

### **Racial Profiling and Genetic Privacy**

Defining the Parameters in Criminal Cases

Michael Boylan July 2008

### RACIAL PROFILING AND GENETIC PRIVACY

### Defining the Parameters in Criminal Cases

### **Michael Boylan**

Center for American Progress

July 2008

### Introduction

Racial profiling and genetic privacy are two related issues that together present a singular problem for policymakers: How do we reconcile our desire for excellent police work with maintaining criminal investigation protocols that respect the rights of citizens? Two recent criminal cases, one in Virginia and the other in Louisiana, encapsulate the problem.

### Charlottesville, Virginia

Jeffery Johnson was grilling steaks for the Aberdeen Barn restaurant on the outskirts of Charlottesville, VA, in March 2004. It seemed like an ordinary night until the police came calling. The officer told Jeffery that he was a potential suspect in a series of rapes that had recently occurred in the area since 1997. The assailant had been identified as an African American. Jeffery Johnson is an African American.

What the officer wanted to do was to run a swab on the inside of Johnson's cheek in order to check his DNA against the DNA from the crime scenes. One can only speculate what thoughts went through Jeffery Johnson's mind at that moment. The steaks might burn. His boss might get mad and fire him. People might think he was a criminal. He might even be arrested—even though he was innocent.

It would certainly be understandable if he were very confused and felt a range of emotions from shame to anger to indignation. Should he go outside with the police or should he stand up to them? Even today, it generally isn't such a good idea for an African American to cross a southern police officer.<sup>2</sup> Jeffery Johnson decided to go outside and cooperate, as did 186 other young African American males in the small college town.

A month later, Police Chief Timothy J. Longo Sr. said that out of around 690 possible leads about 400 were quickly eliminated because their DNA samples were already in the state database or because they had been incarcerated when the rapes occurred. This left 197. Of these,187 agreed to the police swab-on-the-street operation.10 did not.

One of these was University of Virginia graduate student Steven Turner, who twice has refused to be tested. His reason: "Because the suspect is Black, every Black man is a suspect. The more indiscriminate the search, the closer it is to discrimination. What are we going to do about this as a community?"<sup>3</sup>

Mr. Turner asks the crucial question. As events unfolded in this case it turned out that the rapist didn't really fit the profile that the police had in mind. The perpetrator was not young and single. He was not a college student. Instead, he was a married blue-collar worker with a family. It is true that he was African American, but he was not in the criminal database nor was he within the group chosen for DNA swabbing. It would seem that in this case the use of racial profiling was not effective in solving the crime.

#### **Baton Rouge, Louisiana**

In 2003, police in Baton Rouge, LA were investigating a serial killer of White women. The police collected samples from around 1,200 White men in a manhunt reminiscent of the police in Charlottes-ville.<sup>4</sup> The round up of samples was not conclusive.

Then police turned to Tony Frudakis, a molecular biologist who thought he had discovered very subtle genetic markers for race. He took the samples from the crime scene and determined that the perpetrator was not White but Black. This changed the focus of the police's investigation that

was ultimately successful—even if the science behind the about-face by the Baton Rouge police is still in dispute.

In both cases, though, the broad sweeping collecting of DNA samples was not effective. Unless the country maintains a national DNA database—a position this paper will argue against—such moves seem ineffective. And since they imply human rights violations, these DNA tests should not be used as a criminal investigation procedure. Yet other uses of DNA, particularly when it is the focus of matching a person—already a suspect due to other primary factors—to crime scene evidence should certainly be permissible.

Both cases in Charlottesville and Baton Rouge, however, present dual questions of how much we should encourage or allow racial profiling in our criminal investigation procedures and what safeguards should be set in place regarding genetic privacy. This paper will address these two questions in detail in the pages that follow to provide policymakers with some clear philosophical guidelines now that police use of DNA as a forensic tool for criminal investigations is becoming more widespread.

#### DRAWINGS NOT ENOUGH TO MERIT SWAB-ON-THE-STREET DNA TESTS

Police sketches that prompted DNA sweeps by police in Charlottesville, VA and Baton Rouge, LA next to photos of the actual assailants. The composite sketches did not merit such police action.









Images from Charlottesville Police Department and Lafayette Parish Sherriff's Office and F.B.I.

### **Racial Profiling**

Racial profiling has been a widespread police investigative technique that has not drawn very much philosophical attention, though it has been the focus of attention among social scientists. Different authors have variously defined racial profiling. Three of the most common descriptions of racial profiling are that it:

- Constitutes the intentional consideration of race in a manner that disparately impacts certain racial minority groups contributing to the disproportionate investigation, detention, and mistreatment of innocent members of those groups.<sup>6</sup>
- Occurs whenever a law enforcement officer questions, stops, arrests, searches, or otherwise investigates a person because the officer believes that members of that person's racial or ethnic group are more likely than the population at large to commit the sort of crime the officer is investigating.<sup>7</sup>
- Consists of any police-initiated action that relies on the race, ethnicity, or national origin and not merely on the behavior of an individual.<sup>8</sup>

Among these definitions, the first imputes the investigating officers with "intentions" that have the effect of being racist. If intentions confer their characteristics to their effects, then if the effects are racist, one can logically infer that the intentions are, too. Thus, the first definition impugns all officers that pursue racial profiling as doing so out of racist motives. This may or may not be true, but it would not be disinterested to fashion one's definition such that our judgment of its propriety were prejudged by its very formulation.

