

THE DIALECTICS OF RACIAL GENETICS

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INTRODUCTION

The devices of dialectic and narrative have long been used by scholars to analyze jurisprudence and disrupt traditional legal discourse. Henry M. Hart was one of the first legal scholars to utilize the dialectical method in his classic article, *The Power of Congress to Limit the Jurisdiction of Federal Courts: An Exercise in Dialectic*.¹ Since Hart's excursion into dialectical writing, a number of other scholars have used the device to analyze pressing legal issues.² The critical theory movement has also demonstrated the power of narrative writing in challenging and disrupting dominant legal norms as they relate to various forms of social inequality.³ In particular, the late Derrick Bell influenced the writing of scores of critical scholars with his seminal book, *Faces at the Bottom of the Well: The Permanence of Racism*.⁴ I call upon the instruments of dialectic and narrative in this article to analyze an extremely troubling scientific and judicial phenomenon: the re-emergence of biological theories of race in the twenty-first century. The following

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¹ Henry M. Hart, Jr., *The Power of Congress to Limit the Jurisdiction of Federal Courts: An Exercise in Dialectic*, 66 HARV. L. REV. 1362, 1363 (1953).

² See Stephen H. Legomsky, *Portraits of the Undocumented Immigrant: A Dialogue*, 44 GA. L. REV. 65, 66 (2009); see e.g., BRUCE A. ACKERMAN, *SOCIAL JUSTICE IN THE LIBERAL STATE* 30 (1980); Jesse Choper & John Yoo, *Wartime Process: A Dialogue on Congressional Power to Remove Issues from the Federal Courts*, 95 CALIF. L. REV. 1243, 1246 (2007); James D. Gordon III, *A Dialogue About the Doctrine of Consideration*, 75 CORNELL L. REV. 987, 987 (1990).

³ See, e.g., Margaret E. Montoya, *Celebrating Racialized Legal Narratives*, in CROSSROADS, DIRECTIONS, AND A NEW CRITICAL RACE THEORY 243, 243–49 (Francisco Valdes et al. eds., 2002) (discussing how narrative is a technique for discovering and breaking down social stereotypes and the “structures and strictures of power”); Thomas Ross, *The Unbearable Whiteness of Being*, in CROSSROADS, *supra*, at 251, 251–57 (using narrative to describe race relations); Richard Delgado, *Rodrigo's Reconsideration: Intersectionality and the Future of Critical Race Theory*, 96 IOWA L. REV. 1247, 1287–88 (2011); Cheryl I. Harris, *Whiteness as Property*, 106 HARV. L. REV. 1707, 1713–14 (1993).

⁴ DERRICK BELL, *FACES AT THE BOTTOM OF THE WELL: THE PERMANENCE OF RACISM* 12–13 (1992).

discussion takes place between a fictionalized representation of a childhood friend and me.

A DIALOGUE ON RACE AND GENETICS

My wife, daughter, and I recently decided to spend the holiday season with my mother and siblings at the family home on the South Side of Chicago. Upon arrival to “Nana’s” house, I realized that I would always regard Chicago as “home”—despite having lived on the East Coast for the last sixteen years. And yet whenever I visit my childhood home, I often experience an odd muddle of feelings—from love and excitement at reuniting with family and old friends to anguish and despondency over the unrelenting poverty and crime that has come to define my community. A thoroughly African-American community due to past and current segregative practices, the Woodlawn-Roseland neighborhood that I grew up in has long been plagued with high rates of crime, poverty, and unemployment.⁵ And while I spent long stretches of my childhood on “welfare” and fleeing gang violence, I had always remained ardently hopeful for the future of my community. Indeed, my commitment to social justice was strongly shaped by my experiences growing up in the “wild, wild, 100s,” and fed my personal and scholarly interests in overcoming oppression through action and critical theory.

As we drove through my old neighborhood, any lingering feelings of Obama-esque hope for change were tempered by the too familiar signs of crushing poverty: burned out buildings, hopeless drug addicts, boarded-up homes, and gang-controlled corner blocks. Far from experiencing a revival, my Woodlawn-Roseland neighborhood has suffered a re-entrenchment of race-based poverty over the last two decades.⁶ I steeled myself as we approached the family house,

⁵ See ROSELAND CHILDREN’S INITIATIVE, PROPOSAL FOR FUNDING 10 (2011), available at <http://www2.ed.gov/programs/promiseneighborhoods/2011/u215p110090narrative.pdf> [hereinafter CHILDREN’S INITIATIVE] (noting that in 2010, census data showed that Roseland had an unemployment rate that was nearly nine percent higher than the citywide average); *Crime in Chicago: Roseland*, CHI. TRIB., <http://crime.chicagotribune.com/chicago/community/roseland> (last visited Feb. 14, 2013) (reporting that nearly twenty percent of Roseland residents live below the poverty line, slightly higher than the citywide average); Kari Lyderson & Carlos Javier Ortiz, *More Young People Are Killed in Chicago Than Any Other American City*, CHI. REP. (Jan. 25, 2012), <http://www.chicagoreporter.com/news/2012/01/more-young-people-are-killed-chicago-any-other-american-city> (noting that “Woodlawn, Roseland, and Morgan Park” have some of the highest youth homicide rates in the city of Chicago).

⁶ See CHILDREN’S INITIATIVE, *supra* note 5, at 7–8 (noting that ninety-seven percent of the

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reminding myself that my mother's new next door neighbor was a high-ranking leader of the Gangster Disciples "Folks" gang.⁷ I steeled myself at the memory of my youngest sister having to shield her infant son (my nephew) with her body during a fatal shooting at the nearby Ada Park a couple of years prior.⁸ I steeled myself as I considered the safety of my wife and infant daughter, both snoozing quietly in the backseat of the rental car.

We arrived in front of the house, and my fitful thoughts were soon displaced by the expectant joy of seeing family. As I finished unhooking my infant daughter from her car seat, I heard a familiar voice behind me: "What's up, brother? Where you been?" I awkwardly whirled around—any street-sense instincts having long been forgotten—and came face-to-face with a childhood friend. "Farrow Powell! Is that you? I haven't seen you since we were kids!" I responded in shock. Although Farrow and I had been best friends for a while growing up, I had not seen him for over twenty years.

"Yeah, it's me, brother," replied Farrow. "I haven't seen you or your family in a minute. You remember I used to live just a few houses from you?" Holding my daughter in one arm, I awkwardly shook hands with Farrow with my free arm. "Of course I remember! We used to breakdance on broken down cardboard boxes right here on this sidewalk," I exclaimed. Farrow held out his hand towards my wife, saying, "hello, sister, my name is Farrow Powell. I assume you are Christian's wife and that this little one here is your beautiful daughter?" My wife shook hands with Farrow, and introductions were belatedly made. "I was so surprised to see you that I forgot to introduce you to my family," I admitted. I suggested that my wife and daughter head inside to the house while I caught up with Farrow.

residents of Roseland are African-American, and also discussing the racial stratification that occurred in the Roseland community after the Pullman Company closed its factories in 1981, which sent "crime rates, gang violence and urban decay sky-rocketing").

⁷ For an overview of gang activity in the South Side of Chicago, see Susan Chandler, *Gangs Built on Corporate Mentality*, CHI. TRIB., June 13, 2004, § 5, at 1; see, e.g., Jeremy Gorner, *Gang Factions Fuel Violent Year*, CHI. TRIB., Oct. 3, 2012, § 1, at 1 (stating that "[one] in [four] Chicago slaying victims this year linked to Gangster Disciples"); Jeremy Gorner et al., *Gunfire Rings Out at Funeral*, CHI. TRIB., Nov. 27, 2012, § 1, at 1; Jeremy Gorner, *McCarthy Shakes Up Command Staff*, CHI. TRIB., Dec. 6, 2012, § 1, at 7.

⁸ E.g., Daarel Burnette II, *1 Killed in Far South Side Shooting*, CHI. TRIB., Aug. 8, 2010, § 1, at 12. Other shootings have taken place at Ada Park since then. E.g., *Girl, 17, Critically Hurt in Shooting at Far South Side Park*, CHI. SUN-TIMES (updated Nov. 14, 2011, 7:33 PM), <http://www.suntimes.com/news/metro/8834116-418/teen-critically-wounded-in-shooting-at-far-south-side-park.html> [hereinafter *Girl, 17, Critically Hurt*].

“You put on some weight, brother,” Farrow observed. “But that’s a good thing—you always were skinnier than a mug!” We meandered over to the stoop to continue our conversation.

“So why are you back in the neighborhood? I thought you had moved out years ago when we were kids?” I asked Farrow. He grew somber for a moment, as though painfully recalling some past life. “Yeah, I left a long time ago. Right about the same time you up and left to go to that fancy high school on the North Side once you got that scholarship. Anyways, my foster family didn’t want me anymore so I went back into the system.”

