledge systems, the management of the modern state, and colonialism and its legacies. Social anthropologists have often written about biological anthropology as well.

Historian of anthropology George Stocking played a key role in calling attention to the history of physical anthropology and bringing professional historians into the discussion of its past (Stocking 1988). Beginning with his 1968 study of race, culture, and evolution, Stocking has explored the history of biological and cultural anthropology with an emphasis on the ways that anthropologists themselves have responded to decolonization (Stocking 1968, 1991). In the mid-1970s, as the internal professional crisis over the roles of anthropology in colonization waned, “the assumption that anthropology was linked to Western colonialism became as much a commonplace of disciplinary discourse as the ignoring (or compartmentalizing) of that relationship had once been” (Stocking 1991:4). Historians such as Stocking and historically informed social anthropologists as well as historians began to critically interrogate the questions raised by this assumption and began to place the practice of physical/biological anthropology within national and imperial histories (see, e.g., Anderson 2005 on Australia; Blanckaert 1989 and Dias 1991 on France; Bronfman 2004 on Cuba; Cunha 2002 on Brazil; Dikötter 1997 on China and Japan; Hirsch 2005 on the Soviet Union; Philip 2004 on Southern Indian; Pordgorny 1999 on Argentina; Stepan 1991 on Latin America).

Biological anthropologists with historical expertise, such as Michael Little and Kenneth Kennedy (2010) and Jonathan Marks (1995), have tracked the theoretical and intellectual history of their field—the ideas and theories that made sense of human biology across time and place. Little’s paper at our conference sketched out a definition of the field listing paleoanthropology, skeletal biology, primatology, molecular anthropology, population genetics, and human population biology as all a part of biological anthropology. Biological anthropology, he said, was “the study of human evolution and human variation,” proposing that the historical threads leading to contemporary biological anthropology included Ancestral Keyes’s wartime starvation studies, the Human Fatigue laboratories, studies of populations in extreme environments, and studies of the stresses experienced in global conflict when the human body is placed under difficult circumstances. The biology of human tolerance became a practical and politically relevant technical problem for physical anthropology, which moved beyond the focus on populations or race. Marks explores the persistence of ideas about race and human diversity through a century of mixed professional and institutional approaches and practices in which either blood or bodies could take precedence depending on the professional or political stakes in play.

Our papers here join an increasingly sophisticated literature

on the history of physical/biological anthropology. They are inflected by our interdisciplinary discussions and our collective commitment to the development of a more profound understanding of how past concerns continue to matter to the field. We recognize the high human stakes in both historical and contemporary claims about the sciences of human biology. Those stakes animate our interest and guide our approaches and questions.

Physical Anthropology and National Identity

We start with four case studies of the development and role of physical/biological anthropology in Brazil, Portugal, Norway, and Japan, each of which demonstrates how the scientific practices of the field intersected with issues of national identity and colonial power. Building nations and empires was one of the things that biological facts about bodily difference seemed to be able to do, and in many different places. Human biology was a way of thinking about the nation and the state.

In Brazil, the nationalist agenda may also have reflected concerns about European power. In his paper, R. V. Santos reassesses the influence of Franz Boas on physical anthropology in Brazil, suggesting that the antideterministic postures of prominent Brazilian physical anthropologists such as Edgard Roquette-Pinto drew less on Boas and more on the Brazilian experience of nation building at the end of the imperial period and during the rise of the republic. At the National Museum in Rio de Janeiro, one of the most influential anthropological research centers from 1870 to 1930, anthropologists distanced themselves from theories that disqualified the mestizos and placed non-Europeans lower on the hierarchy of human races. Seen as “guardian angels” of the Brazilian people, the physical anthropologists working in this museum participated in forging national identity, and in the rejection of determinism they rejected what was a part of the nationalist ideal. As R. V. Santos proposes, Roquette-Pinto interpreted the problems of Brazilian populations as social, political, and medical rather than racial, and by the time he visited Boas in New York in 1926, he had already rejected racial types as explanations for national status. R. V. Santos’s case study helps us understand how specific contexts intersect with dominant ideas and how nationalism can shape scientific conclusions about populations and racial hierarchies.

