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EDITORIAL

The Equalitarian Dogma Revisited

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Henry Garrett (1961), a president of the American Psychological Association, claimed that "the equalitarian dogma," the belief that Blacks and Whites are genetically equal in cognitive ability, was the "scientific hoax of the century." Since then, the dogma has become more ingrained, despite increased contrary evidence. The dogma has been perpetuated by intimidation as well as by pious thinking. Its long endurance is a scandal of great proportion and illuminates how science works, and sometimes does not. I discuss (a) current international data on race differences; (b) their genetic and evolutionary origins; (c) political fallout from my presentations; (d) corruption of scholarship that has occurred, illustrated partly by the example of Cyril Burt; and (e) what should be done to improve matters.

> It used to be taken for granted that it was not only ethically *right* for scientists to make public their discoveries; it was regarded as their *duty* to do so. Secrecy, the withholding of information, and the refusal to communicate knowledge were rightly regarded as cardinal sins against the scientific ethos. This is true no more. In recent years it has been argued, more and more vociferously, that scientists should [not publicize their discoveries if these should bear on racial differences in ability]. (Eysenck, 1975, p. 1)

Thus wrote Hans Eysenck in 1975 and, unfortunately, so it remains in 1995. The immediate stimulus for this editorial was rejection of my most recent paper on race and sex differences in brain size by the publishing house of a major neuroscience journal 3 months after I had returned corrected page proofs. This rejection was despite protest by the editor who had completed the several-month-long, peer review process. The editor told me that there was nothing he could do because "they own the journal." Fortunately, albeit after another lengthy review process, Douglas Detterman accepted the paper for *Intelligence* (Rushton, 1994), and invited me to write this editorial.

This article is based on presentations at two annual meetings of the American Psychological Association: "Sir Cyril Burt: Victim of the Scientific Hoax of the Century" (Toronto, August 22, 1993), and "Race Difference Research Can Get You Fired, Imprisoned, or Worse" (Los Angeles, August 12, 1994). It also draws on my book *Race, Evolution and Behavior* (1995). I thank Professor C.D. Ankney for helpful comments at several stages in writing this article.

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That was not the first occasion an article of mine had been subjected to unusual treatment. On two previous occasions, what was virtually a special issue had to be canceled after work was completed. In one case this was accompanied by the editor's resignation. Instances of more minor harassment could fill volumes. For the last 2 years, for example, the Society for Neuroscience has flagged my conference abstracts and demanded, less than a week before publication, minor word changes allegedly because of "sensitive" material. Thus, I was requested to change cranial "capacity" to cranial "size" in the title of one abstract, even though the former is the usual scientific term. I made the change with a day to spare and so still presented at the annual meeting. Such events are personally debilitating, but more worrisome is what they say about the process of conducting and publishing research on race differences.

RACE DIFFERENCES

The historical record shows that an African cultural disadvantage has existed, relative to Europeans and Asians, ever since Europeans first made contact 2,000 years ago (Baker, 1974; Rushton, 1995). However, until recently, it was not possible to be certain about the cause of the Black–White difference. Today the evidence has increased so much that it is almost certain that only evolutionary (and thereby genetic) theories can explain it. Surveys show that a plurality of experts in psychological testing and behavioral genetics think that a portion of the Black/White difference in IQ scores is genetic in origin (Snyderman & Rothman, 1987, 1988).

The IQ debate became international in scope when research showed that Asians scored higher on tests of mental ability than did Whites, whereas Africans and Caribbeans scored lower (Lynn, 1982, 1991; Vernon, 1982). The debate was also widened by data showing the same worldwide racial ordering in activity level, personality, speed of maturation, crime, family structure, and health (Rushton, 1995). I explored these and other variables and found that East Asians consistently averaged at one end of a continuum, Africans consistently at the other, and Caucasians consistently in between. There is, of course, enormous overlap in the distributions and thus, it is highly problematic to generalize from a group average to an individual.

The central theoretical questions are: Why should Caucasoids average so consistently between Negroids and Mongoloids on so many dimensions? And, why is there an inverse relation between brain size and gamete production across the races? It is not simply differences in cognitive ability that require explanation. A network of evidence, such as that shown in Table 1, allows more chance of finding powerful theories than do single dimensions drawn from the set.