I suddenly remembered the last weeks we had spent together as children. We had both worn blue and black colored laces in our sneakers to school, symbols of the local Gangster Disciples and Black Disciples gangs.⁹ We didn’t know what we were doing, and certainly didn’t think we had joined any gang. We just thought we were being “cool.” Neither of us was suspended from school, although the Principal spoke with our families after the incident. Shortly afterwards, Farrow was kicked out of his foster home and left the neighborhood. It was the last I had seen of him before today. “I’m sorry, I guess I hoped you had caught on to a new family or something. Are you back in Woodlawn for good now?” I asked, perhaps trying to deflect my own sense of guilt.

“Yeah. I think I might be back here for good, but you never know. I caught a couple of cases over the years, and so it’s hard for a brother to find work. At least I know folk around here—yourself included.” Farrow noticed me straighten up, and he tried to explain. “Naw, it’s not like that. I’m not asking for any help from you. But you made it out! You’re a big success now. I’m proud of you, brother! I want to know more about what you up to.”

“Well, you have probably heard that I am a law professor living in New York. My scholarship focuses on racial construction and race theory.¹⁰ But I don’t think you would be all that interested in

⁹ *Black Gangster Disciples*, GANG PREVENTION SERVICES, <http://www.gangpreventionservices.org/BGD.asp> (last visited Feb. 14, 2013).

¹⁰ See, e.g., Christian B. Sundquist, *Science Fictions and Racial Fables: Navigating the Final Frontier of Genetic Interpretation*, 25 HARV. BLACKLETTER L.J. 57, 58 (2009) [hereinafter Sundquist, *Science Fictions and Racial Fables*] (discussing the anomaly between courts’ willingness to use racial DNA to form racial genomic probabilities and the fact that race is purely a social construct); Christian B. Sundquist, *The Meaning of Race in the DNA Era: Science, History and the Law*, 27 TEMP. J. SCI. TECH. & ENVTL. L. 231, 265 (2008) [hereinafter Sundquist, *Race in the DNA Era*] (explaining the problems that may arise if we accept evidence purporting to prove that race is a biological construct, when in reality race is purely a social construct); Christian Sundquist, *On Race Theory and Norms*, 72 ALB. L. REV. 953, 953 (2009) [hereinafter Sundquist, *Race Theory*] (addressing “the judicial acceptance of

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hearing what I write and lecture about, though,” I said, trying to sound as non-condescending as possible.

“Listen,” Farrow said. “I may not have led the path you have led, I may not have had the same education you have had, and I may not use the same legal terms you use. But I live ‘race’ every day, brother. Just like you in some ways, but in a lot of different ways too: I’m not as rich and light skinned as you, brother. I ain’t never been able to pass for white, even by accident! But seriously, tell me about your work.”

DIALOGUE ONE: THE CONSTRUCTION OF RACE

I relented. “Alright. My current work focuses on the construction of race. Both social and natural science have conclusively established that race has no biological meaning—that it is a socio-political construction. Prominent researchers, such as Professor Michael Omi¹¹ and others, have convincingly established that the concept of ‘race’ developed historically as an attempt to control groups of people deemed ‘non-white’ and to justify their unequal political and social treatment.”¹²

“I see,” Farrow replied. “I’m familiar with this research. As Jay-Z has said, ‘I ain’t passed the bar but I know a little bit!’¹³ The sum of it is that race is not a biological category—but rather a social construction.”¹⁴

“That’s right!” I exclaimed. “And from the beginning, the notion of ‘race’ was given false biological dimensions in order to justify the unequal treatment of persons.¹⁵ The horrible artifice being that it

DNA random match estimates” and its threat to the “modern conception of race as a social construction”).

¹¹ Michael Omi is a professor in the Ethnic Studies Department at University of California, Berkeley. *Michael Omi, Associate Professor, U. CAL., BERKELEY*, <http://ethnicstudies.berkeley.edu/faculty/profile.php?person=11> (last visited Mar. 15, 2013). His research interests revolve around racial theory. *Id.*; see also John O. Calmore, *Exploring Michael Omi’s “Messy” Real World of Race: An Essay for “Naked People Longing to Swim Free”*, 15 *LAW & INEQ.* 25, 37 (1997) (discussing Omi’s rejection of the nature of race in the United States and its presence in all aspects of society, where such presence ultimately prevents an understanding of racism in the United States).

¹² See John A. Powell, *A Minority-Majority Nation: Racing the Population in the Twenty-First Century*, 29 *FORDHAM URB. L.J.* 1395, 1400–02 (2002); Sundquist, *Race in the DNA Era*, *supra* note 10, at 240–42.

¹³ JAY-Z, *99 Problems* at 1:49–:51, on *THE BLACK ALBUM* (Rock-A-Fella Records 2003), available at <http://www.youtube.com/watch?v=WwoM5fLITfk>.

¹⁴ Powell, *supra* note 12, at 1401; Sundquist, *Race Theory*, *supra* note 10, at 956–57.

¹⁵ See Sundquist, *Science Fictions and Racial Fables*, *supra* note 10, at 60 (“The idea of ‘race’ as a tool of social categorization and control likely did not evolve until the late sixteenth and early seventeenth centuries.” (footnote omitted)).

was morally and legally appropriate to treat supposedly genetically inferior persons different from supposedly genetically superior persons.”¹⁶

“In other words,” Farrow responded, “the idea of biological racial differences was used to justify chattel slavery in the United States, Jim Crow, and anti-miscegenation laws, and even played into Nazi racial theories.”¹⁷

“Absolutely,” I replied. I was energized—professors love to talk about their own work.

“That’s great. But, no offense, brother, what else does your work contribute to the struggle? Hasn’t it been established for years and years that race is a social construction? Haven’t we moved on from that idea?” Farrow was not as impressed with my work as I had hoped.

“Listen. I’m just setting the stage,” I pleaded. “Give me a moment to develop the argument and fully describe the problem.”

“Aspects of our law, our science, and even our public-consciousness have once again embraced long-discarded notions of biological race. With the development of new genetic technologies, some scientists, politicians and judges are once again wrongly assuming that race has some discernible biological essence. It has become increasingly commonplace, for instance, for courts to admit race-based estimates of DNA profiles against criminal defendants.¹⁸ Race-based pharmaceuticals have been developed and marketed to specific racial groups.¹⁹ Private companies, including the company owned and promoted by Skip Gates, make millions of dollars offering DNA ancestry testing to the public.²⁰ We are, simply put, witnessing a modern day re-inscription of race as a biological category,” I exhorted.²¹

¹⁶ *See id.*

¹⁷ Sundquist, *Race in the DNA Era*, *supra* note 10, at 241, 246, 250–52.

¹⁸ *See id.* at 233; *see also* George Bundy Smith & Janet A. Gordon, *The Admission of DNA Evidence in State and Federal Courts*, 65 *FORDHAM L. REV.* 2465, 2481–87 (1997) (discussing the acceptance of DNA evidence across the United States and the acceptance of statistical information derived from DNA evidence); Sundquist, *Science Fictions and Racial Fables*, *supra* note 10, at 58.

¹⁹ Sundquist, *Race in the DNA Era*, *supra* note 10, at 257.

²⁰ Ron Nixon, *DNA Tests Find Branches but Few Roots*, *N.Y. TIMES*, Nov. 25, 2007, at B1.

²¹ *See, e.g.* Jonathan Kahn, *Beyond BiDiI: The Expanding Embrace of Race in Biomedical Research and Product Development*, 3 *ST. LOUIS U. J. HEALTH L. & POL’Y* 61, 62 (2009) [hereinafter Kahn, *Beyond BiDiI*] (describing a race-specific patent that was premised on the biological conception of race); Jonathan Kahn, *Race, Genes, and Justice: A Call to Reform the Presentation of Forensic DNA Evidence in Criminal Trials*, 74 *BROOK. L. REV.* 325, 375 (2009) [hereinafter Kahn, *Race, Genes, and Justice*] (discussing the relationships between race and genes); Jonathan Kahn, *Race-ing Patents/Patenting Race: An Emerging Political Geography*

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Farrow thought for a moment. “You know, it doesn’t surprise me. Underneath the polite veneer of colorblindness, I have always suspected that some people continue to believe that Black and non-White folk are racially inferior, from a biological perspective. Even the noted geneticist James Watson, the Nobel Prize winning co-discoverer of the double helix structure of DNA, made the racist (and unsupportable) claim that Black people are genetically less intelligent than Whites.”²²

“It is disturbing,” I gloomily replied. “Such understandings of race are simply uninformed, not based in science, contrary to our statutory and constitutional law, and part of a larger ‘racial project’ that seeks to rationalize (and excuse) continuing social disparities based on race.”²³

“Inform me, brother. I like it when you get this heated about something,” Farrow replied.