The second definition is better on this score. In this case it is the officer's belief that there is a correlation or causal connection between one's likelihood of being a criminal and one's racial or ethnic class membership. The belief of the officer in this instance constitutes the nature of inductive logic and is either a proper or improper application.

The third definition is very factual. The officers look at race and not the actions of the individual in question. The third definition, however, does not tell us *why* an officer would do this. Presumably all police behaviors are motivated by reasons. The most logical reasons that might be brought forth are either those of racism—admitted or not—or of inductive claims about correlation or cause.

Authors who support racial profiling use the third definition. Perhaps for this reason they leave the motivation to engage in racial profiling from their definition, which is unacceptable. Any good definition should contain within it the reasons why.<sup>9</sup> Therefore, this paper will assume the factual basis of the third definition with the understanding that it must be supplemented with either of the motivations of the first two.

Evaluation of the Motives for Racial Profiling: Racism

Most people would agree that if racial profiling were based upon racist motives, then it should be rejected as a police investigation procedure, since most people would agree that racism is immoral. <sup>10</sup> In a recent article, however, Mathias Risse and Richard Zeckhauser at the John F. Kennedy School of Government at Harvard University set forth an interpretation of the relationship between racial profiling and racism that makes the issue more complicated to judge. <sup>11</sup>

In their article they argue that racial profiling is an "expressive" harm. "[T]he harm that is attached to a practice or an event is 'expressive' if it occurs primarily because of harm attached to *other* practices or events." In other words, racial profiling may be racist, but it is only the conduit of a deeper societal racism, which means—or at least implies—that the practice itself is not racist. Racial profiling only expresses the underlying racism of the society and is therefore a neutral character in the scheme of things.

With racial profiling or without it, all things being otherwise equal, the same amount of societal racism will exist and its various expressions will remain constant, presumably because the loss of one expression will be compensated for through other expressive outlets. If this is the case, the authors argue, then racial profiling—as such—should not be a public concern.

If this argument is true, then concern over racial profiling as an expression of racism might be moot. The same amount of racist expressions will exist in the society with or without profiling. This paper takes exception to that position, contending that two fundamental premises of the argument are wrong because:

- Expressions are not neutral in content.
- The overall amount of racism in a society is not itself primary but is the result of its expressions.

So would society tackle the underlying racism that stains the practice of racial profiling? First of all, from a philosophical perspective, there is a normative overlay to all our expressions of what we will accept as *facts* in the world. We cannot pretend that there are entirely value-free facts. This is because what we hold to be facts are various data that are integrated into our personal and community worldview conceptions with particular flags attached. These flags relate to the status of the claims: from the necessary to the contingent—a continuum.

Second, the overall amount of racism in a society is not itself primary but is the *result* of its expressions. If one were to claim—as Risse and Zeckhauser do<sup>13</sup>—that the underlying societal racism is relatively invariant to any particular expression, then the causal connection between phenomena is that a racist society creates all the incidents of racism that occur

Some say racial profiling may be racist, but it is only the conduit of a deeper societal racism, which means—or at least implies—that the practice itself is not racist.

within the society. The causal force is the society so that no single racist action matters.

A second option would assert that the racist actions of people in the society create a racist society. This causal mechanism suggests that we lower the amount of racial incidents so that we might lower the amount of racism in the society.

The first option really begs the question of where societal racism comes from in the first place. The origins of the expressions are given, but where does the racism arise? Is it innate? Is it a law of nature similar to the Laws of Thermodynamics? It would seem to this author that the first option only works with some sort of fanciful, foundational posit as just suggested. This would be a tremendous burden of proof to accept.

The second option gains its plausibility from a sort of logic of induction. It is the expression of particular racist acts that gives rise to the class concept. <sup>14</sup> This seems to follow the way we generally create attitudes and dispositions. If the second option were true, then the elimination of an expression of racism might affect the nature of societal racism since the summation would be decreased and the consequent is dependant upon the precise make-up of the antecedent.

The result is that we should take very seriously each and every actual expression of racism with prompt and effective measures because the character of society's ethical worldview is at stake.

This sub-section has examined the position of racial profiling from the first definition that links racial profiling to expressions of racism. It has argued that

those who would support racial profiling despite this link are wrong, thus those who accept this model of racial profiling should seek its elimination as a technique in police investigation procedures.

# Evaluation of the Motives for Racial Profiling: There Is a Correlation or Causal Connection

The second definition emphasizes a utilitarian benefit to racial profiling because either there is a correlation connection between targeted minorities and crime or there is some sort of causal connection. Regardless of the mode of connection, proponents say that if you want to protect the law-abiding citizens and if profiling is a highly effective means of criminal investigation, <sup>15</sup> then the police should use it.