Brain Size

Rushton (1995) reviewed 100 years of scientific literature and found that across a triangulation of procedures, brains of Mongoloids average about 17 cm^3 (1 $in.^3$)

TABLE 1
Relative Ranking of Races on Diverse Variables

Variable	Race		
	Orientals	Whites	Blacks
Brain Size			
Autopsy data (cm^3 equivalents)	1,351	1,356	1,223
Endocranial volume (cm^3)	1,415	1,362	1,268
External head measures (cm^3)	1,356	1,329	1,294
Cortical neurons (billions)	13.767	13.665	13.185
Intelligence			
IQ test scores	106	100	85
Decision times	Faster	Intermediate	Slower
Cultural achievements	Higher	Higher	Lower
Maturation Rate			
Gestation time	?	Intermediate	Earlier
Skeletal development	Later	Intermediate	Earlier
Motor development	Later	Intermediate	Earlier
Dental development	Later	Intermediate	Earlier
Age of first intercourse	Later	Intermediate	Earlier
Age of first pregnancy	Later	Intermediate	Earlier
Life span	Longer	Intermediate	Shorter
Personality			
Activity	Lower	Intermediate	Higher
Aggressiveness	Lower	Intermediate	Higher
Cautiousness	Higher	Intermediate	Lower
Dominance	Lower	Intermediate	Higher
Impulsivity	Lower	Intermediate	Higher
Self-concept	Lower	Intermediate	Higher
Sociability	Lower	Intermediate	Higher
Social Organization			
Marital stability	Higher	Intermediate	Lower
Law abidingness	Higher	Intermediate	Lower
Mental health	Higher	Intermediate	Lower
Administrative capacity	Higher	Higher	Lower
Reproductive Effort			
Two-egg twinning (per 1,000 births)	4	8	16
Hormone levels	Lower	Intermediate	Higher
Size of genitalia	Smaller	Intermediate	Larger
Secondary sex characteristics	Smaller	Intermediate	Larger
Intercourse frequencies	Lower	Intermediate	Higher
Permissive attitudes	Lower	Intermediate	Higher
Sexually transmitted diseases	Lower	Intermediate	Higher

Note. From *Race, Evolution and Behavior* (p. 5), by J.P. Rushton, 1995, New Brunswick, NJ: Transaction. Copyright 1995 by Transaction Publishers. Reprinted by permission.

larger than those of Caucasoids, whose brains average about 80 cm^3 (5 $in.^3$) larger than those of Negroids. For example, using brain mass at autopsy, Ho, Roessmann, Straumfjord, and Monroe (1980) summarized data for 1,261 Americans aged 25 to 80 after excluding obviously damaged brains. They reported a significant sex-combined difference between 811 Whites with a mean of 1,323 g (SD = 146) and 450 Blacks with a mean of 1,223 g (SD = 144). Using endocranial volume, Beals, Smith, and Dodd (1984, p. 307, Table 5) analyzed 20,000 crania and found sex-combined brain cases differed by continental area. Excluding caucasoid areas of Asia (e.g., India) and Africa (e.g., Egypt), 19 Asian populations averaged 1,415 cm^3 (SD = 51), 10 European groups averaged 1,362 cm^3 (SD = 35), and 9 African groups averaged 1,268 cm^3 (SD = 85). Using external head measurements, Rushton (1992b) found, in a stratified random sample of 6,325 U.S. Army personnel measured in 1988 to determine head size for fitting helmets, Asian Americans, White Americans, and Black Americans averaged 1,416 cm^3, 1,380 cm^3, and 1,359 cm^3, respectively. With data on tens of thousands of men and women collated by the International Labour Office in Geneva, Asians, Europeans, and Africans averaged, respectively, 1,308 cm^3, 1,297 cm^3, and 1,241 cm^3 (Rushton, 1994).

The racial differences in cranial size are consistent across procedures. The world database from autopsies, endocranial volume, head measurements, and head measurements corrected for body size, were, respectively, in cm^3: Mongoloids = 1,351, 1,415, 1,335, 1,356 (M = 1,364); Caucasoids = 1,356, 1,362, 1,341, 1,329 (M = 1,347); and Negroids = 1,223, 1,268, 1,284, 1,294 (M = 1,267). The world average cranial size was 1,326 cm^3. Within-race differences due to method of estimation averaged only 31 cm^3 (Rushton, 1995).[1]

Intelligence

The global literature on cognitive ability was reviewed by Lynn (1991). Caucasoids in North America, Europe, and Australasia had mean IQs of around 100. Mongoloids, measured in North America and in Pacific Rim countries, had higher means, in the range of 101 to 111. Africans living south of the Sahara, African Americans, and African Caribbeans (including those living in Britain), had mean IQs of from 70 to 90. However, the question remains whether test scores are valid measures of group differences in mental ability. Basically, the answer hinges on whether the tests are culture bound. Doubts about validity linger in many quarters, although considerable technical work has disposed of this problem among those with psychometric expertise (Jensen, 1980; Snyderman &

[1]The sex difference in brain size so decisively shown to exist by Ankney (1992), and confirmed in my studies cited above, are not dealt with in this article. As discussed by Ankney (1992, in press) and Lynn (1994), the sex difference in brain size probably underlies some of the ability differences between men and women. These findings, of course, further damage the egalitarian orthodoxy.