Gonçalo Santos explores the development of physical anthropology in Portugal in the mid- to late nineteenth century. Portuguese anthropologists were particularly concerned with the question of the “antiquity of man in Portugal.” Some focused on the past (including the prehistoric period), others focused on aspects of the present deemed to be archaic survivals, but both groups were interested in the study of the origins and specificities of the Portuguese as a “race” and a “nation.” The country had vast overseas possessions and imperial ambitions, both of which shaped the development of physical anthropology. Many observers have commented on the role of anthropology in the colonial enterprise, but G.

Santos emphasizes the ways that Portugal's own internal sense of political fragility shaped anthropological thinking. Shrinking imperial returns combined with continuing domestic underdevelopment and growing economic dependence on other European powers (especially Britain) to produce a general fear that Portugal could be annexed by Spain. By seeking to demonstrate the "antiquity" and the "unity" of the Portuguese as a superior European "race" and "nation," early anthropologists were not just seeking to define themselves in opposition to colonial subalterns, G. Santos proposes; they were also seeking to strengthen their country's claims to sovereignty while reaffirming its position within European hegemony.

A resonant case study is Kyllingstad's consideration of Norwegian physical anthropology, where the Nordic race concept was abandoned in the 1930s despite pressure and criticism from German physical anthropologists. Physical anthropology in Norway developed with close ties to physical anthropology in Germany, but as Norwegian scientists from the late 1920s began to question concepts of racialized hierarchies, Norway began to "lag behind" in racial consciousness, according to the criticism of a Norwegian Nazi anthropologist. Kyllingstad suggests that the relatively small community of physical anthropologists in Norway (three individuals) was responding to a specifically Norwegian scholarly community engaged with archaeological, linguistic, and historical study of national prehistory and history. This community developed scholarly ideas about humankind, culture, and nationhood that were rather different from the *völkisch* ideas that gained increasing support among German academics in the same period. Racial explanations for national development existed among Norwegian scholars, but archaeologists, philologists, and historians were far more influenced by a cultural evolutionary notion of nationhood in which the nation was seen as a product of the cultural adaptation to a certain environment. This perspective was based implicitly or explicitly on a basic principle of the psychic unity of humankind that became part of Norwegian national identity.

National identity played a key role in the search by physical anthropologists in Japan for the origins of the Japanese, as Low suggests in his paper. He considers how Japanese physical anthropologists studied and assessed the Ainu people of Hokkaido and shows that they often had an explicit nationalist agenda over the last century. For Japanese physical anthropology, the Ainu complicated the ongoing debate about the origins of the Japanese, which has drawn on human DNA, rice genetics, and historical linguistics to suggest that immigrants (from somewhere else) were responsible for the transformation of Japan from a hunter-gatherer to an agricultural society starting in roughly 300 BCE. Physical/biological anthropology was far more advanced in Japan than social anthropology, Low suggests, and the historical narratives he reconstructs matter for the Ainu today. Stories that attend to questions of power and national identity, Low proposes, "bring home to us the importance for anthropologists to use research practices based on prior consultation, cooperation

and collaboration with local communities."¹⁵ His case study provides critical perspective on a group that is, like so many others, both "assimilated" and discriminated against and understood to be both modern and ancient simultaneously.

Shifting Cores: Germany, France, and the United States

With the next six papers, we turn to a consideration of the development of physical anthropology in three widely recognized "centers"—Germany, France, and by the mid-twentieth century, the United States. By 1982, G. Ainsworth Harrison could claim that "North America occupies a central position" in physical anthropology and that the population studies then underway by James V. Neel constituted the "main development" in physical anthropology at the time (Harrison 1982). Certainly Neel's interdisciplinary field programs in South and Central America were important for biological anthropology, forging links between geneticists and anthropologists and promoting the use of new laboratory technologies in studies of living human populations. But Neel's approaches reflected theories that had their origins in research programs supported by both German and French anthropologists, and the intellectual traffic between these "centers" was significant.