This paper argues that racial profiling is actually ineffective. The literature specific to analysis of the efficacy of racial profiling in criminal cases is split on this issue, 16 but debating the merits of interpreting empirical studies of police operations is not germane to this paper's larger philosophical purpose. What is germane is the empirical claim that because someone is African American—or Latino or white—they are more likely to commit a crime. There are simply no scientific grounds for these claims. This is because there is no biological mechanism that would suggest that this is the case. Such a claim would require an account of why one racial group or another would be criminal by nature.

In fact, the current biological evidence seems to be moving in just the opposite way. Recent DNA analysis shows that the genetic difference between the races

What is germane is the empirical claim that because someone is African American—or Latino or white they are more likely to commit a crime. There are simply no scientific grounds for these claims. This is because there is no biological mechanism that would suggest that this is the case.

is very small at best.<sup>17</sup> This suggests that there is no large-scale difference between the genetic make-up of blacks, whites, or Latinos (though the science on this is still developing). Even the very categorizations of race may be biologically nonrobust and thus indefensible.<sup>18</sup>

For those who tout correlations we must ask why are there these alleged correlations? Are they correlations of race or really of social class? And if it is the latter, then are people really responsible for being poor? Some are, perhaps, but most are not. 19 For these individuals must we further burden them with a "guilty until proven innocent" tag? This is what racial profiling does. Individuals are stopped, investigated, asked to allow a swab to be rubbed against their cheek for DNA analysis on the basis of statistical correlation. When you have done nothing wrong, you do not deserve such treatment. 20

"But it works," proponents proclaim.
"Workability," however, should not be our benchmark here. One can imagine all sorts of Draconian police methods that might work but are, in themselves, unethical. What makes such tactics especially insidious is that they prey upon the poor. As a society we should be working to build the self-esteem of the poor and not to further erode it (both for moral and prudential reasons).

Statistical correlation should never be used without evaluating the possible cause of the correlation (in order to avoid pure accidental linkages). When these links point to factors beyond the control of the agent—such as being poor—then it is unjust to use this link to further depress their lives. Thus, both induction and statistical correlation do not support the use of racial profiling as a tool in police investigation.

## **Genetic Databases of Non-Criminals: Genetic Privacy**

he second part of this paper concerns creating large, general DNA databases that include those who are innocent of any crime. Such databases could be used in two ways: for forensic population research, and for the forced acquisition of genetic materials in the context of an active criminal investigation. These will be addressed in order.

### **Forensic Population Research**

It might be much more efficient to create a genetic file on every person in a society so that if there were any physical evidence at a crime scene that lent itself to genetic testing, then there might be a very effective means of matching criminal to deed. In many ways this is similar to the advent of fingerprint files. The only difference is that with fingerprint files, the only people who are put in the database are those who have committed a crime or those who have for other reasons (such as job clearance, etc.) volunteered to have their fingerprints put into the central files.

But there are some important differences between fingerprint files and DNA files.<sup>21</sup> The most important is that DNA files are more than mere identifiers; they can potentially give a significant amount of information about an individual. This information can be used against a person. For instance, if the DNA files showed that a prominent member of society had the gene for alcoholism, this piece of information might be used as leverage (also known as blackmail) in order to get special preferment.

There is obviously a very great potential for corruption. In order to get to the root of this grave potential for evil we must consider what the likely consequences are of such a program. The widespread creation of genetic databases for the purposes of forensic files pose a danger in at least two key areas: privacy and human dignity; and informed consent. These two areas are linked, but let us examine each in order.

First there is the issue of privacy and human dignity. This paper posits that the right to privacy is not absolute, but is contingent upon other moral claims. This is not a position of utilitarianism, but recognition that there are times in which a person must give up privacy when others in his community face a pressing loss of basic goods.<sup>22</sup>

If there were a fire or other natural disaster that occurred in Baton Rouge, LA, for example, then people in Charlottesville, VA ethically should help the people from Baton Rouge

find food, clothing, and shelter until the process of reconstructing their homes might commence. It doesn't matter that some of the people in Baton Rouge would rather not be bothered because they wish to maintain their privacy and isolation.

The prospect of assisting police to create genetic databases, however, is different from the scenario of natural disaster. This is because the creation of this database is only remotely (and not proximately) related to helping specific people and because the danger of personal harm is much greater. For instance, when one participates in such an experiment it is often unclear who might obtain access to the genetic records of Jane Doe. If governments, insurance companies, or local employers have any access, then all the potential problems outlined above exist.<sup>23</sup>

It is also a mark of autonomy and dignity to have control of your body (as much as possible). To be pressured or forced into participating in a widespread genetic mapping of a population is to fail to respect the dignity of the citizens. It is to treat them as means only in order that they might give blood for the genetic file.