Rothman, 1987, 1988; Wigdor & Garner, 1982). This is because the tests show similar patterns of internal item consistency and predictive validity for all groups, and the same differences are found on relatively culture-free tests.

Novel data about speed of decision making show that racial differences in mental ability are pervasive. Cross-cultural investigations of reaction time have been done on 9- to 12-year-olds from six countries. In these elementary tasks, children must decide which of several lights is on, or stands out from others, and move a hand to press a button. All children can perform the tasks in less than 1 s, but more intelligent children, as measured by traditional IQ tests, perform the tasks faster than do less intelligent children. Lynn (1991) found that Asian children in Hong Kong and Japan process information faster than do White children in Britain and Ireland, who process it faster than do Black children in Africa (see also Lynn & Shigehisa, 1991). Using similar tasks, as well as those involving retrieval of well-learned facts from long-term memory, the three-way racial pattern is also found in California (Jensen, 1993; Jensen & Whang, 1993, 1994).

The Brain Size–IQ Link

A positive correlation between mental ability and brain size has been established in studies using magnetic resonance imaging, which *in vivo*, construct three-dimensional pictures of the brain (Andreasen et al., 1993; Raz et al., 1993; Wickett, Vernon, & Lee, 1994; Willerman, Schultz, Rutledge, & Bigler, 1991). These confirm correlations, reported since the turn of the century, from measurements of head perimeter (Wickett et al., 1994). The brain size–cognitive ability correlations range from .10 to .40.

Two studies imply that brain size differences underlie the Black–White difference in mental ability. In an adolescent sample, Jensen (1994) found that the greater the difference between White and Black children on 17 tests, the higher was the tests' correlation with head size ($r = .533$, $p < .05$; with unreliability of measurement controlled, $r = .715$, $p < .01$). In a study of 14,000 4- and 7-year-olds, when the White and Black children were matched on IQ, they no longer differed in head size (Jensen & Johnson, 1994).

Other Variables

As shown in Table 1, the Asian–White–Black racial matrix occurs on a surprisingly wide range of dimensions. For example, the racial pattern in violent crime found within the U.S. holds internationally. I averaged several years of international police statistics to find rates of murder, rape, and serious assault to be three times higher in African and Caribbean countries than in Pacific Rim countries, again with European countries intermediate (Rushton, 1990). These results make it clear that whatever the causes of violent crime turn out to be, they must lie beyond U.S. particulars.

One neurohormonal contributor to crime is testosterone. As I review in *Race, Evolution and Behavior* (Rushton, 1995), studies show 3% to 19% more tes-

tosterone in Black college students and military veterans than in their White counterparts (e.g., Ellis & Nyborg, 1992), with the Japanese showing lower amounts than Whites. Sex hormones go everywhere in the body and have been shown to activate many brain-behavior systems involving crime, personality, and reproduction. As another example, around the world, the rate of dizygotic twinning per 1,000 births, caused by a double ovulation, is less than 4 among Mongoloids, 8 among Caucasoids, and 16 or greater among Negroids (Bulmer, 1970; Imaizumi, 1992).

Worldwide surveys show more sexual activity in Negroids compared to Caucasoids and especially to Mongoloids. Differences in sexual activity translate into consequences. International fertility rates show the racial pattern; so does the pattern of AIDS. As of January 1, 1994, World Health Organization and Centers for Disease Control and Prevention statistics showed infection rates, per hundred thousand population, for (a) Asian Americans and Asians in the Pacific Rim of less than 1, (b) European Americans and Europeans in Europe, Canada, and Australasia of 86, and (c) African Americans and Africans south of the Sahara and in the Caribbean of 355.