Lipphardt's exploration of German physical anthropology compares the scientific work of German race hygiene theorists such as Eugen Fischer and Fritz Lenz with the work of the postwar American geneticist L. C. Dunn. She suggests some striking continuities between typological and population-based race concepts both before and after the Second World War. There were population-based evolutionary concepts in German race science before World War II, and there were typologies and typological aspects in human population genetics after World War II. She suggests that all of this work should be assessed in a symmetrical way, within a comparative frame that includes the work of other scientists at the time and later. An overemphasis on the problems of Nordic supremacy, she suggests, has led too many historians to fail to notice both the dissent within Germany—sometimes by extremely effective Jewish scientists who recognized the logical and methodological weaknesses of Nazi race science—and the peculiarities of the scientific community that did emphasize the Nordic race. Her attention to Dunn, who not only carried out fascinating work in Rome but who was also a key player in the UNESCO race statements, permits her to excavate the ways that populational thinking was supposed to resolve the problem of race in genetics.

Like Lipphardt, Emmanuelle Sibeud presents a deep fundamental challenge to the existing historiography. She calls into question any simple connection between colonialism, imperialism, and physical anthropology after 1880 and pro-

15. Morris Low's comments at the symposium reconstructed in an e-mail to the editors, July 2010.

vides insight into practices of what might be called “leisure time” anthropology. These practices reflected the surprisingly limited legitimacy of French physical anthropology at the very moment when its influence should and could have been escalating as the French empire expanded in the late nineteenth century. The old tale of anthropology as an uninflected tool of colonialism does not hold up to historical scrutiny, and practicing anthropology in the French Empire was tenuous, insecure, and not incorporated into the structure of the colonial administration. Securing support for anthropological projects was extraordinarily difficult, and schisms within anthropology undercut the institutional legitimacy of the field. Data on colonial bodies played a relatively small quantitative role in the databases of physical anthropology as a whole in France, and the legacy of Paul Broca, who favored laboratory over fieldwork, had far-reaching consequences for the discipline. By 1900, Sibeud shows, the rise of republican universities shifted anthropology to the academic fringes. Her account underscores the complexity of assessing the roles of anthropologists in any colonial enterprise.

In the colony of Hawaii, Anderson shows that scientific ideas about a natural race-crossing laboratory reflected social and political pressures in the United States. He described his paper in a conversation at our meeting as a consideration of “why Barack Obama is not our first Hawaiian president” in light of the ways that the political and scientific ideas he considers shaped the social experience of race that molded the young Obama in the 1960s. Physical anthropologists from the American Museum of Natural History and Harvard University saw Hawaii in the 1920s as a “racial laboratory” of hybridization, but instead of validating the biological force of race, their research in the Pacific came to reflect the ideas of Franz Boas about human plasticity and the importance of culture. This occurred at the very moment when a mainland notion of blood quantum in racial identity was being institutionalized in Hawaii by the haole-dominated territorial government. The racial technology of the blood quantum was, ironically, imported from colonial management practices in American Indian reservations. While scientists were praising human hybridity and enjoying what he calls “their modernist biological moment,” mainland classifications and social rules moved to the islands uninflected by anthropological theory.

Midcentury theorizing about evolution was similarly uninflected by anthropology, as Vassiliki Betty Smocovitis proposes here. The relative absence of anthropologists from the early development of the evolutionary synthesis raises central questions about the field today. The synthesis as it was understood made possible the reduction of the social sciences to the biological sciences and ultimately to physics and chemistry. Within that positivist ordering, social sciences such as anthropology would be reducible to biological sciences. The role of this tension in anthropology today cannot be overstated. As a category of scientific knowledge, biological anthropology is the discipline in life sciences devoted to the study of a single species. She asks, “What would an equivalent

biological scientific category devoted to fruit flies look like?” (Smocovitis 2012). And what is the logic of the field of primatology, which boomed in the wake of Washburn’s influence in the 1950s, as a category of scientific study devoted to primates but which not only excludes humans but is also an autonomous subset of the larger category, anthropology? Biological logic would dictate that humans be studied by primatologists. Instead, she observes, anthropology preserves and instantiates the special status of humans.

