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Human Biodiversity and the Egalitarian Fiction

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Biosocial criminology was born from a contrarian spirit. Deeply unsatisfied with traditional sociological explanations of crime, biosocial criminologists have pursued and reinvigorated lines of research that had been idle for decades (Wright & Boisvert, 2009). Indeed, with few and isolated exceptions (see Ellis & Walsh, 1997), biological criminology had essentially been relegated to the dustbin of history (Wright & Cullen, 2012). Not only had it been replaced by purely social explanations of crime, but it also became synonymous with racial prejudice. Indeed, it was just a few years ago that no mainstream criminologist would dare link genetic or biological forces to criminal behavior (Wright & Boisvert, 2009; Wright & Cullen, 2012). And for good reason: To do so invited public and private repudiation; it invited allegations of racism, sexism, or suspicions that the scholar was a conservative; or worse, it invited career death (Wright & Cullen, 2012). Against these real and perceived dangers, however, biosocial criminology has continued to grow. New studies are published almost daily and those once afraid to discuss the connections between human biology and behavior have now found their voice (Cullen, 2011).

What is missing from this account, however, are the values, principles, and personality traits that drove these scholars to risk their careers and reputations. We believe it fair to say that biosocial criminologists are a unique breed—no pun intended. As a group they are contrarian to the core. By this we mean they question every theory, every postulate, and every finding. It is more than Mertonian “organized skepticism”—because they often reject conclusions reached by a broad swath of scholars (Wright & Beaver, 2013). Contrarianism infuses their work, but it is backed by a rigid adherence to the scientific method and a rigid belief in science. Simply put, biosocial criminologists are skeptical of entire bodies of research in part because they believe much of it to be misspecified, or worse yet, infused with disciplinary or political bias (Cooper, Walsh, & Ellis, 2010; Wright & Beaver, 2013).

So it is here, at the crossroads between contrarianism, political bias, and science that we address the most controversial topic in the social sciences—that of race, biology, and behavior. In the spirit of contrarian science, we first address what we see as the core of a serious academic dispute. On one side of the dispute are powerful organizations that have issued major proclamations denying any biological basis for race. These organizations argue, with the full force and weight of their membership, that biological race does not exist, or in their language, that race is merely a “social construction.” Many scholars, unfortunately, have taken this to mean that any conversation about biological race is inherently racist. Within these organizations we find serious-minded scholars who have reshaped the debate about race, who are highly respected by their peers, and who train future generations of academics. To be clear, these institutional and personal forces are formidable and intelligent, and they have made their voices heard.

On the other side of the dispute are a loose collection of scholars, some of whom belong to these powerful academic organizations, who have openly questioned these proclamations, and who have marshaled or imported empirical evidence showing that race is a useful biological concept (Risch, Burchard, Ziv, & Tang, 2002; Sarich & Miele, 2004). Some of these scholars are the most cited scientists in the world, but they have been largely ignored, neglected, or worse yet, ostracized because their work confronts deeply held beliefs about race and social equality. Nonetheless, against the full weight of large academic organizations and the zeal of some of their more vocal members, the few scholars who refute the mainstream account that race is merely a social construction remain a minority—a minority easily persecuted by more powerful interests.

Our chapter thus serves a dual role: We first tell a story of how science can sometimes be used for political purposes and how these political views can then become enshrined in scientific conversations. Nowhere, we believe, is this more obvious than in the “scientific” discussions of race, in discussions of aggregate differences between races, and in discussions concerning the race-crime link. While critics may dispute some of our renditions of this story, nobody in either camp can deny that race is unlike any other issue in the social sciences. Brilliant scientists have lost their jobs and seen their character assassinated because they dared say publicly what many believe professionally (see, for example, Snyderman & Rothman, 1988). We tell this story, only in a condensed form, to show why biosocial criminologists

remain unsettled with traditional accounts of race and biology and to show why those who question scientific dogma are neither racists nor unscrupulous.

Having told this story, we then cover the evidence of biological race. Unlike major academic organizations and their proclamations, we trust our readers to evaluate the evidence on their own and to arrive at their own conclusions. This evidence comes from studies conducted all over the world, from studies into genetic differences between groups of people, and from studies that reveal the complex interconnections between evolution and modern genotypes. To foreshadow our discussion, we argue that the scientific evidence indicates that race is both a biological construct and a social construct. While we argue that biological race is real, that it is measurable, and that it is socially meaningful, we make the very same argument about “social race.” Indeed, we believe it misguided to argue that the realities of race and racism become neutral if people believe race to be a mere social construction.

Science and Politics: The Tribal Moral Community

At the 2011 meeting of the Society for Personality and Social Psychology, Jonathan Haidt brought to light, in dramatic fashion, the political biases present in the social sciences. After querying his audience of over 1,000 social psychologists about their political identity, Haidt calculated the ratio of liberal to conservative professors to be about 266:1, a “statistically impossible lack of diversity,” he said. Haidt’s talk was covered in the *New York Times* and the *Chronicle of Higher Education* and stimulated many conversations and discussions. But Haidt was not the first person to find that university faculty are extremely liberal—indeed, that was only a lead-in to his broader discussion of how political biases have materialized in the social sciences, and more important, how they have been enforced.