ORIGINS

Behavioral Genetics

A first study of the genetic contribution to cranial size, and by inference to brain size, has been made in a study of 236 pairs of adolescent twins (472 individuals) aged 13 to 17 years, White and Black, male and female (Rushton & Osborne, in press). Heritability for the total sample ranged from 38% to 51%, depending on particular adjustments made for body size. Environmental effects common to both twins, like parental socioeconomic status, ranged from 6% to 20% and environmental effects unique to each twin, like illness, ranged from 42% to 52%. The heritability estimates did not vary systematically by sex or race, although there was a trend for them to be lower in Blacks than in Whites.

Heritabilities for mental ability range from 50% to 80% and have been established in numerous adoption, twin, and family studies (Bouchard & McGue, 1981). Noteworthy are the 80% heritabilities found in adult twins reared apart (Bouchard, Lykken, McGue, Segal, & Tellegen, 1990; Pedersen, Plomin, Nesselroade, & McClearn, 1992). Genetic influence is also found in studies of non-Whites, including African Americans (Osborne, 1980; Scarr, Weinberg, & Waldman, 1993) and Japanese (Lynn & Hattori, 1990). Quantitative genetic research has also built a strong case for the importance of genetic factors in the domains of personality and psychopathology (Plomin, Owen, & McGuffin, 1994).

Findings such as these led Sandra Scarr to title her 1986 presidential address to the Behavior Genetics Association, "Three Cheers for Behavioral Genetics." She observed that "the war [between nature and nurture] is largely over." Scarr accepted that genetics underlay existing White social class differences in mental

ability in the U.S. and Europe, although this may not have been the case for earlier generations when social mobility was more restricted. Because racial barriers are less permeable than class barriers, Scarr (1987) interpreted her own research of 7-year-old Black and mixed-race children adopted into White middle-class families as showing an environmental cause of racial differences.

Other transracial adoption studies, including a follow-up to Scarr's 7-year-old Black children to when they were 17, indicate a genetic contribution to cognitive ability. Studies of Korean and Vietnamese children adopted into White American and White Belgian homes showed that, although as babies many had been hospitalized for malnutrition, they grew to excel in academic ability with IQs 10 points or more higher than their adoptive national norms (Clark & Hanisee, 1982; Frydman & Lynn, 1989; Winick, Meyer, & Harris, 1975). By contrast, Weinberg, Scarr, and Waldman (1992) found that at age 17, Black and mixed-race children adopted into White middle-class families performed at a lower level than did White siblings with whom they had been raised. Adopted White children had an average IQ of 106, an average aptitude based on national norms at the 59th percentile, and a class rank at the 54th percentile; mixed-race children had an average IQ of 99, an aptitude at the 53rd percentile, and a class rank at the 40th percentile; and Black children had an average IQ of 89, an aptitude at the 42nd percentile, and a class rank at the 36th percentile.

Multifarious other sources of evidence suggest that racial differences in intelligence are substantially genetic. For example, Black–White differences are most pronounced on more *g*-loaded subtests; that is, on the general factor common to diverse cognitive tests (Jensen, 1985). The *g*-loadings are correlated with a number of biological variables including brain evoked potentials, heritability coefficients determined from twin studies, and the degree to which children's test scores are depressed by inbreeding and raised by outbreeding (Jensen, 1987). Also, genetic weights established from inbreeding depression studies in the Japanese population directly predict the magnitude of the Black–White differences on the various subtests of the Wechsler Intelligence Scale for Children (Rushton, 1989). There is no other explanation for inbreeding depression than a genetic one.

Evolution

Evolutionary hypotheses for why Asians average the largest brains and have the most intelligence have been provided (Rushton, 1995). The currently accepted view of human origins, the "African Eve" theory, posits a beginning in Africa some 200,000 years ago, an exodus through the Middle East with an African/non-African split about 110,000 years ago, and a Caucasoid/Mongoloid split about 40,000 years ago. Evolutionary selection pressures are different in the hot savanna where Africans evolved than in the cold arctic where Mongoloids evolved. The further north out of Africa that populations migrated, the more they encountered the cognitively demanding problems of gathering, and storing food,

gaining shelter, making clothes, and raising children during prolonged winters. I proposed that as the original African populations evolved into Caucasoids and Mongoloids, they did so in the direction of larger brains, slower rates of maturation, and other traits differentiating the populations.

To further account for why Negroids are also, on average, more fertile, faster maturing, and more sexually active, I proposed a gene-based evolutionary theory familiar to population biologists as the *r-K* scale of reproductive strategy. At one end of this scale are *r*-strategies, which emphasize high reproductive rates, and, at the other, *K*-strategies, which emphasize high levels of parental investment (nurturing). The scale is generally used to compare different species, but I used it to describe the immensely smaller variations *within* the human species. I hypothesized that Mongoloid people are more *K*-selected than Caucasoids, who in turn are more *K*-selected than Negroids.