Capturing in a different way some of the interdisciplinary forces shaping biological anthropology, Little here suggests that the field “came of age” during the second half of the twentieth century, particularly after 1945. This period saw a revitalization of the profession, with expanded studies of living populations that focused on body composition, child growth, nutrition, environmental physiology, epidemiology, and demography. The International Biological Programme and its Human Adaptability Component provided a range of new insights about populations around the world and a model for multidisciplinary field research. New technical capabilities in human genetics and the shift from “phenotypic inference” to a more sophisticated mode of “direct DNA” or “molecular genetics” analysis made it possible to ask new questions. New fields of investigation from the 1980s through to the end of the century included reproductive ecology, behavioral evolution, Darwinian medicine, psychoneuro-physiological stress, and biomedical and health research. Little’s account captures the many institutional and technological changes that reshaped biological anthropology after the war. Echoing Smocovitis, he tracks the unification of three subfields of anthropology in the 1960s as a theoretical appeal of ecological explanation began to attract those trained in social anthropology, archaeology, and biological anthropology. Little’s account captures the diversity and interdisciplinarity that has shaped biological anthropology since 1945.

Clark Spencer Larsen and Leslie Lea Williams provide a focused account of a different and crucial institution, the *American Journal of Physical Anthropology*, one of the leading journals within the field. They show that today about 30% of the contents of the *American Journal of Physical Anthropology* relates to living human variation (human biology) and that international submissions have increased in recent years. Their analysis helps us place the study of living human populations in the broader context of biological anthropology as a whole. The time period chosen was Larsen’s editorship of the journal, from 2001 to 2007, but it also proved to be a time when international submissions increased and attention to the study of living populations, especially human genetics, continued to grow. More multinational and collaborative research and non-U.S. authorship could reflect stronger ties in biological anthropology programs across national boundaries, but it also almost certainly reflects increasing electronic access to the submission process. By considering patterns of submission and publication in this key journal, Larsen and Wil-

liams illuminate the increasingly international networks of biological anthropology after 2000.

A Global Form of Reason

With the next group of papers, we turn to the transnational negotiation of human biological diversity research and the global forms of reason that shaped it. Race plays some role in every paper here, but this group of papers provides perspectives on its meanings and negotiation transnationally over a century of scientific change.

In his consideration of the roles of European ideas in South African concepts of race and difference, Alan G. Morris proposes that the rise of apartheid in the 1940s was not rooted in the country's physical anthropology of the previous decades. Rather, the engineers of apartheid were for the most part Afrikaans-speaking ethnologists operating out of the Afrikaans-medium universities where little or no physical anthropology was taught, he suggests. Although none of the early practitioners of physical anthropology in South Africa were directly involved in the implementation of the apartheid policy, Morris notes, their strict typological approach to human variation did provide a solid growth medium in which the government policies could develop without credible scientific opposition. Later, some gave testimony before the notorious Race Classification Board set up to hear appeals from individuals seeking to change their race status. The implementation of apartheid after 1948 was a political process that was out of step with most of the post-World War II world, and the ideology that supported it came out of the central European theory of "ethnos." It also drew on the more general physical anthropological concept of typology, but it was not, Morris suggests, strictly homegrown. European ideas played a central role in South African apartheid.

Marks provides a critical perspective on the relationships between genetics and physical anthropology in the first half of the twentieth century, considering how a global community negotiated the relevance (or irrelevance) of genetics to anthropology. His account challenges a commonly repeated story of this relationship—in which anthropologists were unable to recognize the value of human genetics because they were poorly trained—and shows instead that the field of racial serology, as it gained momentum in the 1920s, produced entities that were not recognizably racial and fundamentally therefore not of interest to physical anthropology. Marks notes that the field of racial serology effectively ended in 1963 with a review in *Science* that identified 13 serological races: one African, two Asian, five European, one American, and four Oceanic. As Marks shows here, it was not until the rise of population genetics after 1945 that genetic data began to seem more relevant to physical anthropology, and something called anthropological genetics emerged in the 1960s. Marks explores the crossroads of genetics and anthropology over the last century, the ways that different kinds of data were taken as primary by scientists with different disciplinary and na-

tional identities, and the common valorization of genetic explanations and DNA into the present.

