## Race, Evolution, and Behavior: A Life History Perspective

## J. Philippe Rushton

New Brunswick, NJ: Transaction, 1994, 398 pp. US\$34.95 cloth. ISBN 1-56000-146-1. Transaction Publishers, Rutgers University, New Brunswick, NJ 08903, USA.

## Linda S. Gottfredson University of Delaware, USA

Race, Evolution, and Behavior merits study, both for its contents and for its hostile public reception. The book collates J. Philippe Rushton's decade of research on the pattern and evolutionary origins of race differences in behavior. His constituent studies have appeared in many journals, including Behavior Genetics, Behavioral and Brain Sciences, Ethology and Sociobiology, and Psychological Bulletin. The book dispassionately catalogs a vast array of data (intellectual, personality, reproductive, and physiological) on the three major races (Mongoloid, Caucasoid, and Negroid), much of it secondary data from wide-ranging sources. Rushton then straightforwardly applies reigning theories in evolutionary biology, namely, r-K selection and life-history theory, to explain how the three races evolved somewhat different reproductive strategies and social organization.

Rushton's thesis is that when fully modern humans migrated out of Africa, perhaps only 100,000 years ago, the colder Eurasian climate selected for larger brains, more forward planning, greater family stability, and increased

Linda S. Gottfredson is Professor of Educational Studies at the University of Delaware and Co-director of the Delaware-Johns Hopkins Project for the Study of Intelligence and Society. She conducts research on job aptitude demands, test fairness, and the role of intelligence in social and political life. She also writes on related public policy issues, including employment-related legislation and policies to promote racial and cultural diversity in the workplace. Correspondence should be addressed to Department of Educational Studies, Willard Hall Education Bldg., Room 219, University of Delaware, Newark, DE 19716-2901, USA.

longevity, with concomitant reductions in sex hormones, speed of maturation, reproductive potency, and aggressiveness. This thesis emphasizes a trade-off between parenting and mating and the concept of coordinated life histories of characteristics, evolving together. The selection for large brains and parenting skills, according to Rushton, was taken furthest in northeast Asia.

Although Rushton's theory of the evolutionary divergence of the races has been hotly debated for some years now, no one has succeeded in demolishing it. Nor has anyone offered any alternative theory to explain the consistent pattern of differences among the three races. A new cadre of commentators has been quick to denounce Rushton's book as "inflammatory," "indecent," "pseudoscientific," "racist trash." However, these critiques have usually been highly misleading, often grossly mistaken and ad hominem, and sometimes crudely scatological as well as vicious (for example, Barash, 1995). The book deserves more thoughtful assessments (see, for example, Brand, 1995; Francis, 1995; Horowitz, 1995), because Rushton has built too strong a case to be toppled by flurries of anger or jabs at its periphery.

His strongest claims are that (1) there is a highly consistent pattern of average differences among the three major races on a wide range of attributes (aggregated averages for Caucasoid populations are always intermediate to those for Mongoloids and Negroids), and (2) this pattern cannot be explained in strictly environmental terms. Some of the averages disfavor Negroids (smaller head size, lower intelli-

gence, higher rates of crime, promiscuity, and social disorganization), others favor them (earlier physical maturation, larger body size), and some seem neutral (higher rates of ovulation and multiple births, higher extraversion than introversion).

Critics have disputed the accuracy of some of the averages that disfavor Negroid populations (head size) and attributed others (lower intelligence and higher crime rates) to strictly environmental origins; they have attributed to mere prurient interest Rushton's mention of other differences whose truth they do not dispute (genital size), and they have ignored socially neutral differences (personality, rate of gamete production) as well as ones that favor Negroids (earlier head-lifting, teething, walking), all of which contradict the environmental deprivation theories critics use to explain the unfavorable averages. Although differences within each race are far larger than the average differences between them, as Rushton notes, the latter can nonetheless be quite substantial. To cite just one interesting example, the frequency of dizy gotic twins is 4, 8, and 16 per 1,000 births, respectively, for Mongoloids, Caucasoids, and Negroids (and three-egg triplets constitute, respectively, 10, 100, and 1,700 per million births).

Rushton and others (such as Herrnstein and Murray, 1994) have shown that considerable racial disparities (for example, in low birth weight babies, sexual behavior) often remain after controlling for differences in social class. If social and cultural factors account for the pattern Rushton has documented, then they must operate in far different ways than we have long assumed—indeed, in ways that often mimic genetic mechanisms.

Research in behavior genetics during the last decade (Plomin and McClearn, 1993; Rowe, 1994) has provided Rushton firm ground for arguing that the traits and behaviors he catalogs tend to be moderately to highly heritable (within race). Rushton even understates his case by failing to highlight that heritabilities tend to *rise* substantially with age and that the effects of *shared* environments (such as parents' child-rearing style and social class) tend to dissipate by adulthood, which clearly undercuts currently popular theories of cumulative environmental effects.

Although there is no similarly definitive evidence that average differences between the races are also partly genetic, Rushton marshals indirect and sometimes compelling evidence that they are. For example, he reviews evidence that average black-white differences on diverse mental tests are strongly correlated with the tests' heritabilities as determined in other samples. Those average black-white score differences are also highly correlated with the degree of inbreeding depression (a genetic phenomenon) among Japanese children on those same tests. These well-established correlations are consistent with genetic, but not with strictly environmental explanations of racial differences in intelligence.