FALLOUT

Media Opposition

I began publishing my research on race in the mid-1980s (Rushton, 1984, 1985), but it was not until I presented a 20-min talk at the American Association for the Advancement of Science (AAAS) in 1989 (see Rushton, 1992a, for full text) that serious disturbances began. The AAAS is well attended by the media. My story constituted an item in the U.S., but in Canada it catapulted me into the headlines.

By the time I arrived back from the conference, the uproar was in full swing with invectives savagely hurled from every direction. Newspapers took my views to social-activist groups and asked for their opinion. They said I should be fired for promoting hatred. Newspapers took this idea to the president of the university who argued for academic freedom. The ongoing conflict was serialized for weeks. Student groups also entered the fray, daily demanding that I meet with them in a public forum.

The media was biased from the outset. Coverage on TV presented my theories juxtaposed with footage of Nazi troops. Editing and voiceovers took out my qualification that race differences were often quite small and could not be generalized to individuals. The media also referred to races as "inferior" and "superior," terms I explicitly disavowed.

Fellow academics denounced my work in dozens of media pieces and op-ed articles. Newspapers caricatured me wearing a Ku Klux Klan hood and talking on the telephone to a delighted Adolf Hitler. One newspaper began a campaign to get me fired from my position, chastising my university and stating "This protection of a charlatan on grounds of academic freedom is preposterous." Later, the same paper again linked me to the Holocaust. I had no choice but to hire a prestigious law firm and issue notices under the Libel and Slander Act against the newspaper. This brought the media campaign against me to a halt.

Hate Crime Laws

In the U.S. there is a First Amendment to protect the right of every citizen to free speech and there is not much the government can do to silence unpopular ideas. In Canada and many Western European countries, however, "anti-hate" laws exist, as well as laws against spreading "false news." Two weeks after my talk at the AAAS, and under pressure from the media, the premier of Ontario publicly called on the university to fire me. When the university did not do so, the premier asked the Ontario Provincial Police to investigate whether I had violated the federal criminal code of Canada, Chapter 46, Section 319, Paragraph 2, which read in its relevant part: "Everyone who, by communicating statements, other than private conversation, willfully promotes hatred against any identifiable group is guilty of an indictable offense and is liable to *imprisonment for a term not exceeding two years*" (emphasis added).

The police questioned my colleagues and members of the administration and professors at other universities, demanded tapes of media interviews, and sent a questionnaire to my attorney to which I was obliged to reply in detail. After a 6-month investigation and a 100-page report, however, the Attorney General of Ontario declined to prosecute me and dismissed my research as "loony, but not criminal."

This did not halt the legal action. Eighteen students, including seven Black students, lodged a formal complaint against me to the Ontario Human Rights Commission claiming that I had violated Sections 1, 8, and 10 of the 1981 Ontario Human Rights Code guaranteeing equality of treatment to all citizens of the province. In particular, I was charged with "infecting the learning environment with academic racism." As remedy, the complainants requested that my employment at the university be terminated and that an order be made requiring the university to "examine its curriculum so as to eliminate academic racism." As I write this, 3 years after the complaint was first lodged, the Ontario Human Rights Commission has begun its investigation.

Events at the University

I wish I could say that clear refuge was found within my university, but I cannot. In its relations with the outside world the university administration stood firmly for academic freedom. The president gave a press conference to state categorically that there would be no investigation of me, that I would not be suspended, and that I was free to pursue any line of research I chose.

Unfortunately, behind the scenes, I became the target of a witch hunt by some of the administrators. First, I was unfairly convicted of failing to gain ethical clearance for two pieces of research I had conducted with human subjects. As a consequence, I was banned from using the subject pool for 2 years and a "letter of censure" was placed in my academic file. Although these were confidential personnel matters, the results were immediately leaked to the media. At the same

time, my then dean publicly declared that I had lost my scientific credibility and spearheaded an attack on me in the university newspaper. Next, the then chair of my department gave me an annual performance rating of unsatisfactory. This was a remarkable turn-around because it occurred for the same year in which I had been made a Fellow of the John Simon Guggenheim Foundation. My previous 12 years of annual ratings had been either good or excellent.