Under these circumstances, 'Mary Lane' is seen only as a provider of genetic materials necessary for the grand conceptual scheme to be completed. Obviously, this now runs into informed consent difficulties. If Mary's dignity is to be considered a basic good, then she must be allowed to say "no." The very principle of informed consent in research situations involves the unforced choice of subjects to engage in the project or to decline to engage in the project.

The very dynamics of a comprehensive genetic-testing program of a population creates the situation in which a conflict of interests exists. On the one hand, the police need a very large sample and so there is incentive to do whatever is necessary to bring this about. On the other hand, there is the citizen's right to make her own choice through a careful process of informed consent that may significantly lower the sample and may, in fact, invalidate it.

If the police research team needs to cross the line and violate the rules of implied consent or otherwise fail to respect the privacy and dignity of the potential research subject, then that police research team is acting unethically in its "means" and has crossed the boundaries of the limits of science into forbidden territory.24 In order to address these concerns, this paper argues that the same protocols that have been observed in the creation of fingerprint files—only charged criminals (who if found innocent will have their files deleted from the database) and those volunteering to be profiled will be put into the base). There will be no widespread genetic databases because of the interference with the issues of autonomy and informed consent.

### Forced Acquisition of Genetic Materials in an Active Criminal Investigation

Many of the same arguments of the last section apply here: privacy and human dignity and informed consent. In this case they are to be viewed in the context of a legal system. In the United States, human dignity and privacy are legally protected through our Constitution, including the amendments and their legal interpretations. These interpretations have created a range of protections for the criminal suspect, who is considered to be innocent until proven to be guilty.

If the police research team needs to cross the line and violate the rules of implied consent or otherwise fail to respect the privacy and dignity of the potential research subject, then that police research team is acting unethically.

In the first instance, how is human dignity a factor? Obviously, the point of view differs when we ask this question of the police officers or the suspect. From the worldview of the police, they are only trying to do their job, which is to serve the people by protecting them from unwarranted bodily harm.<sup>25</sup> In the course of protecting the people, the police must arrest those who have broken the law. In order to arrest them, the police must be able to investigate the crime using all the tools scientifically available.

The question is what rules must the police abide by in their investigation? It is certainly tempting for a person whose goal it is to apprehend the guilty and to protect the innocent to say that when there is evidence at a crime scene, such as in Charlottesville and Baton Rouge, in which DNA markers exist that could point to the guilty person that such evidence should be used to its fullest extent. This means first checking DNA profiles against all profiles of those who are criminals or who have voluntarily given samples to public databases, such as those who have served recently in the military, since many of these individuals have voluntarily rendered DNA samples.

But does it also include using intimidation to solicit samples from those who have committed no crime and for which there are no verifiable actions upon which to base reasonable suspicion? Here the point of view of the suspect is important.

A person should only become a suspect when his verifiable actions justify it. For instance, if the crime scene of a murder shows mud found only on an island x, and if there had been a recent excursion to island x, then the individuals who took the trip (a previous verifiable action) could become suspects.

Membership in a particular racial or ethnic group, however, is not a previous action. Therefore, it should not be used to make one a suspect in a case. In short, it would not be enough to know that the suspect in the rape case in Charlottes-ville was a young black man to make all young black men in a community into suspects. Thus, if the critics of genetic profiling in the Charlottesville case were right that the police were using race membership alone as their criteria for being a suspect, then the police were not justified in their actions.

But what if race were *not* the only criterion but one of several (the others based upon the past actions of the individuals involved)? In this case various individuals could be targeted as suspects based upon their actions. Race would then be a secondary identifier (such as height and hair color are often secondary identifiers). Given the difficult history in this country between many police forces and African Americans, it would only be fair to make *sure* that race never becomes the primary identifier.

In such a situation in which a suspect were reasonably detained for questioning, then should we think of requiring a DNA sample to be analogous to the mandatory Breathalyzer test required (in some states) of those under suspicion of drunken driving? Or should it be understood on the model that one must never be required to incriminate himself (an instance of informed consent)?

This is a difficult question because in the first model the level of evidence is raised to probable cause. The officer observes driving behavior consistent with an alcohol-impaired driver and thus pulls over the motorist in order to administer the sobriety test. Our investigative proce-

Given the difficult history in this country between many police forces and African Americans, it would only be fair to make sure that race never becomes the primary identifier.

dures even extend to focusing upon a given stretch of road that is known to be frequented by drunken drivers and administering a sobriety checkpoint where *everyone* driving a car is tested—no profiling, merely a blanket test.

The Charlottesville case would have been different if everyone in the town had to submit to the DNA swab test. But in this event, we would have the same issues as in the forensic population research discussed above, which this paper argues is unjustifiable

What is different from the Breathalyzer Test is that DNA testing can potentially reveal so much more information: it is potentially much more revealing (but not a part of the original cause of suspicion). Therefore, though it might be tempting to say that properly selected suspects should be forced to submit to a DNA test, this paper concludes that because of the amount of the information being conveyed, this amounts to being forced to incriminate oneself and is a privacy violation and not permissible. For these reasons forced testing should be avoided.