At the heart of Haidt’s conversation, and his resulting book, was his idea that many social science disciplines have become “tribal moral communities.” According to Haidt (2012), members of a tribal moral community share a set of sacred values. These values are deeply felt and internalized by members of the community, and because they represent deeply held convictions, they tend to “bind and blind.” By this Haidt means that these values not only provide members a sense of belonging to a larger community, but that they also tend to create conditions where challenges to these values trigger unusually negative responses.

Just what are the sacred values identified by Haidt, the values that if challenged will cause backlash? Haidt argues that race, intelligence, class, sex, and nativism—the linking of biology to behavior—all serve as sacred values. To be clear, these values are moral viewpoints, or more accurately, are political viewpoints. They impose nonscientific standards on the discussions of these subjects, thereby shaping and creating conforming views despite evidence. As Haidt notes, tribal moral communities will “embrace science whenever it supports their sacred values,” but that “they’ll ditch it or distort it as soon as it threatens a sacred value” (Tierney, 2011, p. 1).

Haidt’s work helps us understand why controversy erupts in the social sciences so frequently and why disputes can become so laden with rhetoric and invective.

Science is, to be sure, sometimes controversial. On occasion controversy erupts when scientific findings confront deeply held beliefs. Famous studies on human sexual behavior, for instance, caused social uproar when first published (Kinsey, Pomeroy, & Martin, 1948). On other occasions, controversy erupted when scientific methods of questionable ethics were used, such as the Tuskegee syphilis experiment or the Stanford prison experiment (Oakley, 2007). Today's controversies, however, stem not from the methodologies employed by social scientists or even from the social acceptance of some research findings. Instead, modern scientific controversy stems largely from the questionable objectivity of scientists—an objectivity that is compromised by open political activism and an adherence to sacred values. There is, unfortunately, good reason to question the objectivity of scientists, especially social scientists, as it relates to discussions of race.

A hallmark belief, or sacred value, of contemporary progressive ideology is that minority groups do not differ in their talents or abilities and thus that disparities found in the workplace, the educational arena, or even the criminal justice system, reflect bias and discrimination against these groups. Speaking specifically of intelligence differences between groups, Gottfredson (1994) refers to this sacred value as the “egalitarian fiction.” More broadly, the egalitarian fiction provides liberal academics a script, or a narrative, from which they draw to interpret almost every racial disparity as the product of some form of racism. Differences between “races” in crime, for example, cannot occur because groups differ in their levels of conformity to the law, this narrative states, but because racism creates strain that results in crime (Jang & Johnson, 2003), or because laws are racially biased (Alexander, 2012), or because police racially profile (Rojek, Rosenfeld, & Decker, 2012).

The egalitarian fiction is a lynchpin for modern liberals and radicals. Perhaps unsurprisingly, litanies of studies reveal that university faculty are not just politically liberal, but that they are extremely liberal—especially when compared to the general public. Gross and Simmons (2007), for example, analyzed data from 1,471 university faculty members across 927 schools in the United States. They found that self-described politically conservative faculty composed less than 4% of faculty ranks in major research institutions. Gross and Simmons also found that politically conservative faculty constituted only 4.9% of all faculty in the social sciences and only 3.6% of faculty from humanities departments. Regarding political party membership, Gross and Simmons found that the ratio of Democrats to Republicans was 19.5:1 in sociology. Similarly, in a study of 1,678 university faculty, Klein and Stern (2004) found Democrat to Republican disparities of 30:1 in anthropology and 28:1 in sociology.

Clearly there exists, in academia, large disparities in the political leanings of faculty compared to the general population. Apologists are quick to argue that this disparity is unimportant, in part, because faculty are independently minded, objective analysts. This is undoubtedly true in some cases, but data show that the liberal bias in academia is not without consequence. First, Klein and Stern (2005) measured faculty support of various government intervention efforts. They found that liberal, Democratic professors (the majority of faculty members) strongly supported gun control, economic redistribution, government ownership over business,

and minimum wage laws. Indeed, Klein and Stern found almost perfect correspondence between self-identified political orientation (being liberal) and support for a range of interventionist policies. So strong was the degree of association that Klein and Stern (2005) argued that the social sciences represent a one-party system that offers little in the way of ideological diversity.

Second, Klein and Stern's analysis also found that scholars within two academic disciplines were particularly liberal. Indeed, they state that the strongest predictor of political identification in their sample of university faculty was whether or not the scholar was a sociologist or an anthropologist. "There is something particularly left-wing," note Klein and Stern (2005) "about the disciplines of anthropology and sociology" (p. 289). Collectively, Klein and Stern's findings indicate that faculty political viewpoints can be almost perfectly predicted by which discipline they belong to. As we discuss later, we believe it no coincidence that these two disciplines, sociology and anthropology, have been the driving force in denying the biological foundation of race.

Third, it is impossible for academic disciplines to achieve, by chance, this level of ideological homophily. Until recently, however, no data existed regarding the mechanisms that produce ideological hegemony within the social sciences. Work by Yancey (2011) and by Inbar and Lammers (2012), however, sheds light on the ideological litmus tests now present in many fields, but especially in sociology and anthropology. Yancey, for example, found that applicants for academic positions were at a distinct disadvantage if they were religious or if they belonged to groups identified as "conservative" by other faculty, such as the National Rifle Association. Inbar and Lammers (2012), on the other hand, surveyed a large group of social psychologists. Almost 94% of respondents identified themselves as "liberal," compared to only 4% who identified themselves as "conservative." What was striking about their findings, however, was not the political disparity they detected, but the fact that liberal respondents freely admitted to a willingness to discriminate against conservatives. They wrote:

