1983

Can Science Be Inopportune - Constitutional Validity of Governmental Restrictions on Race-IQ Research

Richard Delgado
University of Alabama - School of Law, rdelgado@law.ua.edu

Sean Bradley

David Burkenroad

Ron Chavez

CAN SCIENCE BE INOPPORTUNE? CONSTITUTIONAL VALIDITY OF GOVERNMENTAL RESTRICTIONS ON RACE-IQ RESEARCH

Richard Delgado,* Sean Bradley,**
David Burkenroad,** Ron Chavez,**
Bruce Doering,*** Eric Lardiere,**
Robert Reeves,** Mark S. Smith,***
John Windhausen***

INTRODUCTION

Fifteen years ago, an article about legal constraints on scientific inquiry would have been a most unlikely enterprise. From the nation's inception in a period of enlightenment, optimism, and faith in science, to the mid-1960's, science enjoyed widespread public support and esteem.[1] The nation welcomed the advances in health, safety, and comfort ushered in by developments in fields such as medicine, chemistry, and geology, while our imaginations were captured by discoveries in space, atomic theory, and flight. The first nuclear explosion at Alamogordo gave some pause, but the atom seemed a single genie let out of a single bottle. If the genie could not be put back in, perhaps it could be tamed, or at least kept quiet.

---

* Professor of Law, UCLA School of Law. J.D., 1974, University of California, Berkeley.

** UCLA School of Law, Class of 1983.

*** UCLA School of Law, Class of 1984.

We gratefully acknowledge the encouragement and ideas of Robert Sinsheimer and the assistance of Richard Dennis and Candace Hellstrom in the preparation of this manuscript.

1. *E.g.*, B. HINDLE, THE PURSUIT OF SCIENCE IN REVOLUTIONARY AMERICA 1735–1789, at 381–92 (1956); T. JEFFERSON, NOTES ON THE STATE OF VIRGINIA (1801); D. PRICE, THE SCIENTIFIC ESTATE (1965) (continuing prestige and influence of science); Delgado & Millen, *God, Galileo and Government: Toward Constitutional Protection for Scientific Inquiry*, 53 WASH. L. REV. 349, 354–61 (1978) (early faith in science).

In the late 1960's, all that changed. Prompted by concerns over a deteriorating environment, weapons research, and the specter of genetic engineering, and heightened by a growing perception of science and scientists as parts of an amoral, if not immoral, Establishment that must be rendered sensitive to the wishes of the citizenry, a new mood, much more critical of institutional science, developed.[2] In the last ten years alone, we have seen calls to banish weapons research from university campuses,[3] to stop or severely curtail recombinant DNA research,[4] to discontinue investigation into race-based differentials in IQ,[5] to block study into the causes and solutions of inner-city violence,[6] to cease testing and exploring the XYY syndrome and its connection with delinquency,[7] and a virtual prohibition on research with human fetal material.[8] Research with human subjects has come to be closely regulated,[9] and scientists in some areas have seen their work subjected to secrecy regulations imposed by the government.[10] Scientists who have pursued lines of inquiry perceived as "sensitive" or disfavored have complained that they were denied promotions, tenure, or grant money by conservative, or cautious, administrators.[11]

---

2. *See infra* notes 3–11, 48 and accompanying text.

3. The University of California, for example, which operates a major nuclear weapons research facility at Livermore, California, has been under continual pressure by students, peace groups, and some faculty and alumni to cease operating the facility. *See, e.g.*, Bleifer, *Berkeley anti-nuke protest ends in police scuffle; 95 arrested*, UCLA Daily Bruin, Jan. 25, 1983, at 3, col. 3; Mar, *Military connection to UC lab assailed*, UCLA Daily Bruin, Apr. 13, 1983, at 6, col. 4.

4. *See infra* notes 123–26, 167–70 and accompanying text.

5. *See infra* notes 54–93 and accompanying text.

6. *See, e.g.*, Hodson, *Reflections Concerning Violence and the Brain*, 9 CRIM. L. BULL. 684 (1973) (criticizing suggested use of brain surgery to control violent individuals); Hastings Center Rep., Apr. 1979, at 2 ("In Brief") (psychosurgery on prisoners and mental patients); Note, *Conditioning and Other Technologies Used to "Treat?" "Rehabilitate?" "Demolish?" Prisoners and Mental Patients*, 45 S. CAL. L. REV. 616, 633–38 (1972) (drug therapy to control violent inmates at medical facility).

7. *See* People v. Yukl, 83 Misc. 2d 364, 372 N.Y.S.2d 313 (1975) (evidence of XYY condition inadmissible to negate criminal responsibility); Culliton, *Patients' Rights: Harvard is Site of Battle over X and Y Chromosomes*, 186 SCIENCE 715 (1974); Powledge, *The XYY Man: Do Criminals Really Have Abnormal Genes?* SCI. DIGEST, Jan. 1976, at 33.

8. *See infra* notes 161–64 and accompanying text.

9. *See infra* notes 151–58 and accompanying text.

10. *Clearance Confusion after DOD Clampdown*, 122 SCI. NEWS 180 (1982); Peterson, *A Question of Free Speech*, 122 SCI. NEWS 396 (1982); *'Remote Censoring': DOD Blocks Symposium Papers*, 122 SCI. NEWS 148 (1982).

11. *See* Delgado & Millen, *supra* note 1, at 351–52 and sources cited therein; *Sociobiology: A New Theory of Behavior*, TIME, Aug. 1, 1977, at 54 (sociobiologist denied tenure). Teaching of certain scientific topics has also come under attack. Fundamentalist religious groups have demanded "equal time" and textbooks for the teaching of Creationism rather than Darwinian evolution. *See* 121 SCI. NEWS 12, 20, 44 (1981); 122 SCI. NEWS 27, 358 (1982).

It seems a virtual certainty that a scientist's right to pursue controversial research free from excessive official intrusion will be tested in court in the near future. Stephan Toulmin, one of the leading philosophers of science of our time, predicts a Supreme Court decision within ten years.[12] Thomas Emerson believes the decision will be written in first amendment terms.[13] At least six law review articles have addressed the subject.[14] Most conclude that science is, or should be, protected by the first amendment.[15]

Much of this early writing on the status of science under the Constitution, while useful in raising the issue for discussion, is nevertheless of limited value because it overlooks the multiform nature of science and the context-dependent variousness of the first amendment. Given the complexity of both the analytical instrument and the subject to which it is likely to be applied, it seems safer to begin not with broad generalization, but more narrowly. This Article, accordingly, explores a single aspect of the scientific-governance question—the permissibility of state action forbidding or discouraging the pursuit of new scientific knowledge on the ground that it is inopportune.[16] For concreteness, the Article uses as illustration proposals to forbid or discourage research

12. Toulmin, *The Research and the Public Interest*, in RESEARCH WITH RECOMBINANT DNA 101 (1977) ("I . . . would predict that a case raising this question will probably reach the Supreme Court sometime during the next fifteen years or so, and that the Court will probably decide that freedom of speech does, at least in general terms, embrace freedom of scientific inquiry."). *Id.* at 103.

13. Emerson, *Colonial Intentions and Current Realities of the First Amendment*, 125 U. PA. L. REV. 737, 746 (1977).

14. Delgado & Millen, *supra* note 1; Favre & McKinnon, *The New Prometheus: Will Scientific Inquiry be Bound by the Chains of Government Regulation?*, 19 DUQ. L. REV. 651 (1981); Ferguson, *Scientific Inquiry and the First Amendment*, 64 CORNELL L. REV. 639 (1979); Lederberg, *The Freedoms and the Control of Science: Notes from the Ivory Tower*, 45 S. CAL. L. REV. 596 (1972); Robertson, *The Scientist's Right to Research: A Constitutional Analysis*, 51 S. CAL. L. REV. 1203 (1978); Note, *Considerations in the Regulation of Biological Research*, 126 U. PA. L. REV. 1420 (1978). *See also infra* note 174 and sources cited therein (articles and notes dealing with control of particular types or areas of scientific inquiry); *Limits of Scientific Inquiry*, DAEDALUS, Spring 1978.

15. *See infra* text accompanying notes 175-81.

16. The term "inopportune science" seems to have been coined by Robert Sinsheimer. *See* Sinsheimer, *The Presumptions of Science*, DAEDALUS, Spring 1978, at 23 ("Can there be 'forbidden'—or, as I prefer, 'inopportune' knowledge? . . . the possession of which, at a given time and stage of social development, would be inimical to human welfare . . . ?"). *See also* M. SHAPIRO & R. SPECE, BIOETHICS AND LAW 62-63 (1981) ("Is There Knowledge We Shouldn't Have?"); Smith, *Scientific Knowledge and Forbidden Truths*, HASTINGS CENTER REP., Dec. 1978, at 33. David Smith believes some knowledge can be untimely for a society not mature enough to absorb it. It would be destructive, he states, to make a child aware of sexual perversity or to tell a seriously ill person of his or her condition immediately. Other knowledge can be destructive if it is "incompatible with the very *being* of a person." *Id.* at 34 (citing the example of virtues such as humility and spontaneity that are destroyed by their bearers' knowledge of them). Some scientific truths, according to Smith, may be in-

into possible race-based differentials in intellectual endowment, or IQ.[17]

The regulation of science asserted to be inopportune was selected for two reasons. First, the charge that certain areas of inquiry should not be pursued because they portend knowledge that is unwise to have is important in its own right; such charges are being heard with increasing frequency and in connection with a widening range of scientific activities.[18] Second, the problem is significant for what it illuminates—it pits strong scientific-freedom claims against powerfully emotive, broad-ranging, but diffuse social interests. It may someday prove the analog of obscenity: the issue that finally crystallizes first amendment thinking and causes it to fall into place.