DIALOGUE TWO: THE BIOPOLITICS OF DNA COLLECTION

“One of the most disturbing manifestations of the ‘new race science’ has taken place in the criminal justice context. For years, it has been altogether commonplace for state and federal prosecutors to admit DNA forensic evidence against criminal defendants.²⁴ In a typical case, DNA crime-scene samples are compared to a sample

of Intellectual Property in Biotechnology, 92 IOWA L. REV. 353, 356 (2007) (discussing the re-biologization of race in patent law); Osagie K. Obasogie, *Beyond Best Practices: Strict Scrutiny as a Regulatory Model for Race-Specific Medicines*, 36 J.L. MED. & ETHICS 491, 496 (2008) (explaining the state’s strong interest in using race as a biological category only where they are supported by “robust studies, and are not simply used as a convenient proxy”); Dorothy E. Roberts, *Is Race-Based Medicine Good for Us?: African-American Approaches to Race, Biomedicine, and Equality*, 36 J.L. MED. & ETHICS 537, 537 (2008) (explaining that race as a biological category results from race-specified medicine); Dorothy E. Roberts, *What’s Wrong with Race-Based Medicine?: Genes, Drugs, and Health Disparities*, 12 MINN. J.L. SCI. & TECH. 1, 9 (2011) [hereinafter Roberts, *Genes, Drugs, and Health Disparities*] (discussing how race is treated as a biological category); Dorothy Roberts, *Collateral Consequences, Genetic Surveillance, and the New Biopolitics of Race*, 54 HOW. L.J. 567, 567 (2011) [hereinafter Roberts, *Collateral Consequences*] (describing how scientists redefine race as a biological category); Sundquist, *Race Theory*, *supra* note 10, at 960 (discussing the re-biologization of race); Sundquist, *Race in the DNA Era*, *supra* note 10, at 233 (explaining how a re-biologization of race contradicts the social construct of race).

²² See Laura Blue, *The Mortification of James Watson*, TIME (Oct. 19, 2007), <http://www.time.com/time/health/article/0,8599,1673952,00.html>; see, e.g., Roxanne Khamisi, *James Watson Retires Amidst Race Controversy*, NEWSIDENTIST, (Oct. 25, 2007), <http://www.newscientist.com/article/dn12835-james-watson-retires-amidst-race-controversy.html> (describing James Watson’s retirement in light of the racial controversy).

²³ See MICHAEL OMI & HOWARD WINANT, RACIAL FORMATION IN THE UNITED STATES 60 (1986) (stating that race is a “sociohistorical concept”).

²⁴ Kahn, *Race, Genes, and Justice*, *supra* note 21, at 333.

obtained (sometimes forcefully) from the criminal defendant.²⁵ The finding of a ‘match’ between the samples, contrary to public opinion, does not conclusively establish that the suspect was the only person who could have contributed the crime-scene sample.²⁶ As such, the prosecution must introduce expert testimony at trial explaining the significance of a ‘match’ to the factfinder.²⁷ The expert typically does so by presenting a random match probability estimate, to the effect that there is only a ‘one in twenty-four million chance’ that a person other than the suspect possessed the same DNA profile as the crime-scene sample.”²⁸

Farrow suddenly interrupted. “Alright, alright. But where is the problem? From what I understand, DNA evidence is pretty much infallible. I’ve watched the *CSI* and *Law and Order* shows.”

“There are a number of evidentiary and constitutional issues regarding DNA evidence. DNA forensics is far from infallible despite its public mystique.²⁹ First, there is a disturbing lack of standardization within the DNA forensics field as to how to calculate statistical interpretations of DNA ‘matches.’³⁰ The field of DNA forensics, which relies on a hodge-podge of federal, state and private laboratories to analyze crime-scene samples, has simply not established universal protocols or methodologies to analyze DNA evidence.³¹ And for reasons that remain unclear, new evidence demonstrates that the method by which experts calculate the probability of random DNA matches is flawed.³² Recent analyses of

²⁵ See 42 U.S.C. § 14135a(1)(A) (2006) (allowing the U.S. Attorney General to take DNA samples from arrested, facing charges, convicted, or non-citizen persons); 28 C.F.R. § 28.12(b) (2012) (allowing the U.S. Attorney General to implement regulations for the collection of DNA); see also N.Y. EXEC. LAW §§ 995-c(3), 995(7) (McKinney 2013) (reflecting recent amendments to expand New York’s DNA database to include any person convicted of a misdemeanor under the New York Penal Law).

²⁶ See Kahn, *Race, Genes, and Justice*, *supra* note 21, at 334–35.

²⁷ Sundquist, *Race in the DNA Era*, *supra* note 10, at 233.

²⁸ See Osagie K. Obasogie & Troy Duster, *All That Glitters Isn’t Gold*, 41 HASTINGS CENTER REP. 15, 16 (2011) (“DNA databases gain much of their authority from the oft-repeated claim that the chance that two profiles will randomly match—even partially—is only one in several million.”).

²⁹ Although DNA evidence is far from infallible, for a thorough discussion regarding many post-conviction DNA exonerations, see generally James R. Acker, *The Flipside Injustice of Wrongful Convictions: When the Guilty Go Free*, 76 ALB. L. REV. 1629 (2013).

³⁰ Obasogie & Duster, *supra* note 28, at 16. For example, the methodology used by experts at trial to calculate statistical interpretations of DNA “match” evidence can vary significantly. See *id.* (discussing the problem of the “prosecutor’s fallacy” in the context of forensic DNA evidence).

³¹ *Id.* (providing the number of profiles available in the federal database—eight million profiles—as well as DNA databases for Arizona, Illinois, and Maryland).

³² *Id.*

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the Arizona state DNA database and the Illinois state DNA database have shown an abnormally high number of DNA profiles that match at various loci,”³³ I explained.

“So that means the probability that an expert gives the jury during trial may be overestimated?”³⁴ Farrow asked.

“That’s correct. And this likely has an impact on trial outcomes.³⁵ The collection, maintenance, and interpretation of forensic samples can also suffer from notorious errors and inaccuracies.³⁶ The contamination, fabrication and mishandling of DNA evidence has led to a number of erroneous criminal prosecutions and convictions.³⁷ For example, it was just recently discovered that a forensic chemist working for a Massachusetts state crime lab had falsified at least sixty thousand forensic samples through contamination and forgery.³⁸ Some have placed the rate of laboratory error as high as one in a thousand.”³⁹

“And so as a result of these errors, innocent people are getting

³³ *See id.*

³⁴ *Id.* (“The substantially diminished probabilities stemming from cold-hit database searches that take database size into account more accurately reflect the statistical limitations of [cold-hit matches that occur within databases which have a substantially higher probability of being coincidental] . . .”).

³⁵ *See id.* (discussing how the lack of standardization can lead to misled courts).

³⁶ *See* NAT’L RESEARCH COUNCIL, STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES: A PATH FORWARD 59 (2009).

³⁷ *See, e.g.,* Maura Dolan & Jason Felch, *DNA: Genes as Evidence*, L.A. TIMES, July 20, 2008, at A1 (discussing a crime lab’s findings that raised doubt about the reliability of genetic profiles where two profiles defied the odds: two un-related felons—one black and one white—shared “remarkably similar genetic profiles”); Nick Madigan, *Houston’s Troubled DNA Crime Lab Faces Growing Scrutiny*, N.Y. TIMES, Feb. 9, 2003, at 20 (discussing Houston’s DNA lab issues after an audit of their facility required a look at over ninety cases); *DNA Testing Mistakes at the State Patrol Crime Labs*, SEATTLE POST-INTELLIGENCER (July 21, 2004, 10:00 PM), <http://www.seattlepi.com/local/article/DNA-testing-mistakes-at-the-State-Patrol-crime-1149846.php> (describing twenty-three cases of errors in major criminal cases relating to DNA testing); William C. Thompson, *The Potential for Error in Forensic DNA Testing (and How That Complicates the Use of DNA Databases for Criminal Identification)*, GENE-WATCH, 3 (Aug. 12, 2008), <http://www.councilforresponsiblegenetics.org/pageDocuments/H4T5EOYUZI.pdf> (pointing out that the risk of DNA evidence producing wrongful convictions is highly correlated with having a profile in government databases or a relative in such databases).

³⁸ Daniel Lovering, *Massachusetts Chemist Charged in Crime Lab Scandal*, REUTERS, (Sept. 28, 2012, 3:47 PM), <http://www.reuters.com/article/2012/09/28/us-usa-massachusetts-crimelab-idUSBRE88R1CZ20120928>. A second Massachusetts forensic chemist has been recently alleged to have mishandled forensic evidence in the last month. *Second Massachusetts Crime Lab Chemist Accused of Evidence Tampering*, CBS NEWS (Jan. 21, 2013, 3:36 PM), http://www.cbsnews.com/8301-504083_162-57565019-504083/second-massachusetts-crime-lab-chemist-accused-of-evidence-tampering.