The more conservative respondents were, the more they experienced a hostile climate, were reluctant to express their views to colleagues, and feared that they might be the victims of discrimination based on their political views. These fears are quite realistic: a sizeable portion of our (liberal) respondents indicated at least some willingness to discriminate against conservatives professionally. One in six respondents admitted that she or he would be somewhat inclined to discriminate against conservatives in inviting them for symposiums or reviewing their work. One in four would discriminate in reviewing their grants. And more than one in three would discriminate against conservatives when making hiring decisions. Thus, willingness to discriminate is not limited to small decisions. In fact, it is strongest when it comes to the most important decisions, such as grant proposals and hiring. *And the more liberal respondents were, the more willing they were to discriminate.* (emphasis added; p. 21)

We highlight this last point to show not only that ideological homophily exists in the social sciences, but that it is also sometimes enforced in ways that are not always obvious but that are no less insidious. Ideological homophily is created

through the power scholars exercise in a tribal moral hierarchy. One unfortunate by-product of ideological homophily is that it easily allows scholars to also claim scientific consensus. Of course, scientific consensus occurs only after extensive research has been conducted by objective analysts, after prolonged debate, and after the results have been sufficiently vetted. This is not always possible, however, when political, moral, and scientific issues coalesce—as they do in discussions of race—or when scholars are afraid to speak candidly out of fear of violating the moral sensibilities of scholars higher up in the moral hierarchy (Felson, 2008).

Taken together, data from a wide range of studies reveal that university faculty are exceedingly left-leaning. This is especially true of sociology and anthropology where it is safe to say that little ideological diversity exists. It is also safe to say that the ideological hegemony found in these disciplines is supported by a strong belief in specific sacred values—especially belief in the egalitarian fiction. Yancy's and Inbar and Lammer's findings provide evidence that many (but not all) liberal professors in these fields serve not only as gatekeepers—keeping out individuals with different views—but also as enforcers of a moral or political code. Even so, critics might accuse us of injecting politics into an academic discussion of race. They would be missing the point: In academia virtually every discussion of race is a political discussion—a discussion held by individuals constrained not solely by scientific standards, but by a rigid adherence to sacred values (Haidt, 2012). Thus, our point is not to inject politics into the discussion of the biology of race, but to show that they are frequently one and the same.

AUTHORITARIAN SCIENCE: DENYING THE BIOLOGY OF RACE

The American Anthropological Association (AAA) and the American Sociological Association (ASA) have been the driving forces behind the mantra that biological race does not exist—issuing proclamations in 1998 and 2003, respectively. The 1998 AAA statement on race emerged out of a broader debate about race and intelligence, with the publication of *The Bell Curve* by Herrnstein and Murray (1994). They make their points clear not only about intelligence, but also about race:

- WHEREAS all human beings are members of one species, *Homo sapiens*, and
- WHEREAS, differentiating species into biologically defined “races” has proven meaningless and unscientific as a way of explaining variation (whether in intelligence or other traits),
- THEREFORE, the American Anthropological Association urges the academy, our political leaders and our communities to affirm, without distraction by mistaken claims of racially determined intelligence, the common stake in assuring equal opportunity, in respecting diversity and in securing a harmonious quality of life for all people. (AAA, 1994, para. 3)

In the 1998 AAA statement about race, Smedley writes that “race evolved as a worldview, a body of prejudgments that distorts our ideas about human differences

and group behavior,” and that “race as an ideology . . . became a strategy for dividing, ranking, and controlling colonized people used by colonial powers everywhere” (para. 8–9). Moreover, the ideology of “race” led to the “extermination of 11 million people of “inferior” races . . . and other unspeakable brutalities of the Holocaust” (AAA, 1998, para. 8). Framed this way, as an inherent moral evil, it should come as no surprise that Alan H. Goodman, a member of the committee responsible for the report and the President-elect of the AAA at the time, would go on to say that, “Race as an explanation for human biological variation is dead” (p. 1). He then went on to equate retaining the concept of race as akin to putting a gun in the hands of racists (Roylance, 2004).

The overt political connotations associated with the AAA statements are largely echoed in the ASA statement on race. “Respected voices from the fields of human molecular biology and physical anthropology . . .” argues the American Sociological Association (2003), “assert that the concept of race has no validity in their respective fields. Growing numbers of humanist scholars, social anthropologists, and political commentators have joined the chorus in urging the nation to rid itself of the concept of race” (p. 4).

Of course, the AAA and the ASA neither speak for all members of their respective organizations nor do they speak for all anthropologists and sociologists. Several studies, for example, show that while 40% to almost 70% of American anthropologists deny biological race, large majorities of eastern European, Polish, and Chinese anthropologists do not (Kaszycka & Strzałko, 2003; Kaszycka, Štrkalj, & Strzałko, 2009; Lieberman & Kirk, 2002). Addressing these differences, Kaszycka et al. (2009) argue that the acceptance of race as a biological construct reflects varying ideological influences more than it reflects scientific concordance. Indeed, we believe it important to note that the committees involved in creating these statements were not ideologically diverse and thus did not include views that were entirely objective. Instead, the composition of the committees reflected ideological homophily, where individuals with preconceived ideological views were tasked to provide a statement whose outcome could have easily been predicted. High ranking officials of the ASA, for example, were paid legal consultants who testified against corporations accused of racism in hiring in promotion. Others were avowed Marxists who advocated making science serve liberal political aims. Others had advanced highly controversial ideas about *white privilege*, *colonialism*, and *critical race theory*. An argument could be made, moreover, that the ASA committee was ideologically tame compared to the AAA committee, whose members were even less diverse and were even more politically active. Thus, instead of gathering a diverse array of neutral scholars to survey research findings and to arrive at a scientific consensus (see, for example, National Academy of Sciences, 2012) the outcomes of these committees were guaranteed from the outset.