The Article begins in Part I by describing the IQ controversy in some detail. Part II reviews the ways in which race-based IQ research can be regulated or discouraged. The third and fourth parts identify the individual and social interests at stake in the IQ controversy and evaluate them in light of constitutional and common law doctrine. We conclude that a court entertaining a challenge brought by an IQ researcher whose work is blocked by official action will probably find that a fundamental right has been infringed, but that the state interest supporting the regulation may be compelling. In Part V, the Article considers a range of means by which the state's interest in avoidance of the harms of race-based IQ research may be promoted while infringing as little as possible on protected liberty.

I. HISTORY AND CURRENT STATUS OF THE RACE-IQ CONTROVERSY

Theories attributing group differences in intellect to innate factors have a long history. In the *Republic*, Socrates proposed

---

opportune for society for much the same reasons—confronting them weakens a social trait or value that we prize.

We use "inopportune" in Sinsheimer's sense alone, meaning knowledge the mere possession of which by human beings is, or could be, detrimental to their well-being. Physical danger created by the research or its results is not an essential part of the "inopportune" concept.

17. IQ (intelligence quotient) is "a number used to express the apparent relative intelligence of a person determined by dividing his mental age as reported on a standardized test by his chronological age and multiplying by 100." WEBSTER'S NEW COLLEGIATE DICTIONARY 595 (1980). Mental age is the average age of all test-takers who earned the same score as a given person. *See infra* text accompanying notes 19–107 (describing debate over IQ tests).

18. *See, e.g.*, M. SHAPIRO & R. SPECE, *supra* note 16, at 62-63. ("inopportune" charges leveled at recombinant DNA research, research into human genetics, research attempting to make contact with intelligent extraterrestrials, and research designed to control the aging process).

that rulers teach the myth that God fashioned thinkers, workers, and soldiers according to their differing metallic compositions. Once sorted, the members of these classes must be kept separate, for prophecy foretold the destruction of the state should brass and iron children be permitted to mingle with golden people, the rulers.[19]

The myth of the metals was a product of Plato's political philosophy and metaphysics. Its purpose was to win acceptance for an innovative, anti-egalitarian system of government on the ground that such a government would be balanced, or "just." Plato did not teach that the myth was literal truth;[20] only that the masses should be taught it so that they would accept their assigned stations in life. Only relatively recently has it been asserted that group-based differences in innate intellect are scientifically provable.[21]

A. *Early Origins: Race-IQ Theories at the Turn of the Century*[22]

At the turn of the century, America's rush into industrialism resulted in a number of problems—overcrowding, industrial monopoly, labor unrest, the need to absorb large numbers of immigrants—as the country rapidly changed from a rural to an urban

---

19. THE REPUBLIC OF PLATO 106–07 (F. Cornford ed. 1978).

20. When asked whether the myth would be believed, Socrates responds: "Not in the first generation; but their sons and descendants might . . . and finally the rest of mankind." *Id.* at 107.

At least one modern student of heredity seems to have regarded Socrates' myth as a precursor of an important discovery. H. EYSENCK & L. KAMIN, THE INTELLIGENCE CONTROVERSY 12 (1981) (Eysenck's description of myth as Plato's contribution to "the distinction between nature [heredity] and nurture [environment]" and as an early statement favoring genetic causes over environmental ones). *But cf.* K. POPPER, THE OPEN SOCIETY AND ITS ENEMIES: THE SPELL OF PLATO (5th ed. 1959). In view of historical evidence of Athenian society,

> the holistic and anti-equalitarian interpretation of justice in the Republic was an innovation, and . . . Plato attempted to present his totalitarian class rule as 'just' while people [in Athenian society] meant by 'justice' the exact opposite . . . .
>
> Why did Plato claim, in the Republic, that justice meant inequality if, in general usage, it meant equality? . . . [T]he only likely reply seems to be that he wanted to make propaganda for his totalitarian state by persuading the people that it was the 'just' state.

Id. at 92.

21. *See infra* text accompanying notes 54–93 (controversy generated by recent assertions of certain scientists that there are demonstrable, physically-based differences in intellect between whites and blacks).

22. This section traces the development in the United States of the idea that there exist differences in intelligence among the races. For an examination of the European antecedents of the race-IQ movement, see B. EVANS & B. WAITES, IQ AND MENTAL TESTING, AN UNNATURAL SCIENCE AND ITS SOCIAL HISTORY 1–7 (1981) [hereinafter cited as B. EVANS & B. WAITES, IQ MENTAL TESTING].

society.[23] The Progressive movement, a reform movement of the time, turned to social science for assistance in coping with these problems.[24] Darwin had transformed scientific thinking about the natural sciences. Progressive social scientists hoped to apply his evolutionary theory to human institutions in the belief that it would bring efficient management to society just as it had brought success to science and technology.[25]

One key problem confronting society during the late 1800's and early 1900's was the educational system. The enrollment in Eastern urban schools, particularly, swelled with non-English speaking immigrant children from the poorest socio-economic groups in southern and eastern Europe.[26] Educators had to contend with seemingly wide differences of ability between old stock American children and the new immigrant stock. In 1909 Leonard Ayers, a prominent educator, published a study of the school problem, maintaining that, on the average, thirty-three percent of public pupils were "retarded"—over age for their grade—and unable to learn.[27] Ayers concluded that schools were squandering funds in educating repeaters.[28] During this same period, psychologists were developing the early IQ tests.[29] Educators saw these tests as a scientific means of sorting out students, and thus avoiding the wasteful allocation of educational resources to those unable to learn.[30]

---

23. *See* W. BEAN & J. RAWLS, CALIFORNIA: AN INTERPRETIVE HISTORY 285–96 (1973).

24. R. HOFSTADTER, THE AGE OF REFORM 131–72 (1956). Hofstadter explains that the force behind this reform movement was the middle class's aspiration to regain the influence it had before the rise of the corporations. Their movement was carried out under the banner of terms like "*patriotism, citizen, democracy, law, character, conscience* . . . terms redolent of the sturdy Protestant Anglo-Saxon moral [character]." *Id.* at 318.

25. *Id.* at 181–84, 242. *See also* R. CALLAHAN, EDUCATION AND THE CULT OF EFFICIENCY 1–5 (1962).

26. *Id.* at 14–15.

27. L. AYERS, LAGGARDS IN OUR SCHOOLS 3 (1909).

28. *Id.* at 3–5; R. CALLAHAN, *supra* note 25, at 15–18.

29. *See infra* text accompanying notes 31–34, 37 (early development and use of IQ tests).

30. Within the testing movement, two beliefs central to Progressive thought—the supremacy of Anglo-Saxon values, and belief in science—coalesced. The proponents of testing also drew strength from advocates of the eugenics movement of the period who attributed traits and behaviors such as murder, prostitution, and laziness to innate intelligence and "the nature of one's germplasm." Karier, *Testing for Order and Control in the Corporate Liberal State*, in THE IQ CONTROVERSY 339, 344–45 (N. Block & G. Dworkin eds. 1976).

The American eugenic movement has origins much earlier than the turn of the century. *See generally* S. GOULD, THE MISMEASURE OF MAN 30–112 (1981) (summarizing scientific efforts during the first half of the nineteenth century to correlate brain weight with intelligence). *See also* J. HALLER, JR., OUTCASTS FROM EVOLUTION: SCIENTIFIC ATTITUDES OF RACIAL INFERIORITY, 1859–1900 (1971); W. STANTON,

B. *IQ Controversy in the Twenties*

Entry of the United States into World War I created the need for a means to select personnel qualified to be military officers. The American Psychological Association, through its president, Robert Yerkes, offered to test the mental capacity of recruits for the United States Army. The Army accepted the offer and tested more than 1.7 million recruits for IQ.[31] For several decades following, the data from these tests became the principal source of information concerning occupational, ethnic, racial, and geographic differences in mental ability in the United States.[32]

Analyzing the Army data, psychologist Lothrop Stoddard announced that "[t]he average mental age of Americans was about fourteen."[33] Using the same data, C.C. Brigham drew comparisons of test scores among ethnic groups. He found that native and Nordic European draftees were intellectually superior, and expressed concern about the inferior genes of Mediterranean, Alpine, and black races. Brigham's studies and those of other psychologists proved influential in Congress' passage of the 1924 National Origins Act which reduced the quota of Alpine and southern European immigrants.[34]

The Army test results attracted the support of popular writers associated with the eugenics movement who saw in the data evidence for their belief that improving conditions and education would only encourage the survival of weak elements in the gene pool.[35] The tests also attracted criticism. In 1922, in a series of six articles in the *New Republic,*[36] Walter Lippmann questioned whether IQ tests measured intelligence, whether intelligence was

---

THE LEOPARD'S SPOTS (1960) (scientific attitudes toward race in America, 1815-1859). In a yet unpublished article, Professor Herbert Hovenkamp of the Hastings College of Law argues that the genetic determinism that dominated social science in the last part of the nineteenth century serves in part to explain the law of race relations during the period. *See* H. Hovenkamp, Social Science and Segregation Before Brown (Feb. 1983) (unpublished manuscript on file with author).

31. Haney, *Validity, Vaudeville, and Values: A Short History of Social Concerns Over Standardized Testing*, 36 AM. PSYCHOLOGIST 1021, 1021-25 (1981).