Providing an equally interdisciplinary perspective on related issues, Perrin Selcer looks at how the UNESCO statements on race illuminate the consolidation of the postwar liberal racial orthodoxy. Persons unmarked by race, Selcer notes, gained authority on the question by virtue of their racelessness—whites (one might argue the *most* "interested" category in the power dynamics of the racial system) were presumed to be capable of producing science that was less biased than that to be expected by those marked and colored. Because race structured so much of twentieth-century society, from international politics to playground etiquette, Selcer notes, whatever the UNESCO statements said had to play well in many venues, including the popular media and scientific journals, at the UN, in the United States, and in newly independent nations. It is unsurprising under these circumstances that producing the statements was tortuous and that the statements themselves often carried multiple meanings so that different audiences could discover congenial interpretations. They were also controversial, although Selcer shows that the controversies are not always exactly what they seemed. By attention to the three UNESCO race statements, he provides a portrait of uncertain scientific authority and shifting social expectations, exploring how the same data could be used to argue opposite points.

In Pálsson's work on the Icelandic biomedical company deCODE, we see different kinds of global truth and different forms of race in action. With the advancement of genomic research, the issue of human variation has been redefined through new engagements between experts and laypersons. Consumers have become active collaborators in personal genomics, participants who work on themselves and who make their way into membership in a new biosocial community. But they have also become implicated in networks over which they do not have control. In Pálsson's own experience as a consumer of genomic testing, recounted here, he is reduced to comparing his DNA to that of James Watson when his family members—his own social kin—are reluctant to join him in the new world of consumer genomics. In a global network of increasing sophistication, anthropologists should be able to participate and collaborate with at least the guiding assumption that *Homo sapiens* is an undivided being and that decoding it—to the extent that the language of "decoding" is the appropriate one—requires integrative perspectives that in the absence of a better nondualistic language resonate with our biosocial nature/culture. This will not be easy, he says, but it is the only meaningful way to go.

Collecting and Contested Ownership

Our next group of papers considers material objects and their ownership, a topic that, as mentioned above, came to seem central to our project. The human materials and remains that

provide evidence in science also provide evidence of history (Lindee 1998).

The community of biological anthropologists in the United States had a particularly active role in the negotiation of race in light of the legacy of slavery, and Watkins considers the emergence of “the American Negro.” Echoing Anderson’s questions, Watkins’s paper might be parsed as explaining “why Barack Obama was not the U.S.’s first *African* president.”¹⁶ She looks at the idea—as it was elaborated in a range of scientific research programs—that “American Negroes” constituted a racialized hybrid product of biohistorical forces. American physical anthropologists described the special properties of the American Negro, and black bodies played a role in the establishment of racial and scientific authority. Her elucidation of the simultaneous construction of the American Negro as both a hybrid and racially distinct suggests that explanations of difference in early twentieth-century bioanthropological research cannot be easily distinguished as racialist and nonracialist, the standard categories. Her close reading of studies of American Negro skeletal and living populations dating between 1924 and 1950 takes ideas about admixture as a historical and technical problem and asks questions about scientific methodology, collections, and social entanglements.

In Kakaliouras’s study of repatriation, she suggests that in the 20 years since the passage of the Native American Graves and Repatriation Act (NAGPRA), the cultural context for the practice of archaeology and bioarchaeology has been transformed. Disciplines that have traditionally studied material remains in the absence of their makers (archaeology) or biological remains in the absence of their descendants (osteology/bioarchaeology) now manage to live with repatriation as a professional reality. Repatriation, she suggests, changes the world of things (or thing-worlds) for both Native North American people and biological anthropologists. Repatriation has also opened the possibility for Native ancestral remains to occupy a whole different set of spaces and places: to be in transit across large geographic regions, to be in new tribally run curation facilities, or to simply be set apart from other bones, perhaps waiting for a repatriation claim to be made or settled. Repatriated remains also perform time travel, forming an uneasy bridge between the “prehistoric” and contemporary. Thus she shows that repatriation has produced a new category of archaeological and contemporary material culture—the “repatriatable.” Repatriatables as such have significant power in the present and have stirred a whole set of complex and long-standing cultural and historical sentiments toward them, from Native people and anthropologists alike.