Voluntary testing of otherwise properly selected subjects, however, is permissible

unless a coercive context is created by which *not agreeing to the voluntary test* is taken to be an admission of guilt. The police should avoid these sorts of coercive contexts. They taint the nature of otherwise permissible police DNA testing.

The upshot: allow voluntary DNA testing of subjects in a criminal investigation in which there is behavior that creates reasonable suspicion that this particular individual may have committed the crime. This reasonable suspicion should be explainable (subject to future intersubjective review) and not merely based on a gut feeling. Thus, DNA testing is not used as the *only* identifier, but as part of the portfolio of evidence that includes reference to past actions.

Further, police should only concentrate on information germane to investigation and not on other facts about the subject that might be garnered from the DNA test. When the case includes crime-scene DNA, and when those who are otherwise suspected consent to provide DNA samples to prove their innocence, then there is no issue—though the failure to provide such evidence should not create a context of presumed guilt.

### **Conclusion**

his essay began with the cases of racial profiling and genetic privacy in Charlottesville, VA, and Baton Rouge, LA. In order to evaluate the police's actions in these cases it was necessary first to examine racial profiling and then to analyze DNA profiling.

The first part of the paper argued that racial profiling is not an acceptable police procedure. This is because racial profiling is an unjustified expression of racism, and because both induction and statistical correlation do not support the use of racial profiling as a tool in police investigation.

In the second part of the paper, DNA testing was examined both as an issue of creating general genetic databases and regarding forced testing of suspects in a police investigation. In the first instance, general databases are rejected because they violate privacy and human dignity and informed consent.

In the second instance, forced testing is not allowed for much the same reasons while voluntary testing of suspects, whose past actions dictate that they are reasonably suspected of committing the crime, is permissible. In such a situation, the DNA test would fit into a profile of evidence that has already been established. Forced testing of suspects amounts to being forced to incriminate oneself and so must be avoided.

This leaves us with a policy of only using race as a secondary identification factor (analogous to a suspect's height and weight) alongside voluntary DNA testing of those individuals whose past actions provide reasonable suspicion of their having committed the crime. And then the DNA test information should be restricted to the precise and narrow issue at hand. If the suspect is found to be innocent, then the suspect's DNA profile (and any biological sample) should be destroyed.

This paper concludes that these policy parameters balance the police's legitimate interest in using the latest technology to solve crimes while protecting the rights of the innocent, the presumed innocent, and the guilty. Such protections are necessary because efficiency is not the only goal in criminal investigation. We must never forget that all social institutions should exist within the context of justice.<sup>26</sup>

### **Endnotes**

- 1 The sources for this depiction of the case study come from: Glod, 2004: A 01; Associated Press Newswires, 2004; Pappa, 2004.
- 2 Brunson and Miller, 2006; Lavelle and Feagin, 2006; Prelow and Mosher, 2006; Pitts, 2006. I have been told by a veteran Virginia police officer—with a Ph.D. in sociology—who I interviewed for this article that the old stereotype of the southern racist police officer is a thing of the past. I have gotten differing views from some African Americans I talked to, even about southern police who are African American. At the very least there may be various perceptions of racism that are felt by African Americans and this affects their shared community worldview.
- 3 Brunson and Miller, 2006: 531.
- 4 For a brief description see Melba Newsome, "The Inconvenient Science of Racial DNA Profiling," Wired, October 5, 2007, available at <a href="http://www.wired.com/science/discoveries/news/2007/10/dnaprint/">http://www.wired.com/science/discoveries/news/2007/10/dnaprint/</a> [last accessed December 8, 2007].
- 5 Some of the recent work from a philosophical angle include: Risse and Zeckhauser, 2004; Levin, 1999; Thomas, 1992; Adler, 1993; Corlette, 1993; Cox, 1993; Pojman, 1993; Levin, 1993. See also note #12 for reactions from the social scientists.
- 6 Banks, 2001: 1077.
- 7 (Gross and Livingston, 2002: 1415).
- 8 (Risse and Zeckhauser, 2004: 136).
- 9 Here I'm following the standard account of the role of definition first espoused by Aristotle, Posterior Analytics I.6, I.8.
- 10 The law on this is somewhat ambiguous. When v. United States, 1996 seems to allow racial profiling up to a point (the rationale for the traffic stop), though the decision is largely about being able to search a car for drugs after it has been stopped.
- 11 Risse and Zeckhauser, 2004: 131-170.
- 12 I depict this as the common body of knowledge in Boylan, 1988. A more applied example in the context of the intelligent design argument can be found in Sarker, 2007.
- 13 *Op. cit.*, p. 146. The authors pose a thought experiment in which one expression of racism is eliminated and the overall amount of racism remains the same. This implies that quantity of the phenomenon is independent of its expressions with the result that the removal of any of those expressions is pointless.
- 14 This, however, may be criticized because of the possible confusion between the priority of knowing and ontological priority. It may be the case that we inductively *know* in the way suggested in Table Two, but the ontological priority of the racism, itself, may follow a different formula.
- 15 Some people would add "prevention" here—such as the profiling of Middle Eastern peoples and Muslims in the airports of the Western world. This is undoubtedly correct, but beyond the scope of this essay.
- 16 Those who believe that racial profiling is effective include: Bork, 2003; MacDonald, 2001; Taylor and Whitney, 1999; Ward, 2002; Leitzel, 2001. Those who feel that it is not effective include: Lynch, 2002; Cole, 1999; Harris, 2002; Kennedy, 1997; Engle and Calnon, 2004. An overview of the statistical validity of empirical studies can be found in Engel, Calnon, and Bernard, 2002.
- 17 This is currently an issue that is in dispute. On the position that there is no significant genetic biological mechanism for race see: Higginbotham, 2006: 1185-86; Barnshad et al., 2003: 578-589; Burchard et al., 2003: 1170-1175; and Cooper, Kaufman, and Ward: 1166-1170. For the reverse see: Redon et al, 2006: 444, Bar, 2005: 809-815; Duster, 2006: 487-496.
- 18 It may, for example, be an arbitrary social construction that some phenotypic traits are considered to be of significance—such as skin color—while others are not, such as detached ear lobes. For a critical discussion of the methods of social construction see: Longino, 2002.
- 19 I explore the issue of deserts and economic starting points in Boylan, 2004: chapter 8.
- 20 Especially relevant here are: *Mapp v. Ohio, Terry v. Ohio*, and *Delaware v. Prouse*. These cases outline guidelines for search and seizure (*Mapp*), reasonable search and discovery upon questioning (*Terry*), and restrictions on random auto stops and detentions (*Prouse*). In fashioning new guidelines for police procedures the fundamental principles in these decisions offer a good beginning.
- 21 At present, the construction of DNA data banks is still developing. Most of the time a general primer (e.g., T-7) is used to designate particular human sequences. These are then digitized according to some protocol for one-to-one matching, usually for identification. The sample is often stored and when techniques improve, the information from the sequencing can be much more revealing. A cautionary view of DNA population databases is evinced by Kaye, 2006: 259—while House, et al. 2006: 61-76 see a positive forensic future for the technique. Many of the questions raised in this section are based upon the assumption of improved information mining techniques.