32. *Id.*

33. 1. STODDARD, THE REVOLT AGAINST CIVILIZATION (1922).

34. The Army data were cited repeatedly in congressional reports submitted by eugenics advocates which led to the passage of the "national origin quotas" which significantly reduced immigration by southern and eastern Europeans. *E.g.*, Europe as an Emigrant-Exporting Continent and the United States as an Immigrant-Receiving Nation, 1924: Before the House Comm. on Immigration and Naturalization, 68th Cong., 1st Sess. 1311 (1924) (report of H. H. Laughlin).

35. *See generally* L. KAMIN, THE SCIENCE AND POLITICS OF IQ 15-30 (1974); Karier, *supra* note 30, at 348.

36. Lippmann, *The Mental Age of Americans; The Mystery of the "A" Men; The Reliability of IQ Tests; The Abuse of the Tests; Tests of Hereditary Intelligence; A Future for the Tests*, in THE IQ CONTROVERSY 4, 8, 13, 18, 21, 26 (N. Block & G. Dworkin eds. 1976).

fixed by heredity, and whether inherited intelligence accounted for racial and ethnic differences in IQ. Lippmann's opponent in the debate was Lewis Terman, the developer of the Stanford-Binet test. Terman, like other IQ testers, contended that intelligence was simply that which the tests measured.[37] Lippmann responded that the questions contained in the tests were essentially arbitrary and reflected the tester's biases.[38]

While conceding that the tests could be useful to school administrators in predicting school performance,[39] Lippmann was concerned about the ways in which the tests could harm the children tested. A bright child with a score depressed by poverty or inadequate education might be led to believe that he or she was inferior and predestined to lack of achievement. Unsophisticated or prejudiced school administrators could use the test scores to justify reduced efforts to educate children identified as slow learners.[40] Terman, for example, proposed that children scoring below 70 be counseled to become unskilled laborers; those scoring between 70 and 115, skilled laborers or clerical workers; and those scoring over 115, members of a profession. He also advocated a differentiated ("tracked") school curriculum corresponding to the pupils' IQ scores.[41]

Lippmann attacked Terman's views for ignoring the impact of environmental influences upon a child's development. Terman's own studies indicated that intellectual growth is greatest in the early years, yet his observations began with the testing of four-year-olds. Terman was thus criticized for "discuss[ing] heredity in schoolchildren before study[ing] the education of infants."[42] Lippman also took issue with Brigham's assertion that inherited intelligence accounted for IQ differences among the Army recruits. Brigham had overlooked that many of the immigrant recruits had little or no formal education.[43] Lippmann concluded that IQ scores represented "an unanalyzed mixture of native capacity, acquired habits and stored up knowledge"[44] and were only helpful to demonstrate a child's internalization or lack

37. *See* Terman, *The Great Conspiracy*, in THE IQ CONTROVERSY 30, 36–37 (N. Block & G. Dworkin eds. 1976).

38. Lippmann, *The Mystery of the "A" Men*, *supra* note 36, at 9–11.

39. Lippmann, *The Reliability of IQ Tests*, *supra* note 36, at 17.

40. Lippmann, *The Abuse of IQ Tests*, *supra* note 36, at 19–20.

41. *See* L. TERMAN, INTELLIGENCE TESTS AND SCHOOL REORGANIZATION 27–28 (1923). *See also* L. TERMAN, INTELLIGENCE OF SCHOOL CHILDREN 268–90 (1919).

42. Lippmann, *A Future for the Tests*, *supra* note 36, at 27.

43. Lippmann, *A Defense of Education*, 106 CENTURY ILLUSTRATED MAG. 95, 99–103 (1923). Lippmann criticized Brigham for "assuming" that the tests measured intelligence. "[T]here is no law compelling professors to assume the very thing which they set out to prove." *Id.* at 103.

44. *See* Lippmann, *A Future for the Tests*, *supra* note 36, at 28–29.

of internalization of Anglo-Saxon values.[45] The notion that intelligence is genetically fixed could "produce nothing but discredit for psychology, fatalism and paralysis in the schools, injustice in society, and unnecessary despair or an unwarranted conceit"[46] among the "exponents of the New Snobbery."[47]

C. *Revival of the IQ Controversy in the Sixties and Seventies*

By the late 1960's, a track system similar to that proposed by Terman and others had become commonplace in American public schools. Nevertheless, American attitudes toward the assumptions and conclusions of these early behavioral scientists had changed. With the Vietnam War, the arms race, and the discovery of the hazards of pollution, the nation's faith in science had been shaken. Terms like "the machine," "the establishment," and "the system" reflected a growing skepticism of science as an instrument for social advancement.[48] Thus, educational tracking and the purported scientific theory on which it was based came under attack. In *Hobson v. Hansen*,[49] Judge Skelly Wright found that tracking locked disadvantaged children into their socio-economic class, and set up a self-fulfilling prophecy in which students with low IQs performed poorly in school because their teachers and parents expected them to fail.[50]

More optimistic theories of intellectual development were also subject to criticism. Earlier in the decade, as the condition of blacks became a national issue, Piaget's views on the role of experience in intellectual growth[51] had gained favor and formed the

---

45. Testers, as a profession, have been accused of being servants of corporate capitalism. *See* Karier, *supra* note 30, at 339.

46. Lippmann, *A Defense of Education*, *supra* note 43, at 103.

47. Lippmann, *A Future for the Tests*, *supra* note 36, at 29.

Lippman also foretold that the testers themselves would be the long run beneficiaries of claims that the tests measured innate capacity. *See id., supra* note 36, at 28. Mental testing is today a multi-million dollar business. Karier, *supra* note 30, at 362. Mental testers have also been accused of being servants of the 'corporate liberal state,' *id.* at 339; but, as Cronbach explains, though there may be "a natural affinity between their ideas and a hierarchically organized, differentiated society, testers worked with the social structure, not for it." Cronbach, *Five Decades of Public Controversy Over Mental Testing*, 30 AM. PSYCHOLOGIST 1, 13 (1975).

48. For an examination of the ambiguous role science has played in American thought during this period, see Marx, *Reflections of the Neo-Romantic Critique of Science*, DAEDALUS, Spring 1978, at 61. *See also supra* note 3 and accompanying text; M. HORWITCH, CLIPPED WINGS: THE AMERICAN SST CONFLICT (1982).

49. 269 F. Supp. 401 (D.D.C. 1967).

50. *Id.* at 491.

51. J. Piaget is a leading twentieth-century cognitive psychologist. His work includes CHILD'S CONCEPTION OF THE WORLD (1960); JUDGMENT AND REASONING IN THE CHILD (1962); LANGUAGE AND THOUGHT OF THE CHILD (1962); CHILD'S CONCEPTION OF PHYSICAL CAUSALITY (1972); CHILD'S CONCEPTION OF THE WORLD

theoretical basis of the Headstart Program.[52] As his views became accepted, new methods were sought to stimulate intellectual growth through enrichment of the child's environment. By the late sixties, however, evidence began to surface indicating that the Headstart Program was not producing the expected and desired results. Most agreed that the program had been too hastily and ambitiously drawn.[53] Nevertheless, the lack of consensus among scientists and educators regarding the relative merits of tracked education and programs such as Headstart provided the conditions for a vigorous revival of the heredity-environment dispute begun fifty years earlier.

1. The Controversy Surrounding Arthur Jensen

In 1969 Arthur Jensen published an article which revived the environmentalist debate.[54] The article began: "Compensatory education has been tried and it apparently has failed."[55] The Berkeley psychologist reviewed evidence indicating that differences in IQ and scholastic aptitude within the white population could be attributed in large measure to genetic inheritance. But the statement that sparked controversy was the suggestion that it was "not [an] unreasonable hypothesis that genetic factors are strongly implicated in the average Negro-white intelligence difference."[56]

No one contested Jensen's finding that blacks scored on the average one standard deviation[57] lower than whites. But the leap from evidence concerning heritability of IQ scores within populations to the suggestion that there were intelligence differences among populations created a national furor.[58] Many social scien-

(1975); THE CHILD AND REALITY (1976). Piaget generally stressed the manner in which a child's mental capacities develop through interaction with the world.

52. Some environmentalists believe that relatively small environmental deprivations or enrichments could produce large, long-lasting effects. The early Headstart programs were based on this belief. *See* Cronbach, *supra* note 47, at 2. A federally funded preschool program, Headstart was designed to prepare disadvantaged children for school.

53. *Id.*; Smith & James, *The Effects of Preschool Education: Some American and British Evidence*, 1 OXFORD REV. EDUC. 223–40 (1975).

54. Jensen, *How Much Can We Boost IQ and Scholastic Achievement?*, 39 HARV. EDUC. REV. 1 (1969) [hereinafter cited as *IQ and Scholastic Achievement*].

55. *Id.* at 2.

56. *Id.* at 82.

57. Standard deviation is a measure of spread, a statistical device used to describe how slowly or rapidly particular distributions thin out in either direction from their mean, or average. The standard deviation of most commonly used IQ tests is about 16. D. KRECH & R. CRUTCHFIELD, ELEMENTS OF PSYCHOLOGY 547 (1961).