What, in turn, has happened is that these statements have become reified in the academic community. They have taken on a special, scientifically authoritative status. Today, scholars and laypeople alike point to these statements as evidence that biological race does not exist. They use these statements to frame debates about race, to advocate for race-specific laws and social policies, and to repudiate

those who offer different views. Forgotten are the motivations for creating these statements. Forgotten are the processes that created the ideologically pure committees, and forgotten are members of the committees who translated a singular political view into science. What has emerged from these statements is an authoritarian science, a science by fiat, a science by political will, and a science imposed by minority (Sesardic, 2010). As we discussed earlier, this is the science of a tribal moral community (Haidt, 2012).

Evidence Concerning Biological Race

To be certain, there does exist legitimate intellectual debate about the nature of biological race. This debate is complex because it involves the subtleties of imprecise definitions, the complexities of molecular genetics, and an understanding of human evolution. Below we outline the core points of those who argue that biological race does not exist.

- First, critics of biological race argue that there is only one race—the human race, or *Homo sapiens* (Hunley, Healy, & Long, 2009; Kitcher, 2007).
- Second, and relatedly, critics of biological race argue that no genetically discrete group of humans exists, thus invalidating taxonomic approaches (Gannett, 2004; Long & Kittles, 2003).
- Third, because *Homo sapiens* have not had sufficient time to evolve into distinct subpopulations, we are genetically more similar to each other than different (Gannett, 2004; Graves, 2010).
- Fourth, because we are genetically more similar than different, differences between groups (races) are trivial when compared to differences within groups (Maglo, 2011).

For a complete statement, see <http://www.physanth.org/association/position-statements/biological-aspects-of-race>.

THE DEFINITION OF RACE

First, we address the appealing notion that we all belong to a single race—appealing because it serves to remind us of our similarities while other definitions of race appeal to our differences. Moreover, it is also appealing because it converges with democratic views about human equality—views that are often cited as reasons to abandon the biological concept of race (Gould, 1996; Lewontin, 1972). Critics of biological race, however, often define *race* as a discontinuous, nonoverlapping, genetically dissimilar group (Graves, 2001; Zack, 2002). From this view, a “race” would include uniquely identifiable genes and phenotypes that are specific only to one racial category—that is, they could not be shared across racial categories. Of course, this definition imposes such an arbitrary constraint that is “so unrealistically

demanding that . . . even the species concept would fail to pass muster” (Sesardic, 2010, p. 147). Sesardic’s point is that if we applied the same criteria to other mammals, we would have to argue there are no differences between canines or no differences between whales, or dolphins, or chimpanzees.

Science has never detected a genetically “pure” race of humans, nor have any who view biological race as “real” defined race in terms of unique categories of human beings. As Walsh and Yun (2011) note, “Using purity as criterion of race is a semantic cheat that enables those who use it to correctly state that there is no such thing and, on that basis, to conclude that the concept lacks any scientific merit” (p. 1282). Instead, when race realists define race, they refer to “a population within a species that can be readily distinguished from other such populations on genetic grounds alone” (Sarich & Miele, 2004, p. 211), or they define race as a “distinct evolutionary lineage within a species” (Templeton, 1998, p. 646). All that is required for biological races to exist under these definitions is evidence of sufficient genetic differentiation—that is, evidence that gene frequencies vary significantly between groups (races) that have somewhat unique evolutionary pasts. Races do not reflect genetically distinct categories of people, but instead, reflect human variation that has been influenced by natural selection.

Critics of biological race often argue that biological race does not exist because human morphological traits fall along a continuum, because there is overlap across humans in these traits, and because there are fine gradations between these traits within any category of race. On closer inspection, however, virtually all physical, mental, and personality traits meet these same criteria—that is, they fall along a continuum, there exists overlap between groups, and they vary within each population grouping. The same can also be said of a variety of other characteristics. For example, we make meaningful distinctions between night and day. We have sunrise, midday, sunset, and night, and we treat these as distinct but related categories. In reality, however, they represent gradations based on visible light, which is related to the rotation of Earth around its axis and the sun. Should we say that sunrise has no intrinsic meaning because it simply represents a point along a continuous distribution? Humans recognize other meaningful categories found within distributions, too. In discussions of the life course, for example, we often speak of *infancy*, *childhood*, *adolescence*, and *adulthood* to discuss periods of developmental time. We can point to physical and mental differences at each point, we can juxtapose those differences, and we can also see continuity or similarity across each category. Is each period of developmental time a meaningless social construction devoid of any biological or physical reality? Of course not.