Because unsatisfactory ratings can lead to dismissal proceedings at my university, I contested the rating through various levels of grievance, wasting an enormous amount of time. Here is not the place to go into some of the "dirty tricks" that were played on me during these proceedings. The important point is that in the end I won my grievance and had the unsatisfactory rating overturned. My research is now back to earning high ratings.

Some radical and Black students mobilized and held rallies, once bringing in a member of the African National Congress to denounce me. In one demonstration, bolstered by bused-in sympathizers, a mob of 40 people stormed through the psychology department, banging on walls and doors, bellowing slogans through bull horns, drawing swastikas on the walls, and writing on my door "Racists Pig Live Here" [sic] (Figure 1). Instead of dealing with the activists, the administration barred me from the classroom and ordered me to lecture by videotape, citing my safety as the issue.

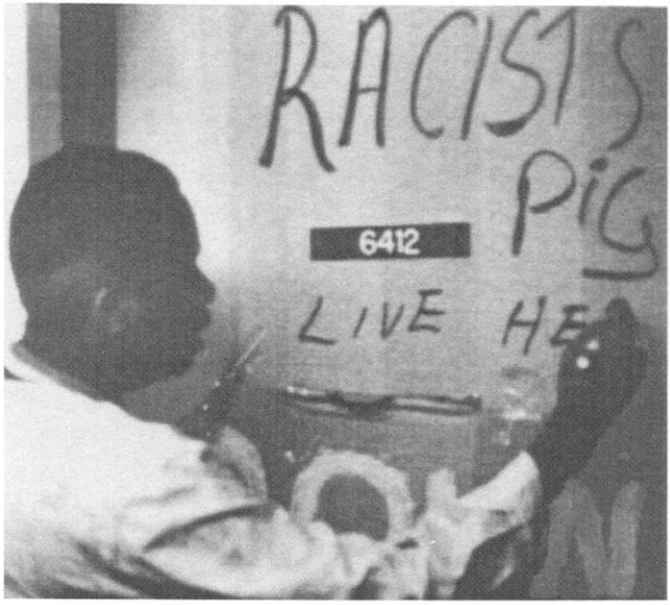

Figure 1. Activist scrawls slogan on the door of Philippe Rushton's office at the University of Western Ontario.

Again I launched formal grievances. After a term of enforced teaching by videotape, I won the right to resume teaching in person, but then I was required to run a gauntlet of students (or pseudo-students) shouting protests and threats. Only after several forced cancellations of my classes did the administration warn the demonstrators that further action would lead to suspension and legal action. That brought the protests to a halt.

THE CORRUPTION OF SCHOLARSHIP

Stories of harassment and intimidation could be told by many others who have had the temerity to research topics that touch on the genetic or distributional basis of race differences. These would include Thomas J. Bouchard, Jr., at Minnesota, Hans J. Eysenck in Great Britain, Linda Gottfredson at Delaware, Richard J. Herrnstein and Edward O. Wilson at Harvard, Arthur R. Jensen and Vincent Sarich at Berkeley, and Michael Levin at City College of New York (Pearson, 1991).

"Fascists Have No Right to Speak"

As a graduate student at the London School of Economics and Political Science in 1973, I witnessed a physical assault on Hans Eysenck, who was studying the biological basis of intelligence and had recently published *Race, Intelligence, and Education* (1971). The slogan of that day was "Fascists Have No Right To Speak," and Eysenck became a target for attack. No legal charges were brought for the widely witnessed assault because another popular slogan of the 1960s, for those who approved the message but disapproved the tactic, was "No Enemies on the Left."

Today, many of the campus radicals of the 1960s are the tenured radicals of the 1990s. The 1960s mentality of peace, love, and above all, equality (no hierarchies) now constitutes the intellectual establishment of the Western world. There are laws to prohibit platforms to "fascists" and others deemed "not politically correct." Even in the U.S. with the First Amendment in place, nongovernmental institutions, including colleges and universities, have set up "anti-harrassment" rules prohibiting, and establishing punishments for, "speech or other expression" that is intended to "insult or stigmatize an individual or a small number of individuals on the basis of their sex, race, color, handicap, religion, sexual orientation or national and ethnic origin." This latter, from Stanford's policy adopted in 1990, is more or less representative.

Rauch (1992) provided numerous other examples of silencing of unpopular opinion in his book, *Kindly Inquisitors*. One case at the University of Michigan became well known because it led a federal court to strike down the rule in question. A student claimed, in a classroom discussion, that he thought homosexuality was a disease treatable with therapy. He was formally disciplined by the

university for violating the school's policy and victimizing people on the basis of sexual orientation.