- 22 By "basic goods" I mean those goods requisite for agency. I go into more depth on these and the basis of the ethical claim for such in Boylan, 2004: chapter 3.
- 23 For a further discussion of some of these issues concerning the abuse of genetic data see: J. McEwen, 1995: 1487-1492 and Mulholland and Jaeger, 1999: 317-326.
- 24 I claim that science—including forensic science—is bound by only working toward ethical ends and by only employing ethical means, see: Boylan and Brown, 2002: chapter 7.
- 25 I view "protection from unwarranted bodily harm" as a basic good of agency. For an argument on this see: Boylan, 2004: chapter. 3.
- 26 This essay is based upon my recent essay: "Genetic Profiling: Ethical Constraints Upon Criminal Investigation Procedures" *Politics and Ethics Review* 3.2 (2007): 236-252. I would like to thank the faculties and audiences at The Institute of Philosophy and Public Policy at the University of Maryland and at American University where I delivered a version of this essay. I would particularly like to thank Jeffrey Reiman (philosopher), Judith Lichenberg (philosopher), and Michael Bolton (criminologist) for their comments and suggestions.

### References

Adler, Jonathan. 1993. "Crime Rates by Race and Causal Relevance: A Response to Levin." *Journal of Social Philosophy* 24: 176–184.

Anderson, W.F. 1998. "Human Gene Therapy." Nature 392: 25–30.

Associated Press Newswires. 2004. "DNA Testing of Black Men Angers Va. Town." April 14.

Banks, Richard. 2001. "Race-Based Suspect Selection and Colorblind Equal Protection Doctrine and Discourse." *UCLA Law Review* 48: 1075–79.

Barnshad, Michael J., et al. 2003. "Human Population Genetic Structure and Inference of Group Membership." *American Journal of Human Genetics* 72.3: 578–589.

Barr, D. A. 2005. "The Practitioner's Dilemma: Can We Use a Patient's Race To Predict Genetics, Ancestry, and the Expected Outcomes of Treatment?" *Annals of Internal Medicine* 143: 809–815.

Bork, Robert H. 2003. "Liberty and Terrorism: Avoiding a Police State." Current 458: 9–15.

Boylan, Michael. 1988. The Process of Argument. Englewood Cliffs, NJ: Prentice Hall.

Boylan, Michael and Kevin E. Brown. 2002. *Genetic Engineering: Science and Ethics on the New Frontier.* Upper Saddle River, NJ: Prentice Hall.

Boylan, Michael. 2004. A Just Society. Lanham, MD and Oxford: Rowman and Littlefield.

Brunson, Rod and Jody Miller. 2006. "Gender, Race, and Urban Policing: The Experience of African American Youths." *Gender and Society*. 20 (4): 531.