³⁹ Maura Dolan & Jason Felch, *The Peril of DNA: It’s Not Perfect*, L.A. TIMES, Dec. 26, 2008, at A1.

locked up!” Farrow exclaimed.⁴⁰

“Yes, but it also means that the guilty are going free.⁴¹ The admission of unreliable DNA evidence not only leads to wrongful convictions in some instances, but impedes the search for truth and the prosecution of the guilty.⁴² Another troubling trend has been the vast expansion of DNA databases and collection methods in the last few years.⁴³ New York State recently enacted legislation to create an “all-crimes” DNA database, which allows the state to forcibly collect DNA samples from people convicted of both felonies *and* most misdemeanors.⁴⁴ The federal government and a few states, including California and Maryland, have gone even further and have passed acts allowing authorities to forcibly obtain DNA samples for all persons arrested for particular crimes.⁴⁵ The Supreme Court has granted certiorari to decide the constitutionality of Maryland’s act, and a ruling is expected later this year.”⁴⁶

Farrow furrowed his brow with incredulity. “And why should we be worried about the expansion of DNA databases? It seems pretty clear that DNA evidence has enabled prosecutors to arrest and convict scores of rapists and murderers.⁴⁷ Despite my own troubles with the law in the past, I see no problem with allowing the police to use scientific methods to lock up predators on the street! And it

⁴⁰ It has been observed that while “[t]he Supreme Court has not recognized a convicted defendant’s freestanding claim of actual innocence . . . individual states have taken differing approaches to claims of actual innocence.” John. M. Leventhal, *A Survey of Federal and State Courts’ Approaches to a Constitutional Right of Actual Innocence: Is There a Need for a State Constitutional Right in New York in the Aftermath of CPL § 440.10(g-1)?*, 76 ALB. L. REV. 1453, 1454 (2013). For a detailed compilation of how individual states handle a convicted defendant’s freestanding claim of actual innocence, see *id.* at 1488–1515.

⁴¹ See Acker, *supra* note 29, at 1631 (“When innocents are convicted, the guilty go free.”).

⁴² See Roberts, *Collateral Consequences*, *supra* note 21, at 575 (explaining how, in certain instances, DNA data banking has served no benefit, and has even produced false identifications and false confessions).

⁴³ Aaron P. Stevens, Note, *Arresting Crime: Expanding the Scope of DNA Databases in America*, 79 TEX. L. REV. 921, 923 (2009) (stating that the size and number of DNA databases in the United States has greatly increased in recent years).

⁴⁴ See Act of Mar. 19, 2012, ch. 19, §§ 5, 6(iii), 2012 N.Y. Sess. Laws 290, 295, 296 (McKinney); N.Y. EXEC. LAW §§ 995(7), 995-c(3) (McKinney 2013).

⁴⁵ See, e.g., 42 U.S.C. §§ 14132(a), 14135a(a) (2006); CAL. PENAL CODE §§ 295(2), 296(a) (West Supp. 2013); MD. CODE ANN., PUB. SAFETY § 2-504(a) (LexisNexis Supp. 2012).

⁴⁶ David G. Savage, *Supreme Court to Hear Case on Arrests and DNA; Justices will Decide on the Legality of Taking Samples from People in Police Custody but Not Yet Convicted*, L.A. TIMES, Feb. 3, 2013, at A18; see *King v. State*, 42 A.3d 549, 555–56 (Md.) (holding that Maryland’s DNA Collection Act violated the Fourth Amendment as authorizing unreasonable searches and seizures), *cert. granted*, 133 S. Ct. 594 (2012).

⁴⁷ See Roberts, *Collateral Consequences*, *supra* note 21, at 570 (explaining how genetic evidence was originally used as “supplemental evidence” to help convict suspects, and that DNA evidence could help police catch criminals who could have “otherwise eluded” detection”).

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seems to me that an expansion of DNA databases could also allow a lot of wrongly convicted brothers to be exonerated!”⁴⁸

“There are at least two legal concerns with the expansion of DNA databases,” I responded. “First, many of these expansive DNA collection acts likely violate the Fourth Amendment’s prohibition on unreasonable searches and seizures.⁴⁹ The forcible collection and indefinite storage of a person’s genetic profile represents an unprecedented violation of personal privacy and bodily integrity.⁵⁰ Unlike a traditional fingerprint, a DNA profile contains extremely personal information about our bodies and our families.⁵¹ Given the well-documented difficulties in using DNA forensics as a tool of crime reduction, the high privacy costs of forcible DNA collection from persons never convicted of a crime are not legitimated by a state’s interest in solving crimes.⁵² For example, in Maryland, less than one-tenth of one percent of collected/seized DNA samples ever led to convictions.”⁵³

“That may be so,” Farrow interjected, “but at least a handful of criminals are being caught by DNA forensics.⁵⁴ Isn’t the capture of just one or two murderers or rapists enough to justify the use of DNA databases?”

“Given the methodological and reliability concerns of DNA collection, analysis and storage, I do not believe that expanding

⁴⁸ See Richard A. Leo & Jon B. Gould, *Studying Wrongful Convictions: Learning From Social Science*, 7 OHIO ST. J. CRIM. L. 7, 7–8 (stating that many exonerations of defendants wrongfully convicted of rape or murder have occurred after DNA evidence determined the innocence of such defendants); Stevens, *supra* note 43, at 942 (“Used correctly, DNA databases and DNA evidence in general can be a powerful tool—both to free the innocent and to help prevent wrongful convictions before they occur.”).

⁴⁹ See Kelly Lowenberg, *Applying the Fourth Amendment When DNA Collected For One Purpose is Tested For Another*, 79 U. CIN. L. REV. 1289, 1302 (stating that some courts have held that it is a violation of the Fourth Amendment to collect DNA from arrested persons without a warrant). *But see* Stevens, *supra* note 43, at 955 (stating that a national database that contains DNA profiles of every American citizen may be found constitutional due to the weakening of Fourth Amendment protections).

⁵⁰ See Roberts, *Collateral Consequences*, *supra* note 21, at 574–75 (“[DNA databanks have] expanded into a form of state surveillance that ensnares innocent people or petty offenders who have done little or nothing to warrant the collateral intrusion into their private lives. Databanks no longer detect suspects—they create suspects from an ever-growing list of categories.”).

⁵¹ See TANIA SIMONCELLI & SHELDON KRIMSKY, AM. CONSTITUTION SOC’Y FOR LAW & POLICY, A NEW ERA OF DNA COLLECTIONS: AT WHAT COST TO CIVIL LIBERTIES? 2 (Aug. 2007) (“[S]amples of DNA can provide insights into familial connections, physical attributes, genetic mutations, ancestry and disease predisposition.”).

⁵² See *id.* at 14 (“[I]t is possible that people are being asked to sacrifice their privacy for a process that may ultimately do little for criminal justice.”).

⁵³ Editorial, *DNA and the Fourth Amendment*, N.Y. TIMES, Aug. 5, 2012, at A16.

⁵⁴ See *id.*

DNA databases to allow for the collection of samples from persons merely arrested by police passes constitutional muster,” I responded. “And yet there is a broader criminal justice issue concerning the expansion of DNA databases. If you consider the overrepresentation of Blacks and Latinos in American prisons due to targeted imprisonment and systemic bias,⁵⁵ then it should also come as no surprise that the genetic samples of Blacks and Latinos are also overrepresented in state and federal DNA databases. For instance, African-Americans only represent thirteen percent of the country’s population, yet have provided forty percent of the DNA samples maintained in federal databases.⁵⁶ The expansion of DNA collection efforts, combined with the rise of familial searching using DNA profiles, creates an unjust system of genetic surveillance with disparate racial consequences.”⁵⁷

“I understand,” replied Farrow. “It almost seems like the expansion of DNA databases—given the disproportionate collection of DNA samples—could evolve into a new system of racial control and oppression!”

DIALOGUE THREE: CRIMINAL FORENSICS AND RACIAL DNA EVIDENCE

“I think it already has morphed into such an animal,” I grimly replied. “My research focuses on a more explicit example of how governments are using DNA forensics to resurrect biased notions of racial biological difference and innate criminal propensity. State and federal courts have long allowed the admission of race-based DNA probability estimates at trial against criminal defendants.⁵⁸ Rather than introduce expert testimony that refers to the frequency with which a DNA profile appears in the general population, it has become accepted practice to introduce testimony that refers to the frequency with which a DNA profile occurs in particular racial groups.⁵⁹ As such, courts now routinely allow testimony that there

⁵⁵ *E.g.*, MICHELE ALEXANDER, *THE NEW JIM CROW: MASS INCARCERATION IN THE AGE OF COLORBLINDNESS* 6–7 (2010) (discussing the racial disparities that have resulted from the war on drugs).