In a related way, Turner, in her exploration of the philosophical and institutional history of bioethics, is attuned to the practices that collections can produce. Like Kakaliouras, she notes that there are examples of repatriation efforts that

have been successfully accomplished, and the repatriation of native material has been in process for years. But there are many unresolved questions. Some materials are clearly subject to the legal requirements of repatriation, but other materials, such as DNA samples, are currently being collected with the explicit attempt to preclude any possibility of return or destruction. She calls attention to the many roles of Neel, who was the primary author for a World Health Organization working group that produced two reports, in 1964 and 1968, that detailed the obligations of researchers to study populations. All of his proposals were in line with standards elucidated at both Nuremberg and Helsinki and could even be seen as farsighted at the time, Turner suggests, yet his work in the field with Napoleon Chagnon in 1968 became the focus of a remarkable controversy in anthropological circles in 2000, and the controversy itself suggests the validity of Turner’s perspectives: standards are continually shifting, and holding relationships “still” in some dependable way into the future is extremely difficult.

Reardon and TallBear explore the assumptions of privilege that shape all interactions between scientific experts and studied groups. They propose that in the name of being against “race,” contemporary scientists continue to make claims to control Native peoples and to own their resources in the name of “whiteness.” Reardon and TallBear argue that while biological anthropologists and geneticists commonly state desires to build an antiracist future, often they do so on conceptual and material terrains that leave intact old links between whiteness and property. Exploring the deeper histories of the relationships between whiteness, property, and the human sciences, they consider how scientists and courts make sense of bodily materials. While indigenous peoples explicitly assert their right to narrate their own histories and identities, Euro-American nation-states and scientists usually need not do so, as these histories and identities are recognized and upheld in dominant systems of law and science. It is an example of the common power of things that do not need to be said. Dominant legal and regulatory mechanisms are shaped by histories of racism and colonialism, and it is these relations that must be addressed in order to respond to the problems created by the constitution of whiteness as property by both the law and the life sciences.

New Powers

Just as Pálsson proposes that the biological and the social cannot logically be separated, Véran proposes that the past and present are working together in biological anthropology and are very difficult to tease apart. His paper points to the vexed status of the anthropologist today—biological or social—who testifies to the legitimacy of categories of historical oppression for the benefit of the oppressed. Remains stored as museum collections or objects of scientific study, he suggests, keep the old anthropology in play, facilitating a new balance of power where the “hard evidences” of yesterday—

16. Promoters of the birther movement in the United States proclaim that he is in fact African and not a U.S. citizen.

the bones, skulls, and blood samples—perform the circumstances of their original collection in the field in new ways. In the repatriation process, V éran notes, they are resignified dialectically, and this dense resignification is the reason that despite many museums' strong voluntarism and deep commitment to repatriation, tensions and conflicts persist. Thus the paradox of contemporary biological anthropology: the anthropologists have never been more committed to ethically aware practices as a guarantee that past mistakes can finally be left behind, and groups demanding the return of materials have never been more committed to keeping the past in play, present, and relevant to their own grievances. Some of the turmoil within anthropology itself, he suggests, reflects this redefinition of power.

Our final "paper" is a nuanced and engaging interview of Noel Cameron conducted by Joanna Radin. His input during the conference came to crystallize our concerns in ways that surprised even Cameron. The formal paper contributed to the conference was an excellent account of his research. But in our discussions it was Cameron's perspectives on his own intellectual trajectory that came to seem most relevant to the themes of the conference, and we therefore proposed to him (at a luncheon meeting in Philadelphia while he was visiting Princeton) that an interview might be a way to capture these perspectives. Radin, who has worked with us on this project in critically supportive ways and whose own doctoral research engages with relevant questions, conducted the interviews and worked to edit them, while Cameron was a full participant in editing and amending the oral history. The resulting text is both an individual life story and a window into the evolution of a community in biological anthropology. His interview shows how radical were the transformations in the practice of physical/biological anthropology in South Africa during the twentieth century. We would suggest that Cameron's experiences reflect more general changes by the end of the twentieth century. After 1945, and in some ways because of the political events of the two world wars and the resulting global political realities, those practicing biological anthropology changed their ways of work and their ways of thought. Carleton Coon remained a full professor at the University of Pennsylvania—and an unrepentant racist—but a new group of practitioners in the United States and elsewhere was sensitized to the strange legacy of racial thought in the field and were determined to draw on new technical and mathematical tools to illuminate human biology in ways that recalibrated what politics meant. In the old order, political priorities seemed to distort thinking about human biology. In the new order, as in Cameron's work, political priorities (including repression, limited access to resources, health care, etc.) could be seen to shape biology itself in human growth, a measurable phenomenon.