EVOLUTION AND RACE

The key to understanding biological race lies in understanding human evolution. Fortunately, modern science has made tremendous gains in accumulating evidence of not only our African origins, but also the processes that have led to human differentiation. First, modern humans first appeared in Africa approximately 250,000 years ago. About 50,000 years ago, small groups of humans began

to migrate out of Africa (Wade, 2006). Evidence indicates that these groups migrated north, into Europe, and northeast into Asia. Migration appeared to create the conditions whereby natural selection would create unique anatomical and physiological differences between humans. Those who migrated north into Europe, for example, encountered a uniquely different climate, encountered different food supplies, and encountered different diseases compared to those who remained in Africa or those who migrated into Asia. As an example, white skin was likely an adaptation to vitamin D deficiency. Individuals living closer to the equator are exposed to more direct sunlight, which translates to relatively more vitamin D. The genes associated with white skin color are found in European populations significantly more often than in African populations.

Migration is one factor associated with human evolution. Another is isolation, both geographic and reproductive isolation. Isolation could occur for a variety of reasons. Humans, for example, are highly territorial and have traditionally killed or seriously injured those who encroached on their lands (Cochran & Harpending, 2009). Isolation could also occur when natural physical boundaries prevented humans from coming into contact with each other—boundaries such as large bodies of water, deserts, or mountain ranges. Geographic isolation likely led to reproductive isolation and thus to genetic adaptations to the local environment.

Migration and isolation worked in unison with natural selection. This is as true today as it was 50,000 years ago (Cochran & Harpending, 2009). Collectively, however, these forces acted on genes and the frequency with which genes were expressed in each population. Genes code for amino acids that then go on to affect cells and their regulation. When a genetic adaptation occurred—that is, when an allele, or a variant, of a gene emerged in the population—those adaptations that proved to enhance fitness and survival increased throughout the population over time. Sometimes new alleles spread rapidly across a population, such as the allele associated with language development (FOXP2) and brain mass (ASPM and CDK5RAP2), but sometimes genetic variants emerge in response to local selection pressures, such as the alleles that developed in response to malaria but that also cause sickle-cell anemia in individuals of African ancestry.

Natural selection thus worked not by creating entirely new genomes, as critics seem to infer, but by altering preexisting genes and the frequency and rate with which they spread through the population. Polymorphic genes come in two varieties: single nucleotide polymorphisms (SNPs), which are changes to a nucleotide base pair, and variable number tandem repeats (VNTRs), which reflect differences in the length of contiguous base pairs that are repeated a varying number of times (Walsh & Yun, 2011). Because of natural selection, geneticists are able to measure the frequency of polymorphic genes in a population, and they are able to compare these frequencies against those found in our closest genetic relatives—the great apes. This allows scientists to measure, with unparalleled precision, how much genetic variation exists between humans and apes, between human races, and between individuals.

Recall that critics argue that we are genetically similar and that there exists more genetic variation *within* races than *between* races. This is true, but only to an extent. For example, we share 97% of our DNA with gorillas. We share 99% of our DNA with chimpanzees. As should be readily apparent, very small differences in total genetic difference correspond to very large phenotypic differences. Nobody, for example, would say that humans are chimpanzees even though we are a derivative of a common ancestor and even though we differ genetically by only 1%. Moreover, when SNPs are used, estimates of human genetic variation reveal that individual humans are about 99.9% genetically similar. That apparently small 0.1% difference between individual humans corresponds to over 3,000,000 base pair differences. However, even greater genetic diversity between humans is found when copy number variants (CNVs) are used instead of SNPs. Redon et al.'s (2006) genetic analysis of 270 people with Asian, African, and European ancestry found that over 12% of the genes in the human genome, or about 2,900 genes, varied in the number of copy number variations. When geneticists add the genetic variation between humans because of CNVs, genetic similarity drops even further (Levy et al., 2007). Again, very small differences in gene frequency can result in substantial phenotypic differences.

EVIDENCE FOR BIOLOGICAL RACE

Geneticists have sampled DNA from individuals across the globe. Study after study has shown that clear patterns of genetic clustering emerge when only a handful of genes are examined. What is interesting is that these clusters correspond almost directly to “continentally based racial classification” (Shiao, Bode, Beyer, & Selvig, 2012, p. 71), or in other words, to African, European, and Asian races. Indeed, studies reveal that scientists can correctly classify an individual's race using loci from relatively few genes. Bamshad et al. (2003) correctly classified the race of 99% to 100% of the individuals in their sample using only 100 loci. Tang et al. (2005) correctly classified the race of 3,631 individuals out of 3,636—yes, only 5 were misclassified—using relatively few genes and the individual's self-reported race. In a follow-up study of over 50,000 Africans and European Americans, Bamshad and his colleagues found that 41% of the 3,931 genes they studied varied significantly between the two groups. They also found that 51% of haplotypes (genes inherited together) were shared between Africans and Europeans—49% were not. In short, then, geneticists can predict almost perfectly to which race or continent of origin a person belongs based on a few genetic markers. These predictions, moreover, correspond almost identically to one's self-reported race. We know of no other social classification scheme so accurate.

These findings are obviously difficult to reconcile with the idea that human races do not exist. Indeed, we believe it important to point out that the patterns of data revealing human races could not be produced by random variation, by sampling bias or even research methodology, or by contemporary environmental variation.

They were, instead, predicted by the science on human evolution. From an evolutionary point of view, given the relative time-frames involved, given human migration, and given the relative isolation and geographic distances between populations, human races almost had to emerge. How, after all, could genetic data reveal such strong and consistent patterns—patterns perfectly corroborated by self-reports of race?