Burchard, Esteban Gonzáles, et al. 2003. "The Importance of Race and Ethnic Background in Biomedical Research and Clinical Practice" *The New England Journal of Medicine* 348 (12): 1170–1175.

Carnap, Rudolph. 1966. An Introduction to the Philosophy of Science. New York: Basic Books.

Cole, D. 1999. No Equal Justice: Race and Class in the American Criminal Justice System. New York: New Press.

Cooper, Richard S., Jay S. Kaufman, and Ryk Ward. 2003. "Race and Genomics." *The New England Journal of Medicine* 348 (12): 1166–1170.

Corlette, J. Angelo. 1993. "Racism and Affirmative Action" *Journal of Social Philosophy* 24: 163–175.

Cox, Chana B. 1993. "On Michael Levin's 'Response to Race Differences in Crime." *Journal of Social Philosophy* 24: 155–160.

Delaware v. Prouse No. 77-1571 Supreme Court of the United States; 440 U.S. 648; 99 S. Ct. 1391; 59 L. Ed. 2d 660.

Duster, T. 2006. "Lessons from History: Why Race and Ethnicity Have Played a Major Role in Biomedical Research." *J Law Med Ethics* 34: 487–496

Engel, Robin, Jennifer Calnon, and T. Bernard. 2002. "Theory and Racial Profiling: Shortcomings and Directions in Future Research." *Justice Quarterly* 19: 249–273.

Engel, Robin Shepard and Jennifer M. Calnon. 2004. "Examining the Influences of Drivers' Characteristics During Traffic Stops with Police: Results from a National Survey." *Justice Quarterly* 21 (1): 49–89.

Galton, Francis. 1883. Inquiries into Human Faculty and its Development. London: Macmillan.

Glod, Maria. 2004. "DNA Dragnet' Makes Charlottesville Uneasy; Race Profiling Suspected in Hunt for Rapist." *The Washington Post*. April 14.

Goodman, Nelson. 1955. Fact, Fiction, and Forecast. Cambridge, MA: Harvard University Press.

Gostin, L. O. 1991. "Genetic Discrimination: The use of Genetically Based Diagnostic and Prognostic Tests by Employers and Insurers." *American Journal of Legal Medicine* 17: 109.

Gross, Samuel and David Livingston. 2002. "Racial Profiling Under Attack." *Columbia Law Review* 102: 1412–1420.

Haim, P. 1987. "Insurers, Consumers, and Testing: The AIDS Experience." *Law, Medicine, and Health Care* 15: 212–222.

Harris, D.A. 2002. Profiles in Injustice: Why Racial Profiling Cannot Work. New York: New Press.

Higginbotham, E. J. 2006. "How Much Influence Do Socioeconomic Factors Have on Glaucoma Prevalence and Therapeutic Outcomes" *Arch. Ophthalmology* 124: 1185–1186.

House, John C., Richard M. Cullen, Brent Snook, Paul Noble. 2006. "Improving the Effectiveness of the national DNA Databank." *Canadian Journal of Criminology and Criminal Justice* 48 (1): 61–76.

Hudson, K.L., et al. 1995. "Genetic Discrimination and Health Insurance: An Urgent Need for Reform." *Science* 270: 391–393.

Jaeger, Andrea. 1993. "An Insurance View on Genetic Testing." Forum for Applied Research and Public Policy 8: 23–25.

Kaye, H.H. 2006. "Behavioral Genetics, Research, and Criminal DNA Databases." *Law and Contemporary Problems.* 69 (1/2): 259.

Kennedy, R. 1997. Race, Crime, and the Law. New York: Vintage Books.

Leitzel, Jim. 2001. "Race and Policing" Society 38.3: 38-42.

Lavelle, Kristen and Joe Feagin. 2006. "Hurricane Katrina: The Race and Class Debate" *Monthly Review* 58 (3): 52–67.

Levin, Michael. 1992. "Responses to Race Differences in Crime." Journal of Social Philosophy 23: 5–29.

———. 1994. "Reply to Adler, Cox, and Corlett." Journal of Social Philosophy 25: 5–20.

Longino, Helen E. 2002. The Fate of Knowledge. Princeton, NJ: Princeton University Press.

Lynch, Michael J. 2002. "Misleading 'Evidence' and the Misguided Attempt to Generate Racial Profiles of Criminals." *Mankind Quarterly* 42 (3): 313–329.

MacDonald, H. 2001. "The Myth of Racial Profiling." City Journal 11: 14-27.

*Mapp v. Ohio* No. 236 Supreme Court of the United States 1961; 367 U.S. 643; 81 S. Ct. 1684; 6L. Ed. 2d. 1081.

McEwen, J. 1995. "Forensic DNA Data Banking by State Crime Laboratories." *American Journal of Human Genetics* 56: 1487–1492.

Mulholland, W.F. and A. S. Jaeger. 1999. "Genetic Privacy and Discrimination: A Comprehensive Analysis of State Legislation." *Jurimetrics* 39: 317–326.