58. Jensen's article created much debate in the popular as well as academic press. Observers note that in the 1969–1970 *Readers' Guide to Periodical Literature*, twelve out of fifteen items related to testing dealt with Jensen's article. *See* Haney, *supra* note 31, at 1025.

tists feared that any appearance of support for Jensen's views by the scientific community would simply strengthen pernicious racial and ethnic prejudices.[59] Others hailed Jensen as a courageous investigator who dared to entertain a controversial hypothesis.[60]

As in Lippmann's debate with Terman, the revived controversy revolved around three issues:[61] the validity of mental tests as measures of intelligence, the heritability of intelligence, and the existence of IQ differences among racial and ethnic groups. Jensen's hypothesis added a further element to the debate, however: a correlation[62] between IQ and occupational attainment.[63] Jensen observed that persons with similar IQ share similar socioeconomic standing regardless of their race.[64] Racial identity is thus unnecessary to explain achievement and social status. Innate ability acts as a "natural assorting process" within a hierarchy of occupations.[65] Positing that intelligence is highly heritable,[66] Jensen ar-

59. Jerry Hirsch, a geneticist, editorialized: "It perhaps is impossible to exaggerate the importance of the Jensen disgrace, for which we must all now share responsibility. It has permeated both science and the universities, and hoodwinked large segments of government and society. Like Vietnam and Watergate, it is a contemporary symptom of serious affliction." Hirsch, *Jensenism: The Bankruptcy of "Science" Without Scholarship*, 25 EDUC. THEORY 3, 3–4 (1975) [hereinafter cited as Hirsch, *Jensenism: The Bankruptcy of Science*].

60. *See, e.g.*, Vernon, *Book Review*, 15 CONTEMP. PSYCHOLOGY 161 (1970) ("I would applaud Jensen for his courage in bringing these problems out into the open. . . .").

61. *See, e.g.*, P. VERNON, INTELLIGENCE: HEREDITY AND ENVIRONMENT vii (1979) (despite 50 years of controversy over IQ testing, "it is doubtful that any of the protagonists have ever been persuaded to change their views."). Some contemporary observers charge that the debate persists today in part because of the socio-political consequences entailed in any resolution. *See* B. EVANS & B. WAITES, IQ AND MENTAL TESTING 189 (1981) (proponents of race-IQ differences, in some cases, desire to show that lack of upward mobility of blacks is understandable and not a sign of discrimination).

62. "Correlation" is a statistical term that describes the extent to which two sets of data behave similarly. H. WALKER & J. LEV, ELEMENTARY STATISTICAL METHODS 161–75, 257–64 (1958). Correlation does not necessarily imply a causal relationship.

63. Many of Jensen's writings are summarized in Jensen, *The Current Status of the IQ Controversy*, 13 AUSTL. PSYCHOLOGY 7 (1978) [hereinafter cited as *The Current Status*].

64. *Id.* For Jensen, black-white correlations between IQ and status extend beyond occupation to include areas of deviance such as criminality and delinquency. *Id.* at 17.

65. *See IQ and Scholastic Achievement*, *supra* note 54, at 14–15. For the environmentalist's response, see, e.g., Lewontin, *Race and Intelligence*, in THE I.Q. CONTROVERSY, *supra* note 30, at 78; Scarr, *From Evolution to Larry P., or What Shall We Do About IQ Tests?*, 2 INTELLIGENCE 325, 339 (1978).

66. Jensen's evidence is drawn largely from analysis of kinship data. Based on these data he concludes that between 50 and 80 percent of IQ variance is attributable to variance in genotypes, and that this variance implies a correlation of .80 to .90 between IQ and genotype. *See The Current Status*, *supra* note 63, at 12–14. Several of Jensen's critics have pointed out, however, that some of Jensen's data are drawn

gued that "reallocating existing socioeconomic and educational . . . advantages or disadvantages will not produce any appreciable change in the rank order of individuals or group[s]. . . ."[67]

Critics discounted Jensen's argument, pointing out that unequal distribution of educational privileges, wealth, and power made Jensen's posited natural sorting process illusory.[68] Environmentalists did not deny the significance of genetic factors for explaining differences in human behavior, nor that variances in IQ within populations are, in part, genetic. They took issue, however, with Jensen's proposition that genetic differences along racial lines account for white-black differences in IQ and occupational achievement.[69] Some even questioned whether such a proposition could ever be established or refuted.[70]

---

from the studies of Sir Cyril Burt, which are now widely believed to be fraudulent. *See, e.g.*, H. EYSENCK & L. KAMIN, *supra* note 20, at 98–105. *See also* Hechinger, *Further Proof that I.Q. Data Were Fraudulent*, N.Y. Times, Jan. 30, 1979, at C4, col. 4. *See infra* Part IVF (Social Disutility of Race-IQ Research).

67. *The Current Status*, *supra* note 63, at 25.

68. Karier, *supra* note 30, at 355–56.

69. Jensen's principal critics include Richard Lewontin, Leon Kamin, Sandra Scarr-Salapatek, and Jerry Hirsch.

Lewontin, a geneticist, reviewed Jensen's evidence for a black-white difference in IQ and found it inconclusive and "irrelevant." Lewontin, *supra* note 65, at 89. Jensen's "fundamental error," according to Lewontin, was "to confuse heritability of a character within a population with heritability of the differences between two populations." *Id.* Columbia psychology professor Leon Kamin also attacked Jensen's methodology and argued that IQ tests serve principally to legitimize the low status of racial minorities in the hierarchy of occupational status, i.e., they operate as instruments of social control. Kamin, *supra* note 35, at 2; Kamin, *Heredity, Intelligence, Politics, and Psychology: I*, in THE IQ CONTROVERSY, *supra* note 30, at 242. Sandra Scarr-Salapatek, although agreeing with Jensen that genes influence IQ, argued that the black environment constituted a separate subculture that did not share the same socioeconomic qualities as white culture. The tests, according to Scarr-Salapatek, are valid predictors of a person's capacity to succeed, but only in the culture in which the tests were designed—in most circumstances, white culture. Scarr, *supra* note 65, at 338–39; Scarr-Salapatek, *Race, Social Class, and IQ*, in EDUCATING THE DISADVANTAGED 1971-1972 198 (E. Flaxman ed. 1973). Geneticist Jerry Hirsch labelled the question of whether heredity or environment was more important a pseudo-question. Hirsch, *Behavior-Genetic Analysis and Its Biosocial Consequences*, in THE IQ CONTROVERSY, *supra* note 30, at 156, 171–73.

70. *See, e.g.*, Hirsh, *supra* note 69, at 172–73.

The controversy made Jensen's name a household word. For contrasting views on the popular attention paid to Jensen, compare Hirsch, *Jensenism: The Bankruptcy of Science*, *supra* note 59, at 3–5 (highly critical of Jensen), with Cronbach, *supra* note 47, at 3–5, 12–13 (Jensen a victim of the media response to his ideas). Some critics charged that he became enthralled by the spotlight, *see* Cronbach, *supra* note 47, at 5, that he had lost his sense of balance and become doctrinaire. *Id. See also* Ramey & Haskins, *Early Education, Intellectual Development and School Performance: A Reply to Arthur Jensen and J. McIver Hunt*, 5 INTELLIGENCE 41, 46 (1981); Ramey & Haskins, *The Modification of Intelligence Through Early Experience*, 5 INTELLIGENCE 5, 16–17 (1981) (specialized programs do promote development of mental ability in preschool children). *But see* Jensen, *Raising the IQ: The Ramey and Haskins Study*, 5

2. Proposals to restrict inquiry

Many of Jensen's academic colleagues attacked his thesis on methodological grounds, but others criticized the nature of the inquiry itself. Law professor J.D. Hyman wrote that social scientists should be sensitive to social problems; that a high probability of truth be shown before "hypotheses . . . which reinforce the stereotypes on which our caste system has been built" are put forward.[71] The Society for the Psychological Study of Social Issues, an organization of social and behavioral scientists, expressed concern that hereditarian statements could be seriously misinterpreted, and used to justify repressive social policies.[72] Elizabeth Alfert, a colleague of Jensen at Berkeley, wrote that many persons read and quoted Jensen's work but failed to notice the many qualifiers it contained.[73] Bernard Diamond, professor of law and psychiatry at Berkeley, found that race-IQ studies risked "social denigration" of the groups singled out and urged that researchers be required to obtain the consent of parents who might not wish their children to participate in studies aimed at discovering ethnic differences.[74]

Despite such criticisms, Jensen sought approval for continued research on race and intelligence.[75] He took the position that society should allow the interested scholar to investigate any hypothesis free from the "unnecessary difficulties [which] arise when . . . scientific question[s] . . . become mixed up with socio-political aspects of the problem . . . ."[76] Jensen further argued that impor-

---

INTELLIGENCE 29, 39–40 (1981) (any early gains from pre-school programs tend to fade with time, as basic intelligence is unchanged).

In early articles, Jensen acknowledged the influence of environmental factors, but as the debate lingered he "let the point drop from sight." Cronbach, *supra* note 47, at 5, 12. Jensen had many critics to respond to, and with each reply he became, in their view, increasingly assertive and un-scholarly. *See id.* (scientists not well suited for the "spotlight;" lack the "skills of Lawyers;" "abandon scholarly consistency;" and take themselves too seriously).

71. Hyman, *I.Q. and Race*, NEW REPUBLIC, Oct. 25, 1969, at 31 (letter to the editor).

72. Comment, *Statement by SPSSI on Current IQ Controversy: Heredity versus Environment*, 24 AM. PSYCHOLOGIST 1039 (1969).