⁵⁶ See Dane C. Barca, Note, *Familial DNA Testing, House Bill 3361, and the Need For Federal Oversight*, 64 *HASTINGS L.J.* 499, 519 (2013) (indicating that African-Americans made up thirteen percent of the U.S. population but accounted for forty percent of the felony offenders).

⁵⁷ See Roberts, *Collateral Consequences*, *supra* note 21, at 582.

⁵⁸ See, *e.g.*, *People v. Oliver*, 713 N.E.2d 727, 732–33, 734 (Ill. App. Ct. 1999); *Prince v. Martel*, No. 1-8-cv-1014-JF, 2010 WL 1241281, at *1 (E.D. Cal. Mar. 25, 2010).

⁵⁹ See *Oliver*, 713 N.E.2d at 732–33, 734 (affirming introduction of expert testimony of a 1

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is only a '1 in 41 million' chance that another 'Hispanic' person would share the same DNA profile as that of the criminal defendant.⁶⁰ The admission of such evidence clearly conflicts with the accepted understanding of race as a socio-political construction, reifies discarded notions of innate race-based criminal propensities and violates federal statutory and constitutional law."⁶¹

Farrow was silent for a moment. "I'm not shocked. I mentioned that I caught a couple of cases earlier, but in one case, I was convicted of felony robbery and assault after trial. I was walking alone on the streets of the Gold Coast a few years ago, looking for work, when the cops rolled up with guns drawn. They threw me to the ground, and arrested me for allegedly robbing and beating some white guy a few blocks away. I explained to them that I had nothing to do with it, that I was on my way to apply for a job. I even showed them the job application in my pocket! The cops didn't want to believe my explanation, that a poor black man from the South Side had any legitimate reason for walking around in an affluent, white neighborhood. Some residents even came out of their million-dollar greystones while I was being cuffed and told the cops that I looked like I was up to no good. That was enough for the police, and apparently for the judge and jury too."

"Against the advice of my appointed attorney, I decided to not take a plea and to go to trial in that case since I was innocent. At trial, it came down to identification. The victim couldn't remember who robbed him, except for testifying that it was 'some black guy' that looked like me. As the state already had my DNA sample on file,⁶² the prosecution decided to introduce DNA evidence as to

in 2200 chance of a wrongful match among African-American males).

⁶⁰ See *id.* at 732.

⁶¹ See Sundquist, *Science Fictions and Racial Fables*, *supra* note 10, at 58; see also Sundquist, *Race in the DNA Era*, *supra* note 10, at 254.

⁶² See ANNA C. HENNING, CONG. RESEARCH SERV., NO. R40077, COMPULSORY DNA COLLECTION: A FOURTH AMENDMENT ANALYSIS 2 & n.11 (2010), available at <http://www.fas.org/sgp/crs/misc/R40077.pdf> (explaining that all states except Idaho, Kentucky, Nebraska, New Hampshire, and Pennsylvania authorize DNA collection from individuals convicted of any felony, and that several states require compulsive DNA collection from arrestees); see also NATHAN JAMES, CONG. RESEARCH SERV., NO. R41800, DNA TESTING IN CRIMINAL JUSTICE: BACKGROUND, CURRENT LAW, GRANTS, AND ISSUES 2 (2012), available at <http://www.fas.org/sgp/crs/misc/R41800.pdf>; Sonia M. Suter, *All in the Family: Privacy and DNA Familial Searching*, 23 HARV. J.L. & TECH. 309, 316–18 (2010); Julie Samuels et. al., *Collecting DNA from Arrestees: Implementation Lessons*, 270 NAT'L INST. OF JUST. J. 18, 21 (2012) (stating that Illinois has not yet expanded state law to include arrestees). *But see* Act of Mar. 19, 2012, ch. 19, §§ 5, 6(iii), 2012 N.Y. Sess. Laws 290, 295, 296 (McKinney); N.Y. EXEC. LAW §§ 995(7), 995-c(3) (McKinney 2013); (requiring any individual convicted of a felony or misdemeanor to submit a DNA sample to the New York State DNA databank).

identification. At trial, the prosecution put on DNA evidence stating that there was only a ‘1 in 500,000 chance that another African-American shared the same DNA profile as that found at the crime scene.’ I wanted my lawyer to object on the grounds that the prosecutor was unfairly and unnecessarily injecting race into the trial, but she told me the judge would overrule such an objection.⁶³ Was she right?”

“Unfortunately, yes,” I responded. “The presentation and admission of racial DNA evidence has become so routine in our state and federal courts that an objection on ‘unfair prejudice’ or ‘relevance’ grounds would almost certainly fail.⁶⁴ But that doesn’t mean such objections are meritless. Indeed, I have argued at length before that racial DNA evidence should be excluded as a statutory matter for being irrelevant and unfairly prejudicial. I have also argued that such evidence should be excluded as being scientifically unreliable.”⁶⁵

“I’m far from a scientist, but tell me a little more about the science argument, brother,” Farrow replied. “I mean, isn’t there some genetic basis to race? My skin is darker than some white dude; my hair is different. There must be some biological basis for that, right?”

“Not quite,” I explained. “There are certainly biological causes for how we look—how dark or light our skin is, the texture of our hair, our facial phenotype and so forth. Yet, we must distinguish biological differences in appearance from the social artifice of ‘race.’ Race, as we discussed earlier, is not a biologically-sound method of human classification, but rather represents a socio-political tool constructed to justify the unequal treatment of persons.⁶⁶ For example, the classification of race varies around the world. A person deemed ‘Black’ in the United States may be interpreted as ‘White’ in Brazil, Africa, or parts of Europe.⁶⁷ Race is an unstable, fluid and highly contested social category—not an innately biological phenomenon.”

“So then if race is socially constructed,” Farrow responded, “the ‘science’ that provides for a genetic basis to race must be flawed.”

“You are absolutely right,” I responded. “Briefly, there are a few reasons why such evidence is unreliable. First, the vast majority of

⁶³ Sundquist, *Science Fictions and Racial Fables*, *supra* note 10, at 79.

⁶⁴ *See id.*

⁶⁵ Sundquist, *Science Fictions and Racial Fables*, *supra* note 10, at 83.

⁶⁶ *Id.* at 65, 82.

⁶⁷ *Id.* at 82.

geneticists have concluded that race is not biologically meaningful, and that the greatest genetic variation occurs within racial groups as opposed to between racial groups.⁶⁸ Second, the facts overwhelmingly demonstrate that the concept of race itself is inherently unstable.⁶⁹ Third, the admission of racial DNA evidence violates basic assumptions of population genetics, including the Hardy-Weinberg and linkage-equilibrium principle.⁷⁰ The Hardy-Weinberg principle provides that the calculation of DNA probability estimates—using the product rule—is only possible if we assume the absence of population sub-structuring or inter-mixing.⁷¹ In other words, the calculation of racial DNA probability estimates assumes that racial groups are genetically homogenous and not subject to extensive inter-mixing with other racial groups!”

“Yet that doesn’t make any sense!” Farrow replied incredulously. “At best it ignores the historical reality of interracial relationships and children,⁷² and at worst it smacks of falling prey to the misinformed and racist assumptions of bright-line racial separation underlying anti-miscegenist attitudes of the past!⁷³ Not to get too personal, brother, but this assumption would regard your bi-racial existence as something as a statistical oddity!”

“Too true,” I added, “further, the assumption of an absence of inter-mixing between racial groups is belied by conclusive evidence that most genetic variation occurs within so-called racial groups.”⁷⁴

“Amazing,” Farrow replied in a somewhat disheartened fashion. “My lawyer made none of these arguments. Do you think I could have successfully appealed my conviction?”

“A successful appeal would have been doubtful, unless you were able to appeal to a court courageous enough to confront the failings of such raced ‘science’ and depart from precedent,” I replied. “That

⁶⁸ Kahn, *Race, Genes, and Justice*, *supra* note 21, at 351, 352; see David S. Caudill, *Race[,] Science, History, and Law*, 9 WASH. & LEE RACE & ETHNIC ANC. L.J. 1, 12 (2003); David Brion Davis, *Constructing Race: A Reflection*, 54 WM. & MARY Q. 7, 7 (1997); Sundquist, *Science Fictions and Racial Fables*, *supra* note 10, at 72.

⁶⁹ See generally Sundquist, *Science Fictions and Racial Fables*, *supra* note 10, at 60–66 (tracing the evolution of racial classification and categorization from the late sixteenth century through the twentieth century).

⁷⁰ *Id.* at 73.