The most interesting of Rushton's speculations (although not original with him) is that ethnocentrism has an evolu-

tionary basis. He describes how race consciousness—and its frequent concomitant, racism—occur in cultures throughout history and the world over. Buttressing his historical accounts with recent empirical evidence, he also reviews evidence that humans and other species recognize, prefer, invest in, and grieve most for the members of their species with whom they share the most genes. The data are startling for the uninitiated. For example, spouses and close friends tend to be most alike on the most heritable traits. This recognition of genetic similarity and self-segregation of breeding populations, in turn, forms a pillar of the most speculative of Rushton's claims, namely, that r-K selection accounts for the differences among the life histories of different races.

This theory has drawn fire not because it is racist or bogus science, for it is neither. Rather, it has drawn fire largely because it violates egalitarian sensibilities, undermines ideologies of cultural determinism, and ignites smoldering racial fears that are, in fact, exacerbated by racial differences, whatever their basis in nature or nurture. Race, Evolution, and Behavior confronts us as few books have with the dilemmas wrought in a democratic society by individual and group differences in key human traits (Gottfredson, 1996).

Indeed, Rushton's obdurate dispassion and refusal to genuflect to social sensitivities on these issues only fuel the firestorm of anger. To remain detached and objective in the midst of turbulent emotions is to risk being branded "uncaring" or "mean-spirited." To trigger fear and fury on matters the public badly misunderstands, but about which it desperately seeks relief, is to court demagogic retaliation. The monstrous ideology that critics attribute to this admirably non-ideological book reflects primarily the extreme, unexamined fears that it unleashes and that opportunists use to advantage.

The book's weakness is that it is not particularly pedagogical. It objectively delivers what seems to be bad news, but does not help readers make sense of it in the context of widespread hopes, fears, and miseducation. However, nowhere is the need for thoughtful pedagogy greater and the challenge more daunting than on emotion-ridden issues such as those Rushton examines. The public badly needs guidance in learning how to think and talk constructively about racial differences, some part of which may eventually be proved genetic. In fact, misconceptions about that possibility abound and produce unwarranted anxiety and pessimism. They flood into and quickly derail any otherwise productive discussion of racial differences that does not anticipate and counter them explicitly, systematically, and repeatedly.

To be sure, Rushton addresses many such misconceptions. He points out that variation within races is far greater than the differences between them; heritability (even 100 percent) does not mean unchanging or immutable; genes work through, not apart from, nurture; genetic and environmental influences are probabilistic, not deterministic; genetic and cultural heritage evolve together; the social and biological meanings of race differ but overlap; and, while

constraining our options, his data do not prescribe any particular social policy or practice, conservative or liberal. But where Rushton has a single sentence or page on these issues, there might be many.

Chapters might begin and conclude with more explanation of Rushton's train of thought in reviewing different kinds of data, which is not always obvious and thereby creates a vacuum for readers' imaginings. The early chapter on "Behavior Genetics" provided a wonderful opportunity, not taken, to teach readers that we have all totally misunderstood how environments create differences among us, thus offering new hope for more effective environmental intervention. While behavior genetics may dash old, mistaken beliefs in environmental determinism, it promises to revolutionize our thinking about how people choose and can change their environments.

It is impossible to speak forthrightly on race today and not be misunderstood or misrepresented by some people. However, it is possible to reduce the rate of misreading and misconception, in part by providing extended, close consideration of what the research in question does and does not document or imply. While such informed reflection does not supply the solutions that disturbed readers sometimes demand, it does help clear the way for others to search more effectively for them. The need to provide it is surely a special burden, but also a special opportunity.

## References

Barash, D.P. (1995). Animal Behaviour 49(4):1131-33.

Brand, C. (1995). "What Is It to Be High-K?" Personality and Individ-

ual Differences 19(3):411-13.

Francis, S. (1995). "Up from the Ice Age." Chronicles (March):28-31. Gottfredson, L.S. (1996). "What Do We Know about Intelligence?" American Scholar, (Winter): 15-30.

Hermstein, R.J. and C. Murray (1994). The Bell Curve. New York: Free Press.

Horowitz, I.L. (1995). "The Rushton File: Racial Comparisons and

Media Passions." Society 32:7-17.
Plomin, R. and G.E. McClearn (1993). Nature, Nurture, and Psychol-

ogy. Washington, DC: American Psychological Association. Rowe, D. (1994). The Limits of Family Influence: Genes, Experience,

and Behavior. New York: Guilford.

Article excerpt. J. PHILIPPE RUSHTON Race, Evolution, and Behaviour: A Life History Perspective (2nd Special Abridged Edition) Port Huron, MI: Charles Darwin Research Institute, 2000, 108 pages. (ISBN 0-9656838-2-1, US\$5.95, Softcover) Reviewed by FREDRIC WEIZMANN. In 1995, Philippe Rushton wrote Race, Evolution and Behavior, which summarized his ideas about race and racial differences. As many readers of this journal are aware, Rushton assumes that the major racial groupings of humankind represent a deep biological and evolutionary reality, and that there are important racial differences caus