73. Alfert, *Comment: The Promotion of Prejudice*, J. SOC. ISSUES, Autumn 1969, at 206–209. It was rumored that Jensen's article was "must reading" in the Nixon White House. Daniel Moynihan, then a member of the Nixon cabinet, responded to the rumor saying the article was not "must reading"; that "[t]he subject did once come up in a Cabinet meeting . . . [merely a] casual enquiry . . . ." Moynihan, *Comment: Jensen Not 'Must Reading' in the Nixon Cabinet*, J. SOC. ISSUES, Spring 1970, at 191.

74. Diamond, Problems of the Ethical Control of Social and Psychological Risks to the Subjects of Behavioral and Social Science Research 11–14 (unpublished manuscript, 1974) (on file at *UCLA Law Review*).

75. *See* Lyons, *Scientists Shun Confrontation on Causes of Differences in I.Q.*, N.Y. Times, May 3, 1970, at 58, col. 4.

76. Jensen, *Can We and Should We Study Race Differences?*, in 3 THE DISAD-

tant social problems might remain unsolved if scientific inquiry were restricted, pointing particularly to "dysgenic" trends in urban slums.[77] Before society embarks on costly efforts to solve inner-city problems, Jensen urged, it ought to determine the extent to which these problems result from unchangeable intellectual deficiencies.[78]

At the 1970 meeting of the National Academy of Science (NAS), William Shockley, co-inventor of the transistor, joined Jensen in encouraging further research into ethnic and racial differences in intelligence. Shockley delivered an address postulating a mathematical model explaining differences in wage earning power between blacks and whites in terms of neurological organization rather than environment.[79] Many members of the Academy declined to participate in the discussion in light of protest demonstrations and criticisms stirred by the IQ question.[80] When Shockley repeated his proposal in 1971, the NAS membership accepted the validity of the study of human racial differences but rejected a recommendation that the organization endorse or sponsor studies in this area.[81]

3. Free Speech on Campus

In the late sixties and early seventies, during the revival of the IQ controversy, a number of attempts were made to prevent proponents of genetic IQ theories from presenting their views or pursuing their research. In the months following the appearance of Jensen's article, faculty and students at Berkeley called for his dismissal.[82] There was an attempted invasion of Jensen's classes, and his research assistant was harassed.[83] The chairman of the Berkeley academic freedom committee warned that "[a]ny attempts to fire him would be a violation of academic freedom."[84] The IQ controversy had merged with the right to free speech.

In October of 1969, William Shockley was prevented from delivering a paper on genetic racial differences by a group of black

---

VANTAGED CHILD 142, 149 (J. Hellmuth ed. 1970). *See also The Current Status*, *supra* note 63, at 24–26.

77. Dysgenics is the study of retrogressive evolution due to the disproportionate reproduction of the genetically disadvantaged.

78. *See* Jensen, *Race and the Genetics of Intelligence*, in THE IQ CONTROVERSY, *supra* note 30, at 100–01.

79. Lyons, *supra* note 75.

80. *Id.*

81. *See* Walsh, *National Academy of Sciences:—Awkward Moments at the Meeting*, 172 SCIENCE 539, 539–41 (1971).

82. Davis, *Harassment Charged by Author of Article about Negroes' I.Q.'s*, N.Y. Times, May 19, 1969, at 33, col. 1.

83. *Id.*

84. *Id.*

students at Dartmouth who applauded continuously during his speech.[85] This harassment was no doubt in response to Shockley's campaign to have the National Academy of Science encourage research in dysgenics.[86] Shockley, a Nobel laureate in electrical engineering, was concerned that the gene pool in the United States was deteriorating. The dysgenic threat, he warned, would be greatest in the event of a nuclear exchange. Without a reserve of highly intelligent individuals to regain control, the future of the United States would be in jeopardy.[87] Of particular concern to Shockley were blacks who, without infusions of white genes, would suffer "genetic enslavement."[88] In order to stem the deterioration of the gene pool, Shockley suggested that the government offer bonuses to the genetically inferior who agreed to undergo sterilization.[89]

In September, 1971, Richard Herrnstein, a Harvard behavioral psychologist, attracted criticism for an article he published in the *Atlantic Monthly*.[90] Herrnstein agreed with Jensen's hypothesis that IQ is largely determined by heredity and suggested that the IQ's of white and non-white groups be studied to see if there were genetic differences among them. Herrnstein presented a syllogism that touched off a minor controversy: if social and economic conditions are made uniform for everyone, then the power of heredity will eventually stratify any achievement-based society so that a child remains in his or her father's socio-economic status.[91] Herrnstein argued that, in the absence of variation in environment, only heredity can influence status. Though Herrnstein did not suggest that blacks were destined to form the lower caste, it was easy to infer this from his article. Alvin Poussaint, associate professor of psychiatry at Harvard Medical School, wrote in the *Boston Globe* that "[w]hether he intended it or not, [Herrnstein] has become the enemy of black people . . . ."[92] In the ensuing year, student protests prevented Herrnstein from teaching at Harvard and from speaking at Princeton and the University of

85. *Dartmouth Blacks Bar Physicist's Talk*, N.Y. Times, Oct. 16, 1969, at 37, col. 2.

86. *See* Shockley, *Dysgenics, Geneticity and Raceology: A Challenge to the Intellectual Responsibility of Educators*, 72 PHI DELTA KAPPAN 297 (1972).

87. Shockley, *supra* note 86, at 303.

88. *Id.* at 304.

89. *Id.* at 306.

90. Herrnstein, *I.Q.*, ATL. MONTHLY, Sept. 1971, at 43.

91. *Id.* at 58–60.

92. Poussaint, *Herrnstein: A Black Point of View*, Boston Globe, Dec. 3, 1971, at 20, col. 3 (Op-Ed). Herrnstein wrote a subsequent account of the events which followed the article from which this quote is taken. *See* R. HERRNSTEIN, I.Q. IN THE MERITOCRACY 12 (1973).

Iowa.[93]

The broadest statement on the right to free speech grew out of the "Shockley affair" at Yale in 1974. The Yale Political Union invited Shockley to speak but cancelled the invitation when student groups protested. A second organization invited him, but Kingman Brewster, then president of the university, opposed the invitation, charging that the group was using "free speech as a game" and demonstrating a "lack of sensitivity to others."[94] A third group invited Shockley to speak. He appeared but was shouted down.[95]

As a result of the Shockley episode, Yale decided to re-examine its attitude towards free speech. C. Vann Woodward, a noted historian, chaired a committee formed for this purpose. The Woodward report was critical of President Brewster and Yale generally, finding a "deterioration in the commitment to free speech . . . ."[96] There were signs of "a willingness to compromise standards, to give priority to peace and order and amicable relations over the principle of free speech . . . ."[97] The report called for strict rules against disruption of speeches or coercion by physical violence or threats.[98] It specifically rejected the view that racial insults or other "fighting words" could justify disruption by an audience.[99] The committee emphasized that "[t]he banning or obstruction of lawful speech can never be justified on such grounds as that the speaker is deemed irresponsible, offensive, unscholarly, or [the speech] untrue.[100]

D. *The IQ Controversy in the Eighties: The Debate Broadens*

The debate about genetic determinants of human behavior did not end with the publication of Jensen's and Shockley's theses and the initial wave of reaction to them. In 1980, Arthur Jensen published a second book, *Bias in Mental Testing*.[101] His declared intention was not to extend his earlier thesis but rather to defend

93. *Id.* at 17–41 (1973).

94. Lewis, *A Report on the Dangers to the Right of Free Speech*, N.Y. Times, Jan. 26, 1975, § 4, at 18, col. 1.

95. *Id.*

96. *Id.* The Woodward report is reprinted in *Report of the Committee on Freedom of Expression at Yale*, 4 HUM. RTS. 357 (1975) [hereinafter *Report*].

97. *Report*, *supra* note 96, at 373.

98. *Id.* at 375–76.

99. *Id.* at 376.

100. *Id.*

101. A. JENSEN, BIAS IN MENTAL TESTING (1980). *See* Gould, *Jensen's Last Stand*, N.Y. REV. BOOKS 38, May 1, 1980, at 38. Jensen still maintains that the black-white IQ differential is largely attributable to genetic factors. *See* Jensen, *Obstacles, Problems, and Pitfalls in Differential Psychology*, in S. SCARR, RACE, SOCIAL CLASS, AND INDIVIDUAL DIFFERENCES IN I.Q. 493–44 (1981).

the reliability of IQ tests against the charge of cultural bias.[102] Shortly thereafter, a National Academy of Sciences panel published a report finding that existing IQ tests, although they do yield disparate white/black average scores, do not discriminate against racial minorities in the prediction of academic performance.[103]

There has also been renewed interest on the part of psychologists in developing "culture-free" IQ tests that might eliminate or reduce differences among groups. In October of 1982, two California psychologists announced the development of one such test that reduces the mean difference between blacks and whites "by half—from about 15 points to seven" and produces a "negligible difference" between Hispanics and whites.[104] A recent study indicated that Japanese students score higher than white American students on IQ tests, and that the relative difference has increased by about seven points in the last two decades.[105] Attention has also focused on purported male-female differences in brain anatomy and function; a number of researchers have proposed that male superiority over females in mathematics and spatial perception is innate,[106] while others have purported to discover that women exceed men in verbal ability and human relations.[107]

II. REGULATION OF THE SCIENTIFIC ENTERPRISE: HOW RACE-IQ RESEARCH CAN OR MIGHT BE RESTRICTED

Sharply critical responses to the work of Jensen, Shockley, Herrnstein, and other proponents of race-IQ theories suggest that some regulation of either the conduct or the product of such research may be proposed and instituted. Since any restriction on the work of race-IQ scientists will probably take the form of one or more regulatory modes now in use, this part examines the ways in which scientific research is currently regulated and the relative efficacy of each mode. Later sections analyze whether or not such restrictions would be constitutional and, if so, what state interest

---

102. A. JENSEN, *supra* note 101, at ix.

103. Herbert, *Ability Testing Absolved of Racial Bias*, 121 SCI. NEWS 84 (1982); Herbert, *Intelligence Test: Sizing Up a Newcomer*, 122 SCI. NEWS 280 (1982).

