## "Leon J. Kamin (1927-2017): A Nemesis of Genetic Determinism and Scientific Racism"

## **NOTES:**

<sup>&</sup>lt;sup>1</sup> I thank William H. Tucker and Ken Richardson for providing very helpful feedback on earlier versions of this article. At the same time, all opinions expressed and conclusions reached in this article are my own, and do not necessarily reflect the views of the people who assisted me. Any errors are of course my responsibility.

<sup>&</sup>lt;sup>2</sup> For an example of a harsh and personal published attack on Kamin by a leading behavioral geneticist, see Scarr, S., (1998), On Arthur Jensen's Integrity, *Intelligence*, 26, 227-232, p. 231. For a description of several other attacks on Kamin by IQ hereditarians, see Tucker, W. H., (1994), <u>Fact and Fiction in the Discovery of Sir Cyril Burt's Flaws</u>, *Journal of the History of the Behavioral Sciences*, 30, 335-347.

<sup>&</sup>lt;sup>3</sup> Many previously accepted biological and genetic assumptions underlying twin research may not be true, including the assumption that MZ pairs are 100% genetically identical throughout their lives. See Charney, E., (2012), Behavior Genetics and Postgenomics, *Behavioral and Brain Sciences*, *35*, 331-358.

<sup>&</sup>lt;sup>4</sup>Although "IQ" and "intelligence" are different concepts, for the most part I will use these terms interchangeably.

<sup>&</sup>lt;sup>5</sup> Jackson, D. D., (1960), "A Critique of the Literature on the Genetics of Schizophrenia," in D. Jackson (Ed.), *The Etiology of Schizophrenia* (pp. 37-87), New York: Basic Books.

<sup>&</sup>lt;sup>6</sup> Kamin, L. J., (1974), *The Science and Politics of I.O.*, Potomac, MD: Erlbaum, p. 177.

<sup>&</sup>lt;sup>7</sup> Kamin, 1974, p. 2.

<sup>&</sup>lt;sup>8</sup> Tucker, W. H., (1997), <u>Re-Reconsidering Burt: Beyond a Reasonable Doubt</u>, *Journal of the History of the Behavioral Sciences*, *33*, 145-162, p. 156. In their 1984 book, *Not in Our Genes*, Kamin and his co-authors wrote of their involvement in the "radical science movement" of that time, and of their shared "commitment to the prospect and creation of a more socially just—a socialist—society." See Lewontin, R. C., Rose, S., & Kamin, L. J., (1984), *Not in Our Genes: Biology, Ideology, and Human Nature*, New York: Pantheon, p. ix.

<sup>&</sup>lt;sup>9</sup> Jensen, A. R., (1969), <u>How Much Can We Boost IQ and Scholastic Achievement?</u>, *Harvard Educational Review*, 39, 1-123, p. 82.

<sup>&</sup>lt;sup>10</sup> Herrnstein, R. J., (1971), I.O., Atlantic Monthly, 228, 43-64.

<sup>&</sup>lt;sup>11</sup> Herrnstein, R. J., (1973), *I.Q. in the Meritocracy*, Boston: Little, Brown and Company.

<sup>&</sup>lt;sup>12</sup> Tucker, 1994, p. 343.

<sup>&</sup>lt;sup>13</sup> Jensen, A. R., (1970), IQ's of Identical Twins Reared Apart, Behavior Genetics, 1, 133-148, p. 133.

<sup>&</sup>lt;sup>14</sup> Egerton, J., (1973), The Misuse of IQ Testing: Interview with Leon Kamin, *Change: The Magazine of Higher Learning*, 5 (8), 40-43.

<sup>&</sup>lt;sup>15</sup> Plomin, R., & von Stumm, S., (2018), <u>The New Genetics of Intelligence</u>, *Nature Reviews Genetics*, 19, 148-159, p. 148.

<sup>&</sup>lt;sup>16</sup> Kamin, 1974, p. 1.

<sup>&</sup>lt;sup>17</sup> Kamin, 1974, p. 29.

<sup>&</sup>lt;sup>18</sup> Jensen and Herrnstein believed that IQ was determined mostly by genetics, plus minor environmental factors related mainly to the prenatal environment. See Jensen, 1970, p. 146; Herrnstein, 1971, p. 58.