In Canada and Western Europe, governments can and do prohibit speech on topics they consider obnoxious. In Denmark, a woman wrote a letter to a newspaper calling national domestic partner laws "ungodly" and homosexuality "the ugliest kind of adultery." She and the editor who published her letter were targeted for prosecution. In Great Britain, the Race Relations Act forbids speech that expresses racial hatred, "not only when it is likely to lead to violence, but generally, on the grounds that members of minority races should be protected from racial insults." Of course, it could be worse. In many parts of the world you can be executed for expressing forbidden opinions.

De Facto Censorship

It is important to draw attention to what sociologist Robert Gordon refers to as "one-party science." Irrespective of religious background, or political affiliation, virtually all American intellectuals adhere to what Linda Gottfredson (1994) called the "egalitarian fiction." For example, only politically correct hypotheses centering on cultural disadvantage are postulated to explain the differential representation of minorities in science. Analyses of aptitude test scores and behavioral genetics are taboo. Moralizing is so fierce that most sensible people avoid the taboo. This encourages vicious attacks on those who are convinced that there is a genetic basis underlying individual and group differences.

The high-placed pervasiveness of the egalitarian fiction is worrying. In an annual feature in *Science* (e.g., November 13, 1992, November 12, 1993 issues), the underrepresentation of minority scientists is documented. Unflinching statistics are accompanied by muddled analysis. First, the word *minority* is too inclusive. Only Blacks, Hispanics and American Indians are underrepresented in science; Several other minorities are overrepresented. Adopting the criterion of being listed in *American Men and Women of Science*, and using Weyl's (1989) ethnic classification of surnames, Chinese are overrepresented relative to their numbers in the population by 620%, Japanese by 351%, and Jews by 424%. These figures cast doubt on an explanation based on prejudice and, instead, suggest factors intrinsic to the various groups. The one-party line was forcefully presented in a lead editorial in *Nature* against my work (Maddox, 1992), which likened the possibility of finding significant group differences in brain size to contradicting accepted views of an ellipsoid earth, continental drift, and relativity theory.[2]

Gottfredson (1987) identified four de facto regulations that she considered had contributed to current taboos. Because many people are uncertain about the eth-

[2]Special sections on "Women in Science" (*Science*, April 16, 1993, March 11, 1994), as well as the editorial in *Nature* by John Maddox (1992) also ignored or denigrated sex differences in aptitudes and brain size.

ics of research on race differences and its public dissemination, they consider observance of these rules their safest moral course.

1. Never "blame the victim." For example, emphasize that Black crime, AIDS, and poverty is the result of White racism. Prefer vague but gentle terms like *cognitive skills* rather than precise words like *intelligence*.
2. Avoid drawing public attention to your work if it might be interpreted as blaming the victim. Do not issue press releases or give public talks. Leave discussion to those with politically correct views.
3. Within your own sphere of responsibility as mentor, colleague, editor, or administrator, discourage the conduct and publication of research that might be "inflammatory" or "offensive," even when it is scientifically sound. Advise graduate students and colleagues that their careers and grant-getting abilities may be harmed by researching controversial positions.
4. Isolate individuals who breach these principles. At a minimum they are showing a lack of judgment and may undermine your department or institution, if not society. Suggest their behavior may be symptomatic of a character disorder.

These regulations do operate and they have consequences. Character assassination has been a prime weapon in the ideological war over human nature. For example, Shipman (1994) described the vehement attack on Carlton Coon, the physical anthropologist whose life's work, *The Origin of Races* (1962), held that some races developed into modern humans more slowly than others. Whatever its merits, Shipman explained that this was a work of science, not of racial politics. Yet, the reaction to this work, at the very moment that the U.S. civil rights movement was coming into full swing, was personal and political, and Coon was disgraced and, to some extent, driven out of his profession. Evolutionary accounts of racial differences simply would not be tolerated, even by those whose job it was to search for the truth. Another well known scientist-victim is Cyril Burt.

Cyril Burt

Burt was a highly respected British psychologist until he became a victim of the scientific hoax about genetic equality. He was the leader of British differential psychology from 1924, when he became a professor of educational psychology, until his death in 1971 at the age of 88. He was knighted by the Labour Government in 1946 for his work on psychological testing and for making educational opportunities more widely available.