104. Herbert, *Intelligence Test: Sizing Up a Newcomer*, 122 SCI. NEWS 280, 281 (1982); L.A Times, Aug. 25, 1982, pt. I, at 14, col. 1.

105. Garmon, *Japanese Jump*, 122 SCI. NEWS 28 (1982).

106. Tangley, *Male-Female Brain Anatomy May Differ*, 121 SCI. NEWS 422 (1982). *But see* Garmon, *supra* note 105.

107. Garmon, *supra* note 105.

In an unusual twist, it was recently revealed that William Shockley is one of the supporters of a "Nobel Prize sperm bank," a private effort to increase the reproductive rate of persons of intellectual accomplishment and thereby slow the rate of genetic drift. Comment, *Eugenic Artificial Insemination: A Cure for Mediocrity?*, 94 HARV. L. REV. 1850 (1981) (discussing Nobel Prize sperm bank).

or interests would legitimate them.[108]

A. *Self-Regulation by the Scientific Community*

Those who wish to protect scientific inquiry from governmental regulation sometimes offer self-regulation as a preferred alternative.[109] Self-regulation may be undertaken at three levels: voluntary self-restraint by individual researchers; policy statements of professional bodies that encourage restraint; and publication policies of scientific journals.

1. Self-regulation by the Individual Researcher

Arguably, external controls can stifle legitimate research activity. The researcher may be overburdened with paperwork or may avoid areas of inquiry he or she believes the regulator will view with disfavor. Outside regulators, if they are nonscientists, may lack sensitivity to notions of scientific freedom. Regulators, even if they are scientists, may be so preoccupied by documentation and other irrelevancies that they permit genuine abuses to slip by unnoticed.[110] Proponents of self-regulation argue that it will be effective through peer pressure, that scientists value highly the respect of their colleagues[111] and that self-policing has heretofore adequately restrained plagiarism and scientific fraud.[112]

Critics of self-regulation reply that while competition among researchers creates a threat of exposure that keeps scientists honest, peer pressure is less effective where protection of the public is concerned.[113] Self-interest may cause a researcher to inflate the benefit and discount the risk of proposed research and thereby expose the public to a level of danger that society would not con-

---

108. *See infra* Part IV. The individual and state interests are balanced in Part V, *infra*. The survey tendered in this section (Part II) does not aim to be analytical, but discursive. Thus, no effort is made to determine whether particular modes of regulation are constitutionally problematic, or trigger "state action." A number of examples are drawn from an area of research—research with recombinant DNA molecules—that resembles race-IQ research in some respects and that has recently been in the public eye. DNA research is like race-IQ research in that both concern biochemical bases of organic behavior, including human behavior. Both areas of inquiry have drawn fire for somewhat similar reasons: as inhumane, "inopportune," and likely to cause social chaos.

109. Bok, *Freedom and Risk*, DAEDALUS, Spring 1978, at 115, 117–18.

110. *Id.* at 118.

111. Sinsheimer suggests that a policy of restraint could only come about if enough scientists believed that such a policy were desirable. Self-discipline therefore is the means whereby consensus develops. *See* Sinsheimer, *supra* note 16, at 32–33.

112. *See, e.g.*, Woolf, *Fraud in Science: How Much, How Serious?*, HASTINGS CENTER REP., Oct. 1981, at 9, 11.

113. *See* J. GOODFIELD, PLAYING GOD: GENETIC ENGINEERING AND THE MANIPULATION OF LIFE 178–79 (1977). *See also* Woolf, *supra* note 112.

done.[114] Moreover, unlike lawyers and physicians, scientists have generally not established disciplinary boards with the power to suspend or expel members.[115] Self-policing would thus lack teeth.

2. Policy Statements of Scientific Organizations

Self-regulation can also take the form of statements issued by major scientific organizations and societies. However, most national organizations that have addressed the question of a scientist's responsibility to society have opposed regulation. At most, they have recommended that scientists give adequate consideration to the public interest before beginning research.[116] For example, in 1967 an ad hoc committee of the National Academy of Sciences recommended that race-IQ research be protected from external regulation, but found no need for the crash program advocated by William Shockley, among others.[117] In 1973, another committee of the National Academy of Sciences supported a researcher's right to investigate problems of human genetics "without hindrance because of fear that the results may be misused or because the conclusions may be unpalatable."[118] The American Anthropological Association, by contrast, concluded that "there is an obligation to reflect on the foreseeable repercussions of research and publication on the general population being studied."[119] The Genetics Society of America expressed a similar concern.[120] All such declarations are normative statements of what ought to be, and provide for no sanctions in the event of violation.[121]

Although simple policy resolutions and statements in themselves may have little effect in shaping the conduct of individual scientists, well-publicized moratoria entered into by the leading

---

114. Green, *Law and Genetic Control: Public Policy Questions*, 265 ANNALS N.Y. ACAD. SCI. 170, 173 (1976).

115. *E.g.*, CAL. BUS. & PROF. CODE § 6078 (West 1974) (attorneys).

116. Woolf, *supra* note 112, at 9. *See also* R. CHALK, M. FRANKEL & J. CHAFER, PROFESSIONAL ACTIVITIES IN THE SCIENTIFIC AND ENGINEERING SOCIETIES (1980).

117. *Racial Studies: Academy States Position on Call for New Research*, 158 SCIENCE 892, 893 (1967).

118. Reinhold, *A Limit on Scholarship?*, N.Y. Times, Dec. 9, 1973, at E5, col. 2.

119. *Id.* at col. 2-3.

120. Peter, *GSA Members Vote on Heredity, Race, and IQ*, 25 BIOSCIENCE 417, 418 (1975). *See also Genetic Differences in Intelligence*, 105 INTELLECT 214 (1977).

121. *See supra* notes 115-16 and accompanying text. *See also* Edsall, *Scientific Freedom and Responsibility*, 188 SCIENCE 687, 688 (1975) (describing stands taken by American Association for the Advancement of Science, Committee on Scientific Freedom and Responsibility). The Committee found no reason to restrict research on living human fetuses. *Id.* at 689. The Committee also proposed the establishment of scientific committees of inquiry that would inquire into matters of research ethics, publish the results of such inquiries, and bring critical issues to the attention of government. *Id.*

scientists in a field do seem effective.[122] In mid-1973, scientists attending a conference on recombinant DNA research expressed concern that careless use of the new technology could prove dangerous. At the conclusion of the meeting, the participants addressed a letter to the National Academy of Sciences urging that the Academy "consider this problem and recommend specific actions or guidelines."[123] The Academy convened a committee of scientists which, within a year, announced a worldwide voluntary moratorium on certain types of DNA experiments pending an international conference to study the safety issues.[124] The moratorium was universally honored during the months between its announcement and the international conference,[125] and ended when the federal government published guidelines for recombinant DNA research in July 1976.[126]

3. Publication Policies of Academic Journals

a. *Measures aimed at ethical content*. Though scientific journals routinely review the merit of articles submitted for publication, they exercise few controls over the articles' ethical or social content.[127] A number of organizations and individuals have sug-

122. *See* text accompanying notes 123–26 (example of effective moratorium).

123. Letter from Maxine Singer and Dieter Soll to Philip Handler, President, National Academy of Sciences, and John R. Hogness, President, National Institute of Medicine, *reprinted in* 181 SCIENCE 1114 (1973).

124. Committee on Recombinant DNA, *Potential Biohazards of Recombinant DNA Molecules*, 185 SCIENCE 303 (1974).

125. Swazey, Sorenson & Wong, *Risks and Benefits, Rights and Responsibilities: A History of the Recombinant DNA Research Controversy*, 51 S. CAL. L. REV. 1019, 1029 (1978). The conference, held at Asilomar, California in early 1975 proposed proceeding with most but not all DNA experiments, provided researchers complied with physical and biological safety measures aimed at varying levels of hazard. Berg, Baltimore, Brenner, Roblin & Singer, *Asilomar Conference on Recombinant DNA Molecules*, 188 SCIENCE 991 (1975).