<sup>&</sup>lt;sup>19</sup> In his 1969 *Harvard Educational Review* article (p. 95), Jensen wrote, "Much more thought and research should be given to the educational and social implications of these trends for the future. Is there a danger that current welfare policies, unaided by eugenic foresight, could lead to the genetic enslavement of a substantial segment of our population? The possible consequences of our failure seriously to study these questions may well be viewed by future generations as our society's greatest injustice to Negro Americans." Herrnstein was a bit more subtle in his 1971 *Atlantic Monthly* article (pp. 57-58), yet he suggested the desirability of controlling the reproduction of people with low IQ scores, and promoting the reproduction of people with high IQ scores: "We are not, for example, on the verge of Galton's vision of eugenics, even though we now have the mental test that he thought was the crucial prerequisite. For good or ill, and for some time to come, we are stuck with mating patterns as people determine them for themselves. No sensible person would want to entrust state-run human breeding to those who control today's states. There are, however, practical corollaries of this knowledge, more humble than eugenics, but ever more salient as the growing complexity of human society makes acute the shortage of high-grade intellect." Herrnstein seemed to support some types of eugenic interventions on human reproduction, even if they were not based on *Galton's* vision of eugenics, or administered by those who control *today's* states.

<sup>&</sup>lt;sup>20</sup> Burt, C., (1966), <u>The Genetic Determination of Differences in Intelligence: A Study of Monozygotic Twins Reared Together and Apart, British Journal of Psychology</u>, 57, 137-153, p. 143.

<sup>&</sup>lt;sup>21</sup> The text of Kamin's 1972-1973 public addresses on IQ twin and adoption research, and on eugenic immigration policies (both subsequently incorporated into *The Science and Politics of I.Q.*), appeared in two chapters in Block, N. J., & Dworkin, G., (Eds.), (1976), *The IQ Controversy*, New York: Pantheon.

<sup>&</sup>lt;sup>22</sup> Hirsch, J., (1981), To "Unfrock the Charlatans," *SAGE Race Relations Abstracts*, 6 (2), 1-65. London: Sage Publications, Ltd.

<sup>&</sup>lt;sup>23</sup> Burt, 1966.

<sup>&</sup>lt;sup>24</sup> Kamin, 1974, p. 47.

<sup>&</sup>lt;sup>25</sup> Tucker, 1997, pp. 152-156.

<sup>&</sup>lt;sup>26</sup> Hirsch, 1981.

<sup>&</sup>lt;sup>27</sup> Jensen, A. R., (1974), <u>Kinship Correlations Reported by Sir Cyril Burt</u>, *Behavior Genetics*, 4, 1-28, p. 24.

<sup>&</sup>lt;sup>28</sup> Gillie, O., (1976, October 24th), Crucial Data Was Faked by Eminent Psychologist, *The Sunday Times*, London,

<sup>&</sup>lt;sup>29</sup> Hearnshaw, L. S., (1979), *Cyril Burt: Psychologist*, Ithaca, NY: Cornell University Press.

<sup>&</sup>lt;sup>30</sup> For a defense of Burt, see Joynson, R. B., (1989), *The Burt Affair*, London: RKP.

<sup>&</sup>lt;sup>31</sup> Chambers, C., (2017), *The Seven Deadly Sins of Psychology: A Manifesto for Reforming the Culture of Scientific Practice*, Princeton, NJ: Princeton University Press.

<sup>&</sup>lt;sup>32</sup> Newman et al., (1937), Twins: A Study of Heredity and Environment, Chicago, University of Chicago Press.

<sup>&</sup>lt;sup>33</sup> Shields, J., (1962), *Monozygotic Twins Brought Up Apart and Brought Up Together*, London: Oxford University Press.

<sup>&</sup>lt;sup>34</sup> Juel-Nielsen, N., (1980), *Individual and Environment: Monozygotic Twins Reared Apart* (revised ed.), New York: International Universities Press (originally published in 1965).

<sup>&</sup>lt;sup>35</sup> Gottesman, I. I., (1980), "Introduction," in Juel-Nielsen, N., (1965/1980), *Individual and Environment: Monozygotic Twins Reared Apart* (revised ed., pp. 7-10), New York: International Universities Press, p. 7.

<sup>&</sup>lt;sup>36</sup> Farber, S. L., (1981), *Identical Twins Reared Apart: A Reanalysis*, New York: Basic Books, p. 60.

<sup>&</sup>lt;sup>37</sup> Newman et al., 1937, p. 31.

<sup>&</sup>lt;sup>38</sup> Shields, 1962, p. 27.

<sup>&</sup>lt;sup>39</sup> Shields, 1962, p. 48.

<sup>&</sup>lt;sup>40</sup> Joseph, J., (2015), *The Trouble with Twin Studies: A Reassessment of Twin Research in the Social and Behavioral Sciences*, New York: Routledge, Table 2.2, pp. 31-38.