⁷¹ NORAH RUDIN & KEITH INMAN, AN INTRODUCTION TO FORENSIC DNA ANALYSIS 143–44 (2d ed. 2002); see also Sundquist, *Science Fictions and Racial Fables*, *supra* note 10, at 89.

⁷² See, e.g., ANNETTE GORDON-REED, THE HEMINGSSES OF MONTICELLO: AN AMERICAN FAMILY 558 (2008). It is relatively well known that Thomas Jefferson had a sexual relationship with his slave Sally Hemings and fathered a number of children with her. *Id.*

⁷³ See WINTHROP D. JORDAN, WHITE OVER BLACK: AMERICAN ATTITUDES TOWARD THE NEGRO, 1550–1812, at 137 (2d ed. 2012).

⁷⁴ Obasogie, *supra* note 21, at 492.

being said, I remain (perhaps naively) hopeful that a future court will declare such evidence inadmissible both for violating our statutory rules of evidence and for running afoul of the Substantive Due Process Clause of the U.S. Constitution.⁷⁵ In regards to the former, the admission of racialized DNA evidence violates our Federal Rules of Evidence since such evidence is irrelevant, unreliable, and unfairly prejudicial to the defendant.”⁷⁶

Farrow interjected, “Couldn’t we just change our statutory laws to prevent such race evidence from coming in at trial?”

“That is an excellent idea, but there are some practical limitations to such an approach,” I responded. “For instance, we could champion an amendment to the Federal Rules of Evidence to create a new exclusionary rule that prohibits the admission of racialized DNA evidence at trial. However, given that federal courts apply *federal* procedural rules⁷⁷ and state courts apply their own *state* procedural rules,⁷⁸ a change to the Federal Rules of Evidence would only effect change at the federal level.⁷⁹ As such, we would also need to seek change to state evidentiary rules on a state-by-state basis.⁸⁰ This is a worthwhile strategy to employ to respond to this crisis, but I believe that there is a stronger and simpler constitutional strategy to pursue. I would argue that the substantive due process doctrine underlying the Fifth and Fourteenth Amendments, as informed by the Ninth Amendment, is violated whenever the State officially embraces genetic views on race.⁸¹ More specifically, I would argue that such a practice violates the fundamental constitutional right to a common humanity by placing State imprimatur on discredited notions of racial biological

⁷⁵ See U.S. CONST. amend. XIV, § 1.

⁷⁶ See Kahn, *Race, Genes, and Justice*, *supra* note 21, at 364–70 (arguing that the use of race for forensic DNA matches should be deemed inadmissible by courts as neither relevant nor reliable, thus admission of such evidence would violate Federal Rule of Evidence 401); see also *id.* at 370–74 (arguing that, even if using race for forensic DNA matches is relevant, it is unfairly prejudicial and its admission would violate Federal Rule of Evidence 403).

⁷⁷ *Erie R.R. Co. v. Tompkins*, 304 U.S. 64, 78 (1938) (“Except in matters governed by the Federal Constitution or by Acts of Congress, the law to be applied in any case is the law of the State.”).

⁷⁸ See *id.*

⁷⁹ See *id.*

⁸⁰ Such a change to federal and state evidentiary rules would also likely create tension with existing federal and state law on the collection and maintenance of DNA samples.

⁸¹ See Joseph F. Kadlec, *Employing the Ninth Amendment to Supplement Substantive Due Process: Recognizing the History of the Ninth Amendment and the Existence of Nonfundamental Unenumerated Rights*, 48 B.C. L. REV. 387, 387–89 (2007) (discussing the historical context of the Ninth Amendment’s support of the Fifth and Fourteenth Amendments’ Due Process Clauses).

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difference.”

“When I was locked up, I took it upon myself to read a number of legal materials in the prison library. My understanding is that the Substantive Due Process Clause is all but dead, with very few modern courts willing to employ the doctrine,”⁸² Farrow remarked.

I was initially shocked by the depth of Farrow’s knowledge, but recalled that he was one of the smartest individuals I had ever met. But for being born into poverty and being raised in the foster system in segregated Chicago, Farrow’s path may have been different. I always felt that if our opportunities and experiences were switched at birth, Farrow would have become the tenured law professor and that I likely would have been running the streets. I collected myself and continued. “Yes, the substantive due process doctrine is rarely invoked this day and age.⁸³ Yet, at its core, it protects certain undeniable and unalienable fundamental rights affecting human liberty.⁸⁴ Developed in the context of the Reconstruction Amendments following the end of chattel slavery,⁸⁵ I can think of no more of an essential right to citizenship than to be free of genetic ascriptions of race. I can think of no more explicit of an example of a fundamental right that lies in the ‘penumbra’ of the Fourteenth Amendment.⁸⁶ Such a right recognizes and reifies our common shared humanity.”

DIALOGUE FOUR: RACIAL IDENTIFICATION AND SCIENTIFIC METHODOLOGY

“Do tell, brother, do tell,” Farrow remarked. “But isn’t there one more problem you haven’t addressed? Given that race and racial identification is an unstable and amorphous phenomenon, isn’t there a critical problem in how DNA samples are racially classified in the first place? How do scientists and courts go about classifying DNA samples by race in a non-arbitrary and scientifically-sound manner?”

⁸² See Erwin Chemerinsky, *Substantive Due Process*, 15 *TUORO L. REV.* 1501, 1503, 1506 (1999) (“[S]ince 1937, not one federal, state, or local economic regulation has been invalidated on substantive due process grounds.”).

⁸³ *Id.* (“[T]he [Supreme] Court [has] backed away from substantive due process in all of its forms, economic and otherwise.”).

⁸⁴ *Id.* at 1501.

⁸⁵ U.S. CONST. amend. XIV, § 1; see Eric Foner, *The Reconstruction Amendments: Official Documents as Social History*, GILDER LEHRMAN INST. OF AM. HIST., <http://www.gilderlehrman.org/history-by-era/reconstruction/essays/reconstruction-amendments-official-documents-social-history> (last visited Feb. 18, 2013).

⁸⁶ See Chemerinsky, *supra* note 82, at 1508 n.24.

“The short answer,” I replied, “is that there exists no scientifically-rigorous or methodologically-sound method for classifying DNA samples by race. No such method exists due to the very nature of race as a socio-political construct! Racial categorization and identification is a socially-contested and informed practice, dependent on a range of cues and variables such as skin color, phenotype, dress, language, hair texture, religion, context and performance.⁸⁷ Perhaps due to the vagaries of racial categorization, the procedures used by DNA laboratories and experts to classify DNA samples lack uniformity and scientific validity.⁸⁸ While some labs rely on outsider-identifications of race, other labs rely on self-identification of race, and the methodology employed by still other labs remains clouded in mystery!”⁸⁹

DIALOGUE FIVE: RACE VS. ANCESTRY

“Fine,” Farrow replied. “You have convinced me that assigning biological attributes to race is unsound. But what about using ancestry as a proxy for race? I used to love watching those Skip Gates ancestry specials on PBS, where he would give celebrities DNA tests and tell them their racial breakdown.⁹⁰ As an African-American, the promise of discovering my African roots seems too

⁸⁷ See Trina Jones, *Intra-Group Preferencing: Proving Skin Color and Identity Performance Discrimination*, 34 N.Y.U. REV. L. & SOC. CHANGE 657, 658–60 (2010); Laura Quiros, *The Social Construction of Racial and Ethnic Identity Among Women of Color from Mixed Ancestry: Psychological Freedoms and Sociological Constraints 1* (2009) (unpublished Ph.D. dissertation, The City University of New York); Paul R. Spickard, *The Illogic of American Racial Categories*, FRONTLINE PBS, <http://www.pbs.org/wgbh/pages/frontline/shows/jefferson/mixed/spickard.html> (last visited Feb. 18, 2013).

⁸⁸ See Sundquist, *Science Fictions and Racial Fables*, *supra* note 10, at 58, 85, 90.

⁸⁹ *Id.* at 90; see DOROTHY ROBERTS, *FATAL INVENTION: HOW SCIENCE, POLITICS, AND BIG BUSINESS RE-CREATE RACE IN THE TWENTY-FIRST CENTURY* 249 (2011) (describing the uncertainty of ancestry established by DNA testing and the commercial, rather than scientific, basis of the industry); Obasogie, *supra* note 21, at 492 (questioning the ability of genetics to accurately differentiate individuals based on race); Sundquist, *Race in the DNA Era*, *supra* note 10, at 262 (highlighting the fact that genetics has not proven genetic similarity within racial groups); Roberts, *Genes, Drugs, and Health Disparities*, *supra* note 21, at 4–5 (calling into question the correlation between racial self-identification and genetics).