Burt's work encompassed both genetic and environmental influences. In *The Backward Child* (1937), he separated environmental variables of deprivation, such as poor nutrition and illness, from the innate factors that handicapped children. He advocated medical and dental examinations within the school setting to

ensure that growth was proceeding normally. He was one of the first to correlate sociological factors with poor school achievement, finding high relationships with residential indicators of infant mortality, overcrowding, poverty, unemployment, family size, and the host of variables now only too familiar.

It was Burt's research showing a preponderant genetic contribution to mental ability, however, that led to his being attacked. Kamin (1974) claimed discrepancies in Burt's figures, including an invariantly high correlation for IQ scores in monozygotic twins raised apart. Despite the increase in sample size, from 15 pairs in 1943 to 53 pairs in 1966, the correlation remained at a rounded .77. The scandal broke wide open with a story in the *Sunday Times* in 1976 headlined "Crucial Data Was Faked by Eminent Psychologist." The article charged not only that Burt had adjusted his data to suit his theory but that two of Burt's collaborators "may never have existed." The controversy flared for about 3 years. Then Burt's biographer, Hearnshaw (1979), a respected historian of psychology with access to Burt's private correspondence and diaries, apparently swayed by Burt's opponents, concluded that Burt was not only "guilty" but that he suffered from a "psychological disturbance" that undermined his character in later life. In 1980, the British Psychological Society, refusing to conduct an enquiry of its own, endorsed the guilty verdict. Later, the British Broadcasting Corporation made a docudrama depicting Burt as a mean-spirited bigot.

The battle seemed over with an enormous victory for the egalitarians. Then, Joynson (1989) reopened the case and concluded that accusations of fraud were ill founded and that Burt must be exonerated. Working independently, Fletcher (1991) completed the demolition of the evidence for the prosecution, concluding with a "not proven." Fletcher drew out the implications, describing how ideology, in alliance with a receptive popular journalism and the media, established itself as a powerful third force in scientific discourse.

Many of the details of the case are fascinating and disturbing. For example, there is the truly "flabbergasting" fact (Jensen's, 1992, term) that many of Burt's papers were destroyed by his housekeeper almost immediately after his death on the advice of Liam Hudson, professor of educational psychology at Edinburgh University, one of Burt's most ardent opponents. As Jensen (1992) has stated: "Both Hudson's rush to Burt's flat right after his death and his advice to Burt's secretary-housekeeper to burn the stored data seem stranger than fiction. Surely it must be one of the most bizarre events in the whole Burt affair" (p. 106).

On the most important issues, the matter appears settled. As for the so-called "missing" research assistants, they have been found. Of even greater importance, there have now been six studies of the correlations of IQ scores of monozygotic twins reared apart. As Jensen (1992) pointed out, Burt's data are by no means out of line with other findings. If an average is taken of the five other studies, weighted by sample size, the result is .75, almost the same as Burt's supposedly faked correlation of .77.

TELL THE TRUTH

So, what can we learn from all of this? That studying race differences is controversial? Well, of course it is. It might be tempting to conclude there must be something wrong with my colleagues and me for sticking our necks out. Unfortunately, this is part of the problem. Such a degree of self-censorship operates that Gottfredson (1994) claimed it amounts to scientific fraud. As mentioned, we know from large-scale surveys that a majority of experts believe that part of the average Black/White IQ difference is genetic in origin (Snyderman & Rothman, 1987, 1988).

Many of my colleagues tell me, privately, that they agree with my views, not just about brain size and intelligence but also about the genetic basis of race differences in crime and other variables. I have even known senior African American police administrators who have told me that they believe biological factors underlie racial differences in crime. But, of course, my informants go on to say, "Please don't quote me."

To improve the current chilly climate for research on race differences, Gottfredson (1994) suggested several principles for inquiry and debate (see also Loehlin, 1992). I reiterate four of these.

1. Seek the truth and speak it as you know it, directly and not in code.
2. Do not speculate about motives unless you have very good grounds for doing so. Integrity is the only character trait that is of concern when evaluating ideas and their impact.
3. Do not apologize for or act embarrassed about racially sensitive research or its results. To do so lends credence to the belief that you think you are doing something wrong.
4. Zealously protect freedom of scientific inquiry.

In conclusion, I suggest that it is a dereliction of duty for us to continue to put up with the egalitarian dogma. It is immoral to know, or even suspect, the truth and to remain silent. Although rational people are not immune to data, they are also influenced by the judgment of their peers. If more scientists would speak openly about the views they now voice only in private, our world would become not only a safer place, but a more enlightened one as well.

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