<sup>&</sup>lt;sup>41</sup> Juel-Nielsen, 1980, Part II, p. 87.

<sup>&</sup>lt;sup>42</sup> Kamin, 1974, p. 56. This quotation was part of an italicized sentence.

<sup>&</sup>lt;sup>43</sup> Behavioral geneticist Richard J. Rose, quoted in Horgan, J., (1993), <u>Eugenics Revisited</u>, *Scientific American*, 268 (6), 122-131, p. 125.

<sup>&</sup>lt;sup>44</sup> Farber, 1981, p. 77. Although Farber was referring to twins' dental issues in this passage, her conclusion applies to IQ and behavioral resemblance as well.

<sup>&</sup>lt;sup>45</sup> Kamin, 1974, p. 67.

<sup>&</sup>lt;sup>46</sup> Kamin, 1974, pp. 175-176.

<sup>&</sup>lt;sup>47</sup> Lewontin, R. C., (1976), Science and Politics: An Explosive Mix [Review of the Book *The Science and Politics of I.Q.*, by L. Kamin], *Contemporary Psychology, 21, (2)* 97-98, p. 97.

<sup>&</sup>lt;sup>48</sup> For a description of the environmental similarities, levels of contact, and mutual relationship of all 75 MZA pairs reported in the Newman, Shields, and Juel-Nielsen studies, see Joseph, 2015, Chapter 2, Tables 2.1, 2.2, & 2.3.

<sup>&</sup>lt;sup>49</sup> Taylor, H. F., (1980), *The IQ Game: A Methodological Inquiry into the Heredity-Environment Controversy*, New Brunswick, NJ: Rutgers University Press, Chapter 3.

<sup>&</sup>lt;sup>50</sup> Bouchard et al., (1990), <u>Sources of Human Psychological Differences: The Minnesota Study of Twins Reared</u> Apart, *Science*, *250*, 223-228.

<sup>&</sup>lt;sup>51</sup> Bouchard et al., 1990, p. 227.

<sup>&</sup>lt;sup>52</sup> Segal, N. L., (2012), <u>Born Together—Reared Apart: The Landmark Minnesota Twin Study</u>, Cambridge, MA: Harvard University Press, pp. 12-13.

<sup>&</sup>lt;sup>53</sup> Tucker, W. H., (2002), *The Funding of Scientific Racism: Wickliffe Draper and the Pioneer Fund*, Urbana: University of Illinois Press. See also Joseph, 2015, Appendix A.

<sup>&</sup>lt;sup>54</sup> Leon J. Kamin, personal communication of 4/8/2001. For more on the importance of sharing data, and on the MISTRA researchers' practice of denying access to their raw data to Kamin and other critics, see Joseph, 2015, pp. 122-126.

<sup>&</sup>lt;sup>55</sup> Wright, L., (1997), *Twins: And What They Tell Us about Who We Are*, New York: John Wiley & Sons, p. 69.

<sup>&</sup>lt;sup>56</sup> A description of "data hoarding" practices in psychology and other fields can be found in Chambers, 2017.

<sup>&</sup>lt;sup>57</sup> Kamin, L. J., & Goldberger, A. S., (2002), <u>Twin Studies in Behavioral Research: A Skeptical View</u>, *Theoretical Population Biology*, *61*, 83-95, p. 93.

<sup>&</sup>lt;sup>58</sup> Examples of MISTRA MZA pairs who had substantial pre-study contact, and who shared a strong relationship with each other, can be found in Watson, P., (1981), *Twins: An Investigation into the Strange Coincidences in the Lives of Separated Twins*, London: Hutchinson, Chapter 2.

<sup>&</sup>lt;sup>59</sup> McGue, M., & Bouchard, T. J., Jr., (1989), "Genetic and Environmental Determinants of Information Processing and Special Mental Abilities: A Twin Analysis," in R. Sternberg (Ed.), <u>Advances in the Psychology of Human Intelligence</u> (Vol. 5, pp. 7-45), Hillsdale, NJ: Erlbaum, p. 23.

<sup>&</sup>lt;sup>60</sup> The genetically oriented MISTRA researchers were the first TRA investigators to recognize, as Kamin compelled them to recognize, that "for most psychological, physiological, and medical variables there are substantial age and sex effects." See McGue, M., & Bouchard, T. J., Jr., (1984), <u>Adjustment of Twin Data for the Effects of Age and Sex</u>, *Behavior Genetics*, 14, 325-343, p. 325. They devised a questionable and complicated statistical procedure, which they claimed corrected their correlations for these effects. In any case, age- and sex-effects are only 2 of at least 15 potential environmental confounds at play in TRA studies.