126. Department of Health, Education and Welfare, National Institutes of Health, Recombinant DNA Research Guidelines, 41 Fed. Reg. 27,902 (1976) [hereinafter cited as DNA Guidelines]. Neither the original conference, the Asilomar meeting, nor the NIH guidelines subsequently enacted provided for public participation in decision making concerning DNA research. Critics thus charged that the proposals amounted to scientists asking to regulate themselves. *See* Nelkin, *Threats and Promises: Negotiating the Control of Research*, DAEDALUS, Spring 1978, at 191, 196; Pepich, *Formulation of the NIH Guidelines for Recombinant DNA Research as an Exercise in Due Process*, 73 AMER. SOC. INT. L. PROC. 219, 231 (1979); Wade, *Gene Splicing Rules: Another Round of Debate*, 199 SCIENCE 30, 33 (1978) (potential for conflict of interest when NIH acts as "sponsor, conductor, and regulator" of recombinant DNA research). They asked whether in a climate of intense competition scientists would voluntarily comply with guidelines that inhibited their research, and suggested that in a controversy as heavily political and ethical as the one over DNA research, there is a great need for public participation. *Id.*

127. *See* Woolf, *supra* note 112, at 11–13 (discussing journals' reluctance to publish retractions or notices of suspect data). Sometimes, the decision whether or not an article has scientific "merit" can become controversial. The University Action Group,

gested that an effective means of controlling violations of safety and ethical standards in research is to prevent publication of research conducted in violation of these standards.[128] In 1970, the Council of Biology Editors recommended that when editors evaluate articles based on research subject to ethical standards, criteria of publishability include the extent to which the research met those standards.[129] Others, including David Baltimore, an influential recombinant DNA scientist, have recommended that all articles be required to contain a statement of the safety measures observed in connection with the research.[130] NIH Director Donald Fredrickson made a similar recommendation.[131] The assumption underlying these proposals is that the desire to publish would motivate researchers to comply with appropriate safety and ethical standards.

b. *Measures aimed at scientific fraud.* Fraudulent scientific data, including race-IQ research results, present a grave potential for harm.[132] Thus, measures aimed at detecting such fraud may seem in order, and editors of scientific journals have begun to consider guidelines designed to minimize its occurrence.[133] But because researchers have long considered fraud an aberration,[134] to date few journals have instituted procedures for dealing with publication of falsified data. One journal requires that authors sub-

---

a Harvard faculty organization, protested the publication in the *Atlantic Monthly* of Richard Herrnstein's views on intelligence research. *See* Ireland, *The Relevance of Race Research*, 84 ETHICS 140, 141 (1974). *See also* 157 PUBLISHER'S WEEKLY 2739 (1950) (prominent astronomers attempted to force publishers of Immanuel Velikovsky's book, WORLDS IN COLLISION, to halt publication because his theories conflicted with their own). Most editors, however, do not view their responsibilities as including the monitoring of papers submitted to assure that the investigators followed accepted ethical practices. Brackbill & Hellegers, *Ethics and Editors*, 10 HASTINGS CENTER REP. 20 (1980); Curran, *Law-Medicine Notes: The Law and Human Experimentation*, 275 NEW ENG. J. MED. 323, 325 (1966).

128. *See* Debakey, *Ethically Questionable Data: Publish or Reject?*, 22 CLINICAL RESEARCH 113 (1974). *See also* Debakey, *Scientific Publishing*, in 1 ENCYCLOPEDIA OF BIOETHICS 188–94 (W. Reich ed. 1978); Abelson, *The Editing of Science*, SCIENCE, March 19, 1971, at 1101.

129. Brackbill & Hellegers, *supra* note 127, at 20.

130. Public Health Service, National Institutes of Health, U.S. Dept. of Health, Education, and Welfare, P.B. No. 76-1133, 1 RECOMBINANT DNA RESEARCH 251 (1976).

131. DNA Guidelines, *supra* note 126, at 27,902 and 27,912.

132. Some race-IQ research, years after its publication, has been pronounced fraudulent. Cyril Burt, an early pioneer in heritability of intelligence studies who influenced Jensen and others, is now widely regarded to have altered fraudulently the results of many of his studies over a long scientific career. *See* B. EVANS & B. WAITES, *supra* note 22, at 159–64; Kellog, *The Case of the Suggestible Psychologist*, PSYCHOLOGY TODAY, Aug. 1982, at 69.

133. *See* Woolf, *supra* note 112, at 13.

134. *Id.* at 9–11; Broad & Wade, *Science's Faulty Fraud Detectors*, PSYCHOLOGY TODAY, Nov. 1982, at 51.

mitting work for consideration agree to make their data books available for five years.[135] Other journals are reluctant even to print retractions when an article is shown to contain fabricated or fraudulent material.[136]

B. *Regulation Through Employment Sanctions at the Institutional Level*

Academic research may also be regulated through an institution's control over tenure, promotion, and merit increases. An academic institution may legitimately take into account a faculty member's research interests and record when making employment and promotion decisions.[137] It may restrict newly hired faculty to particular research topics or place reasonable restrictions on the conduct of their research.[138] An institution may also review a professor's scholarly and instructional records periodically to determine whether or not they justify awarding tenure.[139] Once tenure is granted, reviews similar to those of nontenured faculty members are carried out to determine promotions and merit raises.[140] At each of these stages, disapproval of a professor's area of research or the manner in which it is conducted can affect a scientist's advancement. This is particularly true of the untenured professor. One science writer has written that intra-academic politics at Harvard University during the Cambridge hearings on recombinant DNA research pressured younger, untenured faculty into silence.[141] Speaking or teaching opportunities and tenure have reportedly been denied to scientists who advocated positions their departments or universities found unpopular or controversial.[142]

---

135. *See* Woolf, *supra* note 112, at 13.

136. *Id.* at 14.

137. *See infra* notes 238–73, 279–83, 381–92 and accompanying text.

138. *See generally* Robertson, *supra* note 14, at 1203, 1232.

139. Olswang & Fantel, *Tenure and Periodic Performance Review: Compatible Legal and Administrative Principles*, 7 J. C. & U. L. 1, 25 (1980/1981).

140. W. FURNISS, FACULTY TENURE AND CONTRACT SYSTEMS—CURRENT PRACTICE (Am. Council on Educ. Spec. Rep. 1972). *See generally* Brown, *Tenure Rights in Contractual and Constitutional Context*, 6 J. L. & EDUC. 279 (1977) (protection afforded by tenure and interaction between tenure and constitutional rights); *Developments in the Law—Academic Freedom*, 81 HARV. L. REV. 1045, 1048 (1968) (broad review of academic freedom in higher education including role of tenure in protecting that freedom).

141. Wade, *Gene Splicing: Critics of Research Get More Brickbats than Bouquets*, 195 SCIENCE 466, 466–67 (1977) (critics of recombinant DNA research who have spoken out against gene-splicing pressured into silence for fear of being fired).

142. Wicker, *The Shockley Case*, N.Y. Times, Nov. 16, 1973, § I, at 41, col. 5 (Harvard cancelled a scheduled debate between Professor William Shockley of Stanford and Roy Innis of the Congress of Racial Equality largely because of protests from the Black Law Students Association). *See also* N.Y. Times, Dec. 2, 1973, § I, at 51, col. 1 (Princeton sponsors debate between Shockley and Innis amid student pro-

C. *Regulation Through Public Funding*

1. Funding Decisions and Peer Review

Because some scientists are dependent on support from the federal government for basic research,[143] the government's power of the purse can be used to discourage undesired research or channel it into acceptable directions. The primary method by which the federal government dispenses money for the support of basic research, including research supported by the National Institutes of Health and the National Science Foundation, is peer review.[144] These agencies convene juries of non-government scientists to advise the government as to which research proposals to fund. The scientists who serve on these juries must be employed by nonprofit institutions, be active in research, and be distinguished in their fields.[145] The proposals are ranked, and the institute funds the highest ranked until its research funds are exhausted.[146] Because there is a marked disparity in funding among the various institutes, a meritorious proposal assigned to a cash-poor institute may go without funding.[147]

The peer review system seems to operate without systematic bias,[148] although the preferences and predilections of reviewers do affect the likelihood that a particular grant will be funded.[149] The subjectivity inherent in the peer review system and in the initial decision to allocate funding among the various institutes can cause researchers to avoid lines of research that seem promising but that they fear a reviewing panel would find philosophically unacceptable.[150]

2. Administrative regulation to assure consent and minimize harm to human subjects

In 1974, in response to a series of incidents that raised questions about researchers' obligations to human subjects,[151] the fed-

---

test but strictly limits attendance and press coverage). *Why You Do What You Do—SOCIOBIOLOGY: A New Theory of Behavior*, TIME, Aug. 1, 1977, at 54 (Professor Robert Trivers, a leader of the sociobiology movement, denied tenure at Harvard, although the University asserted his work in sociobiology was not the reason).

143. *See infra* note 152.

144. Wade, *Peer Review System: How to Hand Out Money Fairly*, 179 SCIENCE 158, 158 (1973).

145. *Id.*

146. *Id.*

147. *Id.* at 161.

148. *See, e.g.*, Cole, Cole & Simon, *Chance and Consensus in Peer Review*, 214 SCIENCE 881 (1981) (discussing National Science Foundation's peer review system).

149. *See id.* at 885.

150. *See* Seiler & Murtha, *Government Regulation of Research*, SOCIETY, Nov.-Dec. 1980, at 23.

151. *Id.* The incidents included reports that medical researchers at the Jewish

eral government issued regulations to protect the subjects of biomedical and behavioral research.[152] The regulations require researchers to obtain approval of research plans from local Institutional Review Boards for all research involving human subjects that is funded by the Department of Health and Human Services.[153] Local boards are composed of at least five members. At least one member must be concerned primarily with nonscientific areas and another must not be affiliated with the institution.[154] Boards are required to evaluate proposed research to determine whether the anticipated benefit to the subject and society is reasonable in relation to the risk of harm,[155] and to assure that informed consent is obtained.[156] Although mainly charged with protecting subjects from physical harm, some boards have expanded their purview to include economic, psychological and social injury.[157] When a particular area of research poses an unusual degree of danger, additional guidelines may be enforced.[158]

Chronic Disease Hospital in New York had injected live cancer cells into patients without their knowledge, and that the United States Public Health Service had withheld treatment for syphillis from 400 indigent black research subjects who were part of a long-term study to determine the effects of the disease. Pattulo, *Reconciling Risk and Regulation*, SOCIETY, Nov.-Dec. 1980, at 34. There were also instances of objectionable procedures outside the biomedical area, for example the social scientist who secretly observed homosexual activity in restrooms and then interviewed the participants under the guise of a public health survey after tracing them to their homes. Humphreys, *Tearoom Trade—Impersonal Sex in Public Places*, TRANS-ACTION, Jan. 1970, at 10, 15 (cited in Bok, *supra* note 109, at 127 n.4).