We can thus track a general shift to a recognition of politics as inside biology, inside the skin, in body fat, physiology, reproductive rates, disease—in other words, physical/biological anthropology moving toward a science of human biology

that could take into account racialized human experience and its biological consequences without construing the resulting group differences as justifying inequality or as grounded in heredity. Indeed, increasingly, racial group differences could provide evidence of inequalities that needed to be eliminated.

Conclusion: A New Look at Biological Anthropology

Many of the people who were historically the focus of field research in physical anthropology were viewed as living in some way outside of time. The modern industrialized world changed rapidly, but the worlds of those studied were often seen as stable, timeless, "without history" (Wolf 1982). The notion of timelessness plays a role even in more recent initiatives, including the Human Adaptability Project of the International Biological Program in the 1960s, the Human Genome Diversity Project in the 1990s, the contemporary ongoing DNA collection of the Genographic Project, and the creation of a dazzling array of new DNA databases in recent years for medical and entertainment purposes. We could therefore be seen as telling a time-inflected story of the meanings of timelessness. Selcer proposes that the archival record of the UNESCO race statements keeps the focus on race: "In the act of debunking scientific racism, the antiracist intellectual inadvertently keeps the focus on the very biological facts he insists are insignificant" (Selcer 2012) focus on a past that we hope can become a resource for moving forward.

Watkins proposed, however, that the embarrassment may not be shared by biological anthropologists who are marked by the forms of race that once constituted the central technical subject of the discipline. Speaking of the experiences of African American biological anthropologists today, she noted that "we don't have the privilege to avoid the history." In thoughtful comments after the meeting, she observed that the contributors to our volume do indeed reflect a broader shift toward merging political and intellectual priorities in research in biological anthropology. However, this shift has occurred primarily among "nonraced" scholars who have had the privilege of deciding whether or not to notice the politics of their work. For scholars affiliated with groups that historically entered the field only as research subjects, ignoring the history was not possible, and there may be no shared sense of embarrassment now.

The purpose of any Wenner-Gren symposium is to create an environment for discussion, and the papers we invited to the table were intended to build a space for thinking and talking. Indeed, at a Wenner-Gren symposium, participants do not traditionally formally discuss the papers in great detail. Rather, the precirculated texts become stepping off points, points of departure, and are left in the background as the conference takes form. To return to pregnancy, Gregory Bateson in the 1960s invoked the metaphor when he suggested that a Wenner-Gren symposium was like "a beast," something that could come alive after a long gestation and a long plan-

ning period and was only given “its collective birth when the participants come together.” The anecdote is recounted in Sydel Silverman’s compelling history of these meetings (Silverman 2002). “When a conference jells,” she proposed, “the beast comes to life; it settles down at the center of the table, growing and growling, only to slink away when the conference ends, never to return.” When the editors and authors return to their papers and their ideas, having flown home and (in our case) left the remarkable hummingbirds and marmosets behind, they have all been changed.¹⁷ We present here these changed papers, written by people who were also changed by our joint discussions and by shifts in our collective perspective. In the context of the conference and in the process of reviewing their papers in the following months, our participants came to terms with questions of being both “embarrassed” and *embarazada* (pregnant) with new ideas.

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17. It is true that Ricardo Ventura Santos and Jean-François Vêran live in Rio de Janeiro, 2 hours southeast of Teresópolis, so perhaps they did not leave the hummingbirds and the marmosets behind, but they did at least leave the conference changed.

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