<sup>&</sup>lt;sup>61</sup> Segal, 2012, p. 62.

The MISTRA Wechsler (WAIS) full-scale IQ test score correlations were MZA = .62, versus DZA = .50. The Raven's Progressive Matrices IQ test score correlations were MZA = .55, versus DZA = .42. The information is incomplete because the MISTRA researchers did not publish or analyze their full-sample DZA IQ correlations. The Wechsler IQ correlations are taken from Segal, 2012, p. 286, based on unpublished figures given to her by Bouchard. Segal did not state the number of MZA and DZA twin pairs, but the final MISTRA sample consisted of 81 MZA and 56 DZA pairs. The Raven IQ correlations are found in Johnson et al., (2007), Genetic and Environmental Influences on the Verbal-Perceptual-Image Rotation (VPR) Model of the Structure of Mental Abilities in the Minnesota Study of Twins Reared Apart, Intelligence, 35, 542-562, p. 552, Table 3, Test #21, and were based on 74 MZA and 52 DZA pairs. The VassarStats website provides a test of statistical significance between two independent sample correlation coefficients. This test shows that both the MISTRA Wechsler (based on the full sample of 81 MZA and 56 DZA pairs) and the Raven MZA versus DZA correlations fail to differ below the conventional .05 level of statistical significance, meaning that the difference between these correlations is assumed to have occurred by chance (the null hypothesis stating that the correlations do not differ is not rejected). For more details, see Joseph, 2015, Chapters 5 and 6, including Chapter 6 endnotes #4 and #6 (p. 148) for the statistical calculations.

<sup>&</sup>lt;sup>63</sup> Bouchard et al., 1990, p. 227.

<sup>&</sup>lt;sup>64</sup> Joseph, J., (2016, March 6), <u>"Bewitching Science" Revisited: Tales of Reunited Twins and the Genetics of Behavior</u>, [Web log post, *Mad in America* "The Gene Illusion"].

<sup>&</sup>lt;sup>65</sup> For an example of Bouchard's strong pre-MISTRA IQ hereditarian beliefs, including his claim that "class differences in intelligence have an appreciable genetic component," see Bouchard, T. J., Jr., (1976), "Genetic Factors in Intelligence," in A. Kaplan (Ed.), <u>Human Behavior Genetics</u> (pp. 164-197), Springfield, IL: Charles C. Thomas, p. 193.

<sup>&</sup>lt;sup>66</sup> Joseph, J., (2016, June 2), <u>Reared-Apart Twin Study Mythology: The Latest Contribution (Part One)</u>, [Web log post, *Mad in America* "The Gene Illusion"].

<sup>&</sup>lt;sup>67</sup> Bouchard, T. J., Jr., (2014), Genes, Evolution and Intelligence, Behavior Genetics, 44, 549-577, p. 568.

<sup>&</sup>lt;sup>68</sup> Plomin & von Stumm, 2018, p. 148.

<sup>&</sup>lt;sup>69</sup> For more on Robert Plomin's long history of making behavioral gene discovery claims that were not replicated, see Joseph, 2015, Chapter 10.

<sup>&</sup>lt;sup>70</sup> Kamin, 1974, p. 97.

<sup>&</sup>lt;sup>71</sup> Kamin, in Eysenck, H. J., vs. Kamin, L. J., (1981), *The Intelligence Controversy*, New York: John Wiley & Sons, p. 133.

<sup>&</sup>lt;sup>72</sup> Kamin, L. J., (1977), <u>Comment on Munsinger's Adoption Study</u>, *Behavior Genetics*, 7, 403-406, p. 403. See also Kamin, in Eysenck, H. J., vs. Kamin, L. J., (1981), *The Intelligence Controversy*, New York: John Wiley & Sons, pp. 114-115; Kamin, L. J., (1977), A Reply to Munsinger [Letter to the Editor], *Behavior Genetics*, 7, 411-412.

<sup>&</sup>lt;sup>73</sup> Munsinger, H., (1977), <u>The Identical-Twin Transfusion Syndrome: A Source of Error in Estimating IQ</u> <u>Resemblance and Heritability</u>, *Annals of Human Genetics*, *40*, *307-321*, p. 319.

<sup>&</sup>lt;sup>74</sup> Kamin, L. J., (1978), <u>Transfusion Syndrome and the Heritability of IQ</u>, *Annals of Human Genetics*, 42, 161-171.