But what about the criticism of greater within-race genetic variation than between-race variation? Wouldn't this invalidate the biological conception of race? Lewontin (1972) was the first to note this, and as Walsh and Yun (2011), Sesardic (2010), Shiao et al. (2012) and others (see, for example, Sarich & Miele, 2004) note, Lewontin's observation has been mindlessly rereported ever since. Nonetheless, A.W. F. Edwards (2003), the statistician responsible for the quantitative measures used by Lewontin, addressed what he called "Lewontin's Fallacy." In general, there is greater within-race genetic variation than between-race genetic variation. Modern estimates vary, but 70% to 85% of genetic variation is within a race, and between 6% and 20% occurs between races, depending on the type of genetic information analyzed (Melton et al., 2001). What Lewontin was referring to, however, was variation in a single loci, or a single point in a gene. One way of viewing this fallacy was offered by Walsh and Yun (2011). Imagine, they argue, combining the DNA of gorillas, chimpanzees, and modern humans. Analyses would review three separate races that share genes. There would also be greater genetic variation within gorillas, within chimpanzees, and within humans than between the groups (for another example, see Sesardic, 2010). Interestingly, Risch points out that greater genetic variation exists between the races than between the sexes. Moreover, Risch also notes that genetically based classification schemes, like those used to classify people based on their race, produce more errors in predicting self-reported sex than in predicting race (Gitschier, 2005, p. 14).

PHENOTYPIC DIFFERENCES BASED ON RACE

Phenotypic differences in humans are those characteristics that are visibly expressed in the individual. Applied to race, morphological differences are considered the most visually obvious set of characteristics that define race. Perhaps the most well-known phenotypic difference across racial groups is that of skin pigmentation. Other differences also exist, however, and were caused by selection pressures that affected the frequency of specific genes. Recent research by Kamberov et al. (2013), for example, has identified a mutation in the EDAR gene that is not found in individuals of African or European ancestry. Occurring approximately 30,000 years ago, this mutation is theorized to be responsible for the thicker hair, distinctive teeth, smaller breasts, and additional sweat glands found in East Asians. This genetic variant may have arisen as a result of sexual selection or in response to advantageous evolutionary benefits amid the warm and humid climate in what is now central China. Thus, natural selection produced visible and measurable differences between populations—differences that reflected the adaptation to local

selection pressures. Morphological differences can also be used by forensic scientists and physical anthropologists to accurately predict the race of an individual. For example, Rushton and Rushton (2003) examined 37 separate morphological traits, including cranial shape, pelvic width, and knee joint surface area. They found that these characteristics not only differed across racial groups, but that they were also highly correlated ($r = .94$) with cranial capacity—that is, brain size.

Natural selection created morphological differences between humans—differences we use to classify ourselves and others by race. Few scholars would deny this. Yet they will deny the possibility that natural selection shaped or influenced other phenotypes, instead arguing that culture, geography, and economic inequality produced differences in intelligence, aggression, or specific personality factors. Nonetheless, it is entirely possible—if not entirely likely—that a wide variety of phenotypes have been under constant selection pressures that led to aggregate differences between groups.

Differences between racial groups are sometimes large, such as morphological differences, and sometimes small. However, even small differences between aggregate groups can be associated with large differences in social outcomes. Zeigler-Hill and Wallace (2011), for example, conducted three separate studies on narcissism involving hundreds of college students. Controlling for gender and self-esteem, they found that Black students reported significantly higher levels of narcissism than Whites. Similarly, Lynn (2002), in a comprehensive investigation of psychopathy, presents evidence that Native Americans, Blacks, and Hispanics score higher on the Minnesota Multiphasic Personality Inventory's (MMPI) Psychopathic Deviate scale compared to Whites, while East Asians score lower. Furthermore, Lynn argues that this racial trend extends to a host of related social outcome measures including childhood conduct disorder, ADHD, recklessness, aggression, criminality, the ability to delay gratification, marriage rates, and even moral understanding. Across the multitude of studies analyzed, a clear pattern emerges where Blacks score the worst on these measures, Whites intermediate, and Asians the best even when controlling for the effects of age and IQ.

As previously mentioned, one of the most obvious sources of maladjustment in society is the predilection toward crime and criminal behavior. According to Walsh (2004), one of the most consistent predictors of high crime rates is the number of Blacks living in an area. Although Blacks make up approximately 13% of the population in the United States, data from the Federal Bureau of Investigation (2011) shows that Black offenders are arrested for 38% of all violent crimes committed, including nearly 50% of all murders. Conversely, Whites, who constitute 78% of the population, are arrested for 59% of violent crimes and 48% of murders. Again, the aforementioned racial pattern begins to materialize from these data with Asians representing just 5% of the population, yet being arrested for only 1% of violent crimes and 1% of murders, a clear underrepresentation. Similar findings exist regarding arrests for property crimes with 30% for Blacks, 68% for Whites, and 1% for Asians. This stark disparity in Black offending leads Levin (2005) to note that if Black crimes were eliminated from statistical calculations in the United States

the crime rates would be comparable to those found in Europe and Canada. In sum, Ellis (1988) states that after examining over 60 studies on race and crime a clear delineation appears with Blacks committing the most crimes, followed by Whites, and then Asians.

Biosocial Criminology and Race

We started this chapter with a discussion of the insidious politics found in the academy and how political concerns can influence, if not entirely shape, important academic debates. We explicitly linked liberal political notions of social equality to academic discussions on race generally, but drew special attention to the modern denial of biological race specifically. In true contrarian form, we called into question the conclusions of major academic societies, and we called into question the political motives of those who fashioned the conclusions.