⁹⁰ *Finding Your Roots with Henry Louis Gates, Jr.* (PBS television broadcast Mar. 2012); see also *Finding Your Roots with Henry Louis Gates, Jr.*, PBS, www.pbs.org/wnet/finding-your-roots/about (last visited Mar. 16, 2013) (detailing PBS's ten-part series on DNA and ancestry); see Richard Willing, *DNA Rewrites History for African-Americans*, USATODAY (updated Feb. 1, 2006, 11:31 PM), http://usatoday30.usatoday.com/tech/science/genetics/2006-02-01-dna-african-americans_x.htm (listing Oprah Winfrey and Whoopi Goldberg as among the celebrities who appeared on Professor Gates's PBS television broadcast in order to determine their ancestral roots).

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compelling to pass up,” Farrow exclaimed.

“I can absolutely understand that, Farrow. In fact, years ago when private DNA ancestry testing first came out, I immediately signed up.⁹¹ I was blinded by the promise, made by DNA testing companies, to discover my African roots and provide a detailed percentage breakdown of race.⁹² I sent in my swabbed cheek DNA sample by mail, and a few weeks later, I received an official ‘Certificate of Ancestry’ proclaiming that I was ‘Native-American!’⁹³ I admitted.

“They said you were Native-American?” Farrow replied, apparently astounded. “No offense, but seeing how you are this light-skinned, racially-ambiguous type brother, I wouldn’t be shocked by DNA results that stated that you were European or African or maybe even Latino.”

“I was surprised as well! That said, you know as well as me that there often is a rich oral history of Native-American ancestry amongst African-Americans.⁹⁴ In my own family, my mother and grandparents would often recount our ancestral connections to the Potawatomi⁹⁵ and Black Foot tribes,⁹⁶ I shared.

“Well now, it can’t just be a coincidence that both the DNA testing and your family oral tradition concluded that you have Native-American ancestry. Doesn’t this revelation completely undermine your argument?” Farrow contended.

“Not at all,” I replied. “The principal shortcoming of private DNA testing lies in its conflation of ancestry with race. Most DNA testing companies expressly describe their testing as [t]racing

⁹¹ See Sundquist, *Race Theory*, *supra* note 10, at 957 (recounting the author’s actual experience with DNA ancestry testing).

⁹² See *id.* (discussing the claims that DNA could identify ancestry).

⁹³ *Id.* (describing the author’s ancestry report and reaction).

⁹⁴ See Carla D. Pratt, *Tribes and Tribulations: Beyond Sovereign Immunity and Toward Reparation and Reconciliation for the Estelusti*, 11 WASH. & LEE RACE & ETHNIC ANC. L.J. 61, 69–70 (2005) (noting that Native Americans kept black slaves during the period of American Slavery, which enabled Indian slave owners to engage in sexual relationships with African women leading to a shared Native American and African ancestry on many Native American plantations); David A. Love, *Native American Roots in Black America Run Deep*, THEGRIO (Nov. 22, 2012, 8:00 AM), <http://thegrio.com/2012/11/22/native-american-roots-in-black-america-run-deep> (indicating that claims of Native American heritage are common among African-Americans).

⁹⁵ Originally from Michigan, the Potawatomi Tribe is still in existence today. *Potawatomi Indians*, INDIANS.ORG, <http://www.indians.org/articles/potawatomi-indians.html> (last visited Feb. 19, 2013).

⁹⁶ The Blackfoot Indians were nomadic tribes living in Montana and parts of Canada. *Blackfoot Indian Tribe*, INDIANS.ORG, <http://www.indians.org/articles/blackfoot-indian-tribe.html> (last visited Feb. 13, 2013).

[r]acial [r]oots.⁹⁷

Professor Skip Gates, who co-owns one of the largest private DNA testing companies⁹⁸ (for African DNA), even equates biogeographical ancestry with race!⁹⁹ He even went on *Oprah* to share DNA results that the musician Yo-Yo Ma is ‘100 percent Asian’ and that the actress Meryl Streep is ‘100 percent European!’¹⁰⁰ Most DNA testing companies also provide percentage breakdowns of genetic ‘ancestry’ according to population groups that were selected as mirroring U.S. racial group categories: European, African, Native-American, and Asian.¹⁰¹ And yet, as we discussed earlier, race is inherently indeterminate.¹⁰² The false equivalence of ancestry with race—relying on contested American racial classifications—neglects that race is unstable and is socially-defined in many different and conflicting ways throughout the world!”

“But ancestry has a biological basis,¹⁰³ and at least in the United States, ancestry roughly approximates with social notions of race.¹⁰⁴ So what is so wrong with me trying to discover my ancestral roots?” Farrow demanded.

“There are a few additional ways in which conflating biogeographical ancestry with race should give us all pause for concern,” I responded. “The racial percentage breakdowns provided by private DNA testing companies rest on a flawed measure of what constitutes a one hundred percent pure race.¹⁰⁵ One, there is simply no such thing as a ‘pure’ African race or ‘pure’ white race.¹⁰⁶ The fact that such a baseline approximation is necessary to provide such percentages demonstrates the danger ancestral DNA testing creates in reinforcing myths about racial essentialism. Two, the genetic

⁹⁷ See ROBERTS, *supra* note 89, at 226–27 (discussing the new focus of DNA testing companies in racial lineage rather than familial lineage).

⁹⁸ Ron Nixon, *DNA Tests Find Branches but Few Roots*, N.Y. TIMES (Nov. 25, 2007), http://www.nytimes.com/2007/11/25/business/25dna.html?pagewanted=all&_r=0.

⁹⁹ See *Historical Overview*, AFRICANDNA.COM, <http://africandna.com/history.aspx> (last visited Feb. 19, 2013).

¹⁰⁰ Alondra Nelson, *Henry Louis Gates’s Extended Family*, CHRON. REV. (Feb. 12, 2010), <http://chronicle.com/article/Henry-Louis-Gatess-Extended/64192/>.

¹⁰¹ See, e.g., *About Ancestry by DNA*, ANCESTRYBYDNA, <https://www.ancestrybydna.com/abd-about.php> (last visited Feb. 19, 2013) (demonstrating that the AncestrybyDNA™ test is divided into the four population groups discussed).

¹⁰² See *supra* Dialogue One: The Construction of Race.

¹⁰³ See *Race in a Genetic World*, HARVARD MAG. (May–June 2008), <http://harvardmagazine.com/2008/05/race-in-a-genetic-world-html> (discussing the idea that race is either a social construct or is determined by genetics).

¹⁰⁴ *Id.*

¹⁰⁵ Nelson, *supra* note 100.

¹⁰⁶ *Id.*

determinations are based on inadequate and unreliable database sampling of present-day geographical populations.¹⁰⁷ Considering African-American customers as an example, it is impossible for DNA companies to identify or sample our ancestors living in Africa at the time of the slave trade. As such, genetic ancestral determinations are based on present-day African populations. The testing thus assumes, based on Hardy-Weinberg principles, that such African populations remained frozen in time—that there was no genetic drift, no intermixing with other African or non-African populations, and no migration to other locations.¹⁰⁸ The historical reality of African migration and intermixing simply belies these assumptions. Further, private DNA testing companies have never sampled the world's population in a systematic fashion.¹⁰⁹ As such, ancestral markers created by such companies arbitrarily differentiate among groups, while treating all people within a 'group' as the same.¹¹⁰ This failure has led to well-documented methodological errors in interpreting racial ancestry."¹¹¹

"Alright," Farrow replied. "Even if the science is flawed and rests on debatable assumptions, I know a lot of people would still want even a crude guess at knowing where they came from. I have to admit, I would still love to know if my people were Yoruba or Mende or came from some other African group.¹¹² I long for that lost feeling of connection and history that was stolen from me by the

¹⁰⁷ See Christopher L. Blakesley, *Scientific Testing and Proof of Paternity: Some Controversy and Key Issues for Family Law Counsel*, 57 LA. L. REV. 379, 412 (1997) ("Potential problems could result from 'genetic drift' resulting in small populations having distinct genetic differences, too small a database, lack of randomness of the samples, and most importantly, lack of a truly mixed population . . ." (quoting *State v. Copeland*, 922 P.2d 1304, 1317 (Wash. 1996))).

¹⁰⁸ See generally D. Vogt, *Five Assumptions of the Hardy-Weinberg Equilibrium*, HELIUM (Feb. 16, 2010), <http://www.helium.com/items/1744068-hardy-weinberg-equilibrium-assumptions> (discussing the Hardy-Weinberg equilibrium theory, where various factors are used to explain why some populations will acquire new traits while others will not).

¹⁰⁹ Paul C. Giannelli, *The DNA Story: An Alternative View*, 88 J. CRIM. L. & CRIMINOLOGY 380, 41920 (1997) (book review) (stating that while the Supreme Court has specified certain factors—peer review, empirical testing, and the publication process—as determinative of whether a theory or technique has been tested for flaws in methodology, there is a lack of "peer-reviewed articles and independent replication" with regard to DNA testing).