<sup>&</sup>lt;sup>75</sup> Kamin, in Eysenck, H. J., vs. Kamin, L. J., (1981), *The Intelligence Controversy*, New York: John Wiley & Sons.

<sup>&</sup>lt;sup>76</sup> Eysenck, in Eysenck, H. J., vs. Kamin, L. J., (1981), *The Intelligence Controversy*, New York: John Wiley & Sons, p. 83.

<sup>&</sup>lt;sup>77</sup> Lewontin, Rose, & Kamin, 1984.

<sup>&</sup>lt;sup>78</sup> Joseph, J., (2017), *Schizophrenia and Genetics: The End of an Illusion*, e-book, URL: https://store.bookbaby.com/book/Schizophrenia-and-Genetics

<sup>&</sup>lt;sup>79</sup> Lewontin et al., 1984, p. 102.

<sup>&</sup>lt;sup>80</sup> Lewontin et al., 1984, p. 108.

<sup>&</sup>lt;sup>81</sup> Lewontin et al., 1984, p. 92.

<sup>&</sup>lt;sup>82</sup> For a critical analysis of family, twin, and adoption studies of criminal and antisocial behavior, see Joseph, 2004, Chapter 8.

<sup>&</sup>lt;sup>83</sup> Wilson, J. Q., & Herrnstein, R. J., (1985), *Crime and Human Nature: The Definitive Study of the Causes of Crime*, New York: Simon and Schuster.

<sup>&</sup>lt;sup>84</sup> Kamin, L. J., (1986), Is Crime in the Genes? The Answer May Depend on Who Chooses the Evidence, *Scientific American*, 254 (2), 22-27.

<sup>85</sup> Kamin, L. J., & Grant-Henry, S., (1987), Reaction Time, Race, and Racism, Intelligence, 11, 299-304, p. 299.

<sup>&</sup>lt;sup>86</sup> Herrnstein, R. J., & Murray, C., (1994), *The Bell Curve: Intelligence and Class Structure in American Life*, New York: The Free Press.

<sup>&</sup>lt;sup>87</sup> Kamin, L. J., (1995), "Lies, Damn Lies, and Statistics," in R. Jacoby & N. Glauberman (Eds.), *The Bell Curve Debate: History, Documents, Opinions* (p. 81-105), New York: Times Books, p. 82.

<sup>&</sup>lt;sup>88</sup> Kamin, 1995, p. 105.

<sup>&</sup>lt;sup>89</sup> Kamin, L. J., (2006), <u>African IQ and Mental Retardation</u>, *South African Journal of Psychology, 36, (1),* 1-9, pp. 1-2.

<sup>&</sup>lt;sup>90</sup> Flynn, J. R., (1999), <u>Searching for Justice: The Discovery of IQ Gains over Time</u>, *American Psychologist*, 54, 5-20.

<sup>&</sup>lt;sup>91</sup> One of the best refutations of *The Bell Curve* and IQ hereditarian theory is found in Fischer et al., (1996), *Inequality by Design: Cracking the Bell Curve Myth*, Princeton, NJ: Princeton University Press.

Press; Anonymous, (2014), Gold Medal Award for Life Achievement in the Science of Psychology: Thomas J. Bouchard, Jr. Award for Distinguished Scientific Contributions, *American Psychologist*, 69, 477-479. As a longtime supporter of Arthur Jensen and his views, Bouchard wrote a positive 1995 review of *The Bell Curve*, and endorsed its authors' conclusion that genetic factors play a role in causing racial differences in IQ scores. See Bouchard, T. J., Jr., (1995), Breaking the Last Taboo [Review of the Book *The Bell Curve: Intelligence and Class Structure in American Life*, by R. J. Herrnstein & C. Murray], *Contemporary Psychology*, 40, (5), 415-421. Bouchard also wrote an endorsement for the 2000 abridged edition of former Pioneer Fund Director J. Philippe Rushton's Race, Evolution, and Behavior: A Life History Perspective, where Rushton argued that racial groups differ in inherited levels of intelligence. Bouchard's endorsement reads as follows: "The only acceptable explanation of race differences in behavior allowed in public discourse is an entirely environmental one...Professor Rushton deserves our gratitude for having the courage to declare that 'this emperor has no clothes,' and that a more satisfactory explanation must be sought." See Rushton, J. P., (2000), Race, Evolution, and Behavior: A Life History Perspective (2<sup>nd</sup> special abridged ed.), Port Huron, MI: Charles Darwin Research Institute, p. 2.