Obviously, our concern with biological race is secondary to our concern about open scientific debate. To be direct, we have no vested interest in whether human races exist or do not exist. Their existence is an empirical question—a question we believe the evidence to date answers in the affirmative. Science, however, is often used to advance political agendas. In this instance, it appears that those who wish to deny biological race do so, in part, because they believe that is what the evidence indicates and, in part, because they believe that if we eliminate using the term *race* we help eliminate racism (AAA, 1998). Eliminating racism is an admirable goal and one that the United States has pursued with vigor since the 1960s. Yet eliminating racism, or *scientific racism* as some scholars refer to it, can easily infuse science with politics. Because of this, even the casual reader on the topic of biological race will likely come away more confused than informed.

The modern denial of biological race, however, also coincides with the historical denial of the role of human genetics and biology in a range of observable phenotypes—including criminal behavior, alcohol and drug addiction, and violence. For decades criminologists and other social scientists excluded the study of biological factors associated with crime, and they sanctioned those who pursued the subject. They did so for two reasons: First, they bought into the idea that biological theorizing was dangerous—that it inevitably brought about harsh, punitive state sanctions (Wright & Cullen, 2012). Until recently, almost every criminology textbook made a direct link between fascism and Nazism and biological theorizing (DeLisi, Wright, Vaughn, & Beaver, 2009; Wright et al., 2008). Even today, most textbooks still link biological theorizing to Lombroso, as though human science has not progressed since the Italian doctor measured the physical characteristics of inmates. In this sense, biosocial criminologists are keenly aware of how politics dressed up as science cuts off open inquiry and how it can bring harm to those who violate the sacred values of an academic discipline.

Second, and related, criminologists are accurately aware of racial differences in criminal behavior. These differences are large, geographically widespread, found in

various institutions, and stable over time (Kalunta-Crumpton, 2006; Rushton, 1997; Trevethan & Rastin, 2004; Wortley, 2003). Given these facts, it is unlikely that racial differences in criminal behavior can be produced entirely by racial discrimination or racial animus. Yet discussions of racial patterns of offending always reflect a common narrative—that American society is racist; that the institutions within American society, such as the police, are racist; and that Blacks in America are the victims of widespread racial discrimination that amazingly accounts for disparities in health (Smedley & Stith, 2003; Williams, 2006), education (DeCuir & Dixon, 2004; Skiba, Michael, Nardo, & Peterson, 2002), behavior (Walsh & Ellis, 2003), and socioeconomic status (Thomas, 1993). The irony of such reductionism, a criticism almost always leveled at biological research, has never escaped us.

On the issue of race and offending, biosocial criminology has been largely agnostic. At one level, biosocial criminologists differ in their views on biological race and, to a greater extent, on the relevance of biological race to phenotypic variation. To date, no authoritative statement has been written summarizing the role of race in biosocial theorizing. At another level, it is fair to say that biosocial criminology at least offers room for biological race in explanations of offending and in explanations of offending differences by race. For example, as we discussed, certain phenotypes are expressed more frequently in Blacks than in other groups. Blacks, for example, tend to have significantly higher levels of self-esteem (Zeigler-Hill, 2007), more narcissistic traits (Zeigler-Hill & Wallace, 2011), and score significantly lower on measures of intelligence and intellectual functioning (Rushton & Jensen, 2005) than other groups. Each of these phenotypes is moderately to highly heritable across all races but appear expressed more often in Blacks. The possibility thus exists that certain evolved phenotypes are (a) somehow embedded in the genetic architecture of race, or (b) that these heritable phenotypes emerge under environmental conditions that Blacks are more likely to experience. Again, at this point, biosocial criminology remains agnostic on the possibility, but at a minimum it recognizes the possibility.

While we have argued that biological races exist, we also believe that critics of biological race have sufficiently documented how “social race” also exists (Smedley, 1998). Social race draws attention to how cultural images and beliefs about race can be used to structure a society or to regulate a society through law or through force. The “social construction of race” helps us understand how individuals and groups can intellectually justify unethical, undemocratic, and immoral treatment of other groups of humans, and it helps us understand how biases and preconceived notions influence perceptions and political beliefs. Prior to the United States’ entry into World War II, for example, the Empire of Japan based much of its expansionist efforts on a racist ideology that viewed Koreans and Chinese as innately inferior. Japanese views of racial superiority were soon to be extended to Americans, as would their inhuman and brutal treatment. Unfortunately, any survey of world history will find that human beings have a long history of enslaving others and of justifying political subjugation based on a range of factors—including race.

There seems to be a belief, however, that if science establishes the existence of races that this will inevitably lead to harm to minority groups. We have to acknowledge the

possibility that “biological race” could be used to justify harsh, punitive, state sanctions and to justify the withdrawal of social welfare assistance. Yet we also have to acknowledge the fact that the social construction of race can also easily justify the worst behaviors in humanity independent of any knowledge of biological race. Slavery, subjugation, and tyranny existed long before knowledge of Mendelian genetics and long before the decoding of the human genome. Thus, the existence of biological race is no more or less likely to incite racism than is the social construction of race—indeed, if race is truly socially constructed, then concern that biological race will somehow incite people to hatred seems misplaced. The social construction of race is what we should be more concerned about given the tendency of powerful politicians and academic societies to manipulate public opinions and views.