¹¹⁰ See Alan R. Davis, Comment, *Are You My Mother? The Scientific and Legal Validity of Conventional Blood Testing and DNA Fingerprinting to Establish Proof of Parentage in Immigration Cases*, 1994 B.Y.U. L. REV. 129, 143.

¹¹¹ C. Matthew Snipp, *Racial Measurement in the American Census: Past Practices and Implications for the Future*, 29 ANN. REV. SOC. 563, 582 (2003).

¹¹² See Janet L. Dolgin, *Biological Evaluations: Blood, Genes, and Family*, 41 AKRON L. REV. 347, 369 (2008) (suggesting that the importance in knowing one's genetic background is a way for people to "pursue their roots" or "define [their] identity").

African slave trade.”¹¹³

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“I understand, brother, I really do,” I exclaimed. “But the implications of genetic ancestry testing are broader than fraudulent and unreliable ‘scientific’ claims of racial authenticity. As Professor Dorothy Roberts has argued, ‘perpetuating a false understanding of individual and collective racial identities . . . can have widespread repercussions for our society’ in terms of how race is constructed and understood.”¹¹⁴

Farrow persisted. “It just doesn’t make sense to me that highly-educated scientists, judges and lawyers could believe that it was scientifically possible to make genetic racial distinctions, given that since World War II, the crushing weight of evidence has shown race to be socially constructed.”¹¹⁵

“I think a few things are going on,” I responded. “Even educated scientists and judges are highly susceptible to culture-based assumptions of race. Knowledge itself is socially created, and cultural norms of belonging and difference continue to consciously and unconsciously shape our ideas on race.¹¹⁶ Given our recent history of manipulating science to validate folk’s notions of race during the nineteenth and twentieth centuries, it is unsurprising that formerly discarded notions of biological racial difference have found a fresh expression in our modern laws and science.”¹¹⁷

“And so all of this is going on simply because judges and scientists cannot resist the folk appeal of understanding race as a natural and biological method of classifying humans? That seems to only partly address why we are witnessing a new ‘race science,’” Farrow remarked.

“To fully understand the revival of biological theories of race, we must first recognize that the artifice of ‘race’ was created to rationalize social and economic inequality on the purported grounds of biological difference,” I explained.¹¹⁸ “Our society believes in

¹¹³ See David Lowenthal, *On Arraigning Ancestors: A Critique of Historical Contrition*, 87 N.C. L. REV. 901, 945 (2009) (discussing how the history of slave trade has a continued detrimental effect on generations with ancestral history of the slave trade in their families).

¹¹⁴ ROBERTS, *supra* note 89, at 249.

¹¹⁵ See Kahn, *Race, Genes, and Justice*, *supra* note 21, at 349.

¹¹⁶ See *id.*

¹¹⁷ See ROBERTS, *supra* note 89, at 26–27 (describing why there has been a “speedy resuscitation of biological concepts of race”).

¹¹⁸ *Id.* at 27.

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democratic liberal equality for all persons.¹¹⁹ Our professed belief in equality, however, is shaken by the existence of race-based social and legal inequality in society.¹²⁰ The enslavement and unequal social and legal treatment of non-white persons was thus initially justified on the basis of biological difference.¹²¹ Non-white persons were deemed biologically inferior, and thus not sufficiently ‘human’ to be entitled to socio-legal equality.¹²² Once society rejected biological theories of difference following the horrifying aftermath of applied racial eugenics by Nazi Germany, we experienced a brief period where disparities based on race were acknowledged as stemming from past and present structural discrimination.¹²³ Race was finally recognized as having no biological meaning, and rather was a crude taxonomy created to impute socio-political meaning to perceived human differences.¹²⁴ During this time, constitutional rights were expanded for non-white citizens and race-conscious measures were adopted to address entrenched systemic racism.¹²⁵ And yet the achievements of the Civil Rights era were short-lived, as society again tried to distance itself from moral and legal responsibility for past and existing racial inequality.¹²⁶ The notion of ‘biological difference’ was no longer a valid tool for legitimizing the existence of racial disparities in an ‘equal’ democratic society, and so race-neutral explanations for disparities soon filled the void.¹²⁷ ‘Culture of poverty,’ equal opportunity, and classic market theories have all been relied on to rationalize the existence of racial disparities as the result of either cultural depravity, irresponsible behavior, or the natural outcomes of neutral market forces.”¹²⁸

“Then why are biological theories of difference again coming into vogue if these other race-neutral rationalizations have developed over time,” Farrow asked.

“That is a very good question. I believe there are at least two reasons why we are witnessing a resurgence of biological race

¹¹⁹ *Id.* at 24.

¹²⁰ *See, e.g.*, 1 GUNNAR MYRDAL, *AN AMERICAN DILEMMA: THE NEGRO PROBLEM AND MODERN DEMOCRACY* xliii (4th ed. 1944).

¹²¹ ROBERTS, *supra* note 89, at 24.

¹²² *Id.*

¹²³ *See id.* at 43–44.

¹²⁴ *Id.*

¹²⁵ *See* ALEXANDER, *supra* note 55, at 35–40 (discussing the major milestones and effects of the Reconstruction and the civil rights movement).

¹²⁶ *See id.* at 40.

¹²⁷ *Id.*

¹²⁸ Charles R. Lawrence III, *The Id, the Ego, and Equal Protection: Reckoning with Unconscious Racism*, 39 *STAN. L. REV.* 317, 374–75 (1987).

theories. First, it may well be that the dated colorblind distancing strategies are no longer sufficient to manage the cognitive dissonance and moral shame created by making privilege visible.¹²⁹ These distancing tools have been used for decades, during which time disparities based on race have increased!¹³⁰ Second, the decreased utility of colorblind artifices has occurred at the same time that society has begun to adopt an assumption of post-racial transcendence.¹³¹ And yet, racial disparities and discrimination persist! The persistence of racial disparities creates a moral dilemma for those who mistakenly believe that we live in a colorblind and post-race society,” I explained. “To acknowledge the modern persistence of racism and racial inequality is to acknowledge the continued role that white racial privilege plays in shaping life outcomes. Rather than acknowledge the reality of racial privilege, discrimination, and structural inequality, the post-race adherent seeks out ways to legitimize continuing racial inequalities as normal and natural in a ‘post-race’ era. Similar to the race science of the nineteenth century, one way to legitimize racial disparities in a liberal democratic society is to encode racial difference with genetic meaning.”¹³²

Farrow stood up from the stoop and stretched. “Not much surprises me anymore. Racism continues to fester, and as you’ve seen just coming back home, racial disparities have only exacerbated in the last few decades. That said, it is sobering to consider that mainstream scientists and judges have re-embraced biological conceptions of race without much question.”

Farrow shook my hand and started walking down the sidewalk. “It was nice seeing you again, brother.”

“And you too, Farrow. I’m happy we were able to catch up like this,” I replied. But Farrow could see the dark clouds our discussion had brought to my face.

“Now, I don’t want you to forget where you came from,” Farrow

¹²⁹ See *id.* at 323 (articulating Professor Lawrence’s cognitive dissonance theory, through which he critically analyzes the psychological conflict created by the contradiction between the transmission of racial preferences and stereotypes via social mores and norms, and society’s ubiquitous desire to cast off these very preferences and stereotypes).

¹³⁰ See ALEXANDER, *supra* note 55, at 227–29.

¹³¹ See Sumi Cho, *Post-Racialism*, 94 IOWA L. REV. 1589, 1589, 1644–46 (2009) (chronicling what Professor Cho believes to be a widespread, national “retreat from race” (internal quotation marks omitted)).

¹³² See Roberts, *Genes, Drugs, and Health Disparities*, *supra* note 21, at 14–15 (“Adding a genetic explanation for [racial] difference attributes health disparities to flaws inside black people’s bodies rather than to flaws in the society they live in.”).

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said as he walked away. “Remember what you are fighting for, brother.” As Farrow turned down the street, I could hear him reciting a favorite childhood poem into the crisp winter air:

Well, son, I'll tell you:
Life for me ain't been no crystal stair.
It's had tacks in it,
And splinters,
And boards torn up,
And places with no carpet on the floor—
Bare.
But all the time
I've been a-climbin' on,
And reachin' landin's,
And turnin' corners,
And sometimes goin' in the dark
Where there ain't been no light.
So boy, don't you turn back.
Don't you set down on the steps
'Cause you finds it's kinder hard.
Don't you fall now—
For I've still goin', honey,
I've still climbin',
And life for me ain't been no crystal stair.¹³³

¹³³ LANGSTON HUGHES, *Mother to Son*, in *THE COLLECTED POEMS OF LANGSTON HUGHES* 30, 30 (Arnold Rampersad & David Roessel eds., 1994).