Newsome, Melba. 2007. Wired. http://www.wired.com/science/discoveries/news/2007/10/dnaprint/

Pappa, Lauren Todd. 2004. "Speaker Discusses DNA Sampling in Rapist Search." *Cavalier Daily.* April 13.

Pitts, Leonard Jr. 2006. "Profiled in Prince George's." *The Washington Post.* December 2: A 15.

Pojman, Louis. 1993. "Race and Crime: A Response to Michael Levin and Lawrence Thomas." *Journal of Social Philosophy* 24: 152–154.

Pokorski, R.J. 1997. "Insurance Underwriting in the Genetic Era." *American Journal of Human Genetics* 60: 205–216.

Prelow, Hazel, Catherine E. Mosher, and Marvella A. Bowman. 2006. "Perceived Racial Discrimination, Social Support and Psychological Adjustment Among African American College Students." *Journal of Black Psychology.* 32 (4): 442.

Redon, Richard, et al. 2006. "Global Variation in Copy Numbers in the Human Genome." *Nature.* 444.7118 (November 23): 444.

Risse, Mathias and Richard Zeckhauser, 2004. "Racial Profiling." *Philosophy and Public Affairs* 32 (2): 131–170.

Sarkar, Sahotra. 2007. Doubting Darwin. Malden, MA and Oxford: Blackwell Publishers.

Taylor, J. and G. Whitney. 1999. "Crime and Racial Profiling by U.S. Police: Is there an Empirical Base?" *Journal of Social, Political and Economic Studies*, 24: 485–510.

Terry v. Ohio No. 67 Supreme Court of the United States 1968; 392 U.S. 1; 88 S. Ct. 1868; 20 L. Ed. 2d 889.

Thomas, Laurence. 1992. "Statistical Badness." Journal of Social Philosophy 23: 30-41.

Verma, I.M. 1997. "Gene Therapy-Promises, Problems, and Prospects." *Nature* 389: 239–242.

Ward, James D. 2002. "Race, Ethnicity, and Law Enforcement Profiling: Implications for Public Policy." *Public Administration Review* 62 (6): 435–456.

Warren, S.T. and D. I. Nelson. 1994. "Advances in Molecular Analysis of Fragile X Syndrome." *Journal of the American Medical Association* 271: 536–542.

Weber, Max. 1978. "Value-Judgments in Social Science." in *Weber: Selections in Translation*, ed. W.G. Runciman. New York: Cambridge University Press: 69–88.

Whren, et al. v. United States, 517. US. 806 (1996).

Wittgenstein, Ludwig. 1970. *Philosophical Investigations*, 3<sup>rd</sup> ed. G.E.M. Anscombe, trans. New York: Macmillan.

——. 1986. *The Blue and Brown Books*. New York: HarperCollins.

### **About the Author**

Michael Boylan, a Fellow at the Center for American Progress, received his Ph.D. from the University of Chicago and is professor of philosophy and chair at Marymount University. His most recent book, *The Extinction of Desire* (April, 2007), is a bold experiment in narrative philosophy. *A Just Society* (2004) is his manifesto on ethics and social/political philosophy. It is the most complete depiction of his normative worldview theory and is the subject of a forthcoming book of exploratory essays by scholars from six countries.

Boylan is also the author of "Basic Ethics" (2000), an essay on normative and applied ethics, *Genetic Engineering: Science and Ethics on the New Frontier* (2002, with Kevin E. Brown), *Ethics Across the Curriculum: A Practice-Based Approach* (2003, with James A. Donahue), and *Public Health Policy and Ethics*, (ed. 2004) along with 13 other books in philosophy and literature and over 90 articles. He is also the general editor of a series of trade books on public philosophy with Basil Blackwell Publishers and another series of books with Prentice Hall, as well as the ethics editor for the *Internet Encyclopedia of Philosophy*.

Presently, Boylan is working on an extension of his worldview theory to some of the major problems in philosophy entitled, *The Good, The True, and The Beautiful*, which is under contract and scheduled for publication in June, 2008 (U.K.) and September, 2008 (U.S.).

### **Acknowledgements**

I would like to thank the faculties and audiences at The Institute of Philosophy and Public Policy at the University of Maryland and at American University where I delivered a version of this paper. I would particularly like to thank Judith Lichtenberg (philosopher at Maryland), Jeffrey Reiman (philosopher at American), Lucius Outlaw (philosopher at Vanderbilt), and Michael Bolton (criminologist at Marymount) for their comments and suggestions.

# Center for American Progress

#### ABOUT THE CENTER FOR AMERICAN PROGRESS

The Center for American Progress is a nonpartisan research and educational institute dedicated to promoting a strong, just and free America that ensures opportunity for all. We believe that Americans are bound together by a common commitment to these values and we aspire to ensure that our national policies reflect these values. We work to find progressive and pragmatic solutions to significant domestic and international problems and develop policy proposals that foster a government that is "of the people, by the people, and for the people."

Center for American Progress
1333 H Street, NW, 10<sup>th</sup> Floor
Washington, DC 20005
Tel: 202.682.1611 • Fax: 202.682.1867
www.americanprogress.org