While academics debate the science behind biological race, write prolifically to warn against various incarnations of racism, and make broad proclamations concerning the “reality” of race, another unfortunate reality is played out daily on the streets of the United States. This reality involves the loss of life, the loss of opportunities, and the loss of innocence. It is a reality outside the view of most intellectuals but it is a reality that consumes and destroys those who participate in it—and it is a reality based on race. While we have drawn attention to the biological evidence on human races, we believe it also necessary to draw attention to the power of culture—especially to the power of the criminal subculture. To date, biosocial criminologists have not addressed how the criminal culture is influenced by genetic propensities, how the subculture influences criminal propensities, or how the subculture can override propensities and “attract” individuals who are otherwise normally functioning. This is an area, however, where criminology has excelled. Descriptive and vivid ethnographies exist that document the appeal of the criminal culture and how individuals embrace and make sense of their cultural identity and the harm they bring to others (Anderson, 2000; Copes, Hochstetler, & Williams, 2008; Wright & Decker, 1994, 1997).

The criminal subculture not only is nasty, brutish, and violent, but it also provides young men (predominately) with a sense of territory, with status, and with access to resources. The culture motivates criminal action, provides individuals with criminal rationalizations, and rewards antisocial and hedonistic conduct. The criminal subculture, moreover, is highly racist, with street and prison gangs usually constructed along racial lines. And while the criminal subculture exists in African Americans, Caucasians, and Asians, it is concerning African Americans where the manifestations of the criminal subculture are the most obvious and, some could argue, the most deleterious. Crime, victimization, disrepute, and incivility saturate inner cities populated primarily by Blacks—a fact it pains us to point out. Blacks are overrepresented in the criminal subculture, and because of this, they pay a hefty price for their participation. Incarceration, serious bodily injury, death, and a host of social penalties accompany involvement in the criminal subculture, and these penalties do not discriminate based on race.

Finally, we return to the point that research on race in American society is frequently tinged with political considerations. As we have shown, embedded in the American scholarly narrative of race is a fundamental belief in equality. By this we mean a belief that not only are individuals equal in talents, motivations, intelligence,

and various traits, but so too are groups of individuals—groups that include races of people. Thus, aggregate differences between races, the narrative goes, must reflect some form of unjust bias if not some form of racial discrimination.

By any measure, however, groups differ along any number of dimensions. Professional athletes, for example, are, on average, more athletic than members of the general population. College professors likely know more about their respective fields than do laypeople. Clergy are likely less physically aggressive than are criminals. The point is that groups, including groups based on race, are likely to differ from each other. Sometimes these differences are trivial and other times they are not—but they do vary. And while overlap almost always exists between groups, important differences can still exist. Scholars, however, sometimes deny these differences. They deny the existence of socially or biologically derived groups, including sex and race-based groups, and they sometimes deny empirically verified differences between groups (Baumeister, 2010). In essence, they elevate the *egalitarian fiction*—that is, the belief that groups are fundamentally equal.

Human evolution can produce many unique adaptations. It has caused morphological differences across humans, disease resistance and disease susceptibility, and fundamental differences between the sexes. Although the forces of Darwinian evolution can produce many unique adaptations, they cannot produce equality within or between groups. And while we recognize that a variety of other factors outside of Darwinian evolution also influence individual and group differences, it remains an artful act to espouse a belief in evolutionary principles and to simultaneously deny the by-products of human evolution (Cochran & Harpending, 2009).

The academic wars that have erupted over the existence of biological race—not to mention the inclusion of evolutionary and genetic principles for understanding human behavior—have resembled tribal conflicts of the past. Territory is zealously guarded. Intruders are killed, at least symbolically, and dominance hierarchies emerge and exert control over others within the culture. This has been unfortunate. Unfortunate not only because it has infused political motives into science, nor because it has unjustly ruined the careers of important scholars, but because understanding individual and group differences can, and has, lead to important discoveries that have saved lives and that have reduced human suffering. Our hope is that biosocial criminology aids in bettering the lives of individuals through more scientifically informed treatments and that it reduces the suffering caused by criminal behavior. For biosocial criminology to do this, however, it must adhere to scientific principles so that it does not become yet another conduit for advancing any political agenda.

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Discussion Questions

CHAPTERS 3 AND 4

1. Data have consistently revealed that minorities—primarily African Americans—are overrepresented in both serious offending and correctional statistics. What explanations do sociologists provide for this overrepresentation? What explanations does human evolution provide? How are they different?
2. Authoritarian science has argued that biological race does not exist and that race is better defined as a socially constructed concept. Discuss the scientific evidence related to biological race. For example, in what ways has natural selection worked to create differences between humans? How have phenotypic differences been used to classify individuals across race?
3. Findings from Shaw and McKay's (1942) social disorganization theory have led theorists to de-emphasize the importance of individual-level variables and to instead place importance on studying community-level disadvantage and disorganization to explain criminality. What role does human genetics and biology play in explaining criminal behaviors? Does research support the importance of individual characteristics?
4. Sociologists believe the most important determinant of the relationship between race and crime is the differential distribution of minorities in communities characterized by social disorganization and cultural social isolation. How can human evolution be used to explain distributions among groups?
5. As noted by Drs. Wright and Morgan, many social scientists believe the concept of biological race has no validity in their fields and will only breed racism. Describe the ways in which the social construction of race has been used to justify discriminating behaviors. Is there reason to believe the existence of biological race will only breed hatred?
6. How does the topic of race fit into Dr. Haidt's idea of "tribal moral communities"? Moving forward, do you believe race will remain a sacred value among social scientists?