152. 45 C.F.R. § 46 (1982). The Health and Human Services Department is the largest source of funds for medical and behavioral research in the United States. *New HHS Rules for Research on Humans*, 119 SCI. NEWS 69 (1981) [hereinafter cited as *New Rules*]. The rules require that any institution that receives HHS funds file an "assurance" of steps taken to protect human subjects of all research. In addition, an institution must file a statement of ethical principles for all research, regardless of source of funding. 45 C.F.R. § 46.103 (1982).

153. 45 C.F.R. § 46.103 (1982); *New Rules*, *supra* note 152, at 69–70 (listing types of research exempt from Institutional Review Board approval).

154. 45 C.F.R. § 46.107 (1982).

155. 45 C.F.R. § 46.111(2) (1982).

156. 45 C.F.R. §§ 46.111(4)(5), 46.116 (1982).

157. *See, e.g.*, Diamond, *supra* note 74, at 11–12.

158. For example, at the request of DNA scientists following the Asilomar meeting, *see supra* note 125, the National Institute of Health adopted detailed guidelines for recombinant DNA research. The guidelines require review and approval of projects by an impartial local committee, and assign four levels of biological and physical containment which are matched to scaled assessments of potential risk. 43 Fed. Reg. 60,080, 60,109–13, 60,124–25 (1978).

Under the guidelines, prime responsibility for ensuring the safety of recombinant DNA experiments lies with the principal investigator and local Institutional Biosafety Committee. 45 Fed. Reg. 77,398–400 (1980). There is a provision for on-site inspection of the research, but the only sanction for violation is termination of funding for the institution where the violation occurs. *Id.* A few violations of the guidelines have been reported. *See, e.g.*, J. LEAR, RECOMBINANT DNA: THE UNTOLD STORY 204–07

D. *Direct Regulation of Research by Government*

The federal government can also directly regulate certain types of research under the interstate commerce clause[159] or the federal police power.[160] Governmental regulation could take the form of a complete prohibition, or regulation of the manner in which research is conducted. The first congressional moratorium on a specific type of research began in 1974, with the introduction of several bills in Congress to ban fetal experimentation. At the same time, federal legislation was pending that would establish an ethical advisory board, the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research.[161] To assure passage of the latter legislation, the Commission's supporters accepted a moratorium on fetal research until the Commission could develop a fetal research policy.[162] The Commission ultimately recommended that most fetal research continue, although it imposed conditions including informed consent by the parents, prior studies with animals, and absence of alternative means to obtain the knowledge sought.[163] The federal government accepted the Commission's report, clearing the way for the research to continue.[164]

Congress also has the power to regulate the manner in which research is conducted. In recent years, the only areas of research that have been proposed for detailed congressional review are re-

(1978) (failure of Harvard University and one of its researchers to file appropriate paperwork); Wade, *Recombinant DNA; NIH Rules Broken in Insulin Gene Project*, 197 SCIENCE 1342, 1342–45 (1977) (similar incidents at the University of California, San Francisco).

159. Article I, Sec. 8 of the United States Constitution confers on Congress the power to "regulate Commerce . . . among the several states . . . ." This power would seem broad enough to encompass scientific research that is likely to create broadscale economic effects. *See, e.g.*, 21 U.S.C. §§ 347, 347A (1976) (regulation of a food additive); 21 U.S.C. § 360 (1976) (registration requirement for producers of drugs).

160. Although the Constitution does not enumerate a general federal police power, liberal interpretations of the Necessary and Proper Clause have given Congress a broad power to legislate in the interest of the public health, safety, welfare, or morals. *See* Perez v. United States, 402 U.S. 146, 151–54 (power to control loan sharks under Commerce Clause) (1971); Duke Power Co. v. Carolina Environmental Study Group, 438 U.S. 59 (1978) (power to limit liability for nuclear accidents under Due Process clause).

161. National Research Service Award Act of 1974, Pub. L. No. 93-348, §§ 201–215, 88 Stat. 342, 348–54 (1974). *See Senate Approves a Permanent Ethics Commission*, 201 SCIENCE 138 (1978) (discussing prospect that Commission will become a permanent one).

162. Culliton, *Science's Restive Public*, DAEDALUS, Spring 1978, at 147, 154–55.

163. Yesley, *The Use of an Advisory Commission*, 51 S. CAL. L. REV. 1451, 1459–60 (1978) (Author Michael Yesley served as Staff Director of the Commission during the period in question).

164. *Id.* at 1466–67. *See* 45 C.F.R. §§ 46.201–211 (1982).

combinant DNA research[165] and research having national security implications.[166]

A number of municipalities and states have also considered or enacted legislation controlling types and scope of research, particularly research in the life sciences.[167] In 1976, for example, the city council of Cambridge, Massachusetts enacted a three-month moratorium on recombinant DNA research at all laboratories situated within the city limits.[168] The moratorium was lifted after a review board set up to hear the views of citizens and scientists recommended continuation of the research.[169] A similar ordinance was passed ten months later by the city of Berkeley, California.[170]

III. JUDICIAL REVIEW OF RESTRICTIONS PLACED ON RACE-IQ RESEARCH

Each of the regulatory approaches discussed in the previous Part could be applied to limit the freedom of a race-IQ researcher in carrying out his or her chosen line of inquiry.[171] A few actually

165. *See* Talbot, *Introduction to Recombinant DNA Research, Development and Evolution of the NIH Guidelines, and Proposed Legislation*, 12 U. TOL. L. REV. 804, 810 (1981). *See also* Culliton, *Recombinant DNA Bills Derailed: Congress Still Trying to Pass A Law*, 199 SCIENCE 274 (1978); Pepich, *Formulation of the NIH Guidelines for Recombinant DNA Research as an Exercise in Due Process*, 73 AM. SOC'Y INT'L L. PROC. 219, 226–27 (1979).

166. *See* 42 U.S.C. § 2274(b) (1976) (official secrets statute). The American Association for the Advancement of Science considers governmental control over particular types of research objectionable and argues that "(w)e should look at claims of 'national security' with a very critical eye . . . ." Edsall, *supra* note 121, at 689. *Science* magazine, in which Ed Edsall's article appears, is the official publication of the American Association for the Advancement of Science. *See generally* Paine, *Admiral Inman's tidal wave*, BULL. ATOM. SCI., Mar. 1982, at 3 (similar reactions to further regulatory proposals).

167. *See* CAMBRIDGE, MASS., REV. ORDINANCES ch. 11, art. I, § 11.7 (1950); PRINCETON, N.J., REV. ORDINANCES ch. 26A § 1-13 (1978); AMHERST, MASS., BY-LAWS art. III, § 10 (1978); Berkeley, Cal. Ordinance 5010 (1977); N.Y. PUB. HEALTH LAW § 3220 (McKinney Supp. 1982); MD. PUB. HEALTH CODE ANN. § 898 (1977). *See generally* Wade, *Gene Splicing: At Grass Roots Level a Hundred Flowers Bloom*, 195 SCIENCE 558 (1977).

168. Wade, *Gene Splicing: Cambridge Citizens OK Research but Want More Safety*, 195 SCIENCE 268, 268 (1977) (reviewing governmental and business efforts to regulate gene-splicing research across the nation). *See also* N.Y. Times, July 8, 1976, § I, at 12, col. 5.

169. *The Cambridge Experimentation Review Board*, BULL. ATOM. SCI. May 1977, at 22, 22 and 24–27 (1977) (text of board's report); *Cambridge resumes genetic research*, 111 SCI. NEWS 103, 103 (1977) (new ordinance restricting high-risk research and providing fines and possible shut-down of violating labs).

170. Berkeley, Cal., Ordinance 5010 (1977). *See also* Chalfant, Hartmann & Blakeboro, *Recombinant DNA: A Case Study in Regulation of Scientific Research*, 8 ECOLOGY L.Q. 55, 119 n.128 (1979) (discussing benefits and detriments of local regulation).

171. Race-IQ researchers could institute a self-designed moratorium, *see supra*

have been implemented,[172] while others have only been proposed.[173] Regardless of regulatory mode, it is likely that any severe governmental restriction on race-IQ research would be subject to a court challenge. In any such suit, the court will first need to determine the applicable standard of review when official action abridges the ability of a scientist to pursue a line of investigation.

A. *The Extent of First Amendment Protection of Scientific Inquiry*

Legal commentators have recently begun to assess the extent of constitutional protection for scientific activities.[174] Scholars

---

notes 123–26 and accompanying text, or agree to ethical screening through professional journals, *see supra* notes 127–36 and accompanying text. They could enact persuasive policy statements against the conduct of certain types of research, *see supra* notes 116–21 and accompanying text. Research institutions could attempt to dissuade such research through various sanctions, *see supra* notes 137–42 and accompanying text. Additional regulatory mechanisms not reviewed earlier, but which might plausibly be invoked, are the public purpose doctrine, which restricts the use of public funds to expenditures providing a public benefit, *see, e.g.*, People v. Parks, 58 Cal. 624 (1881); the conflict of interest rules, designed to avoid the possibility that private sponsorship will interfere with faculty members' university responsibilities, *see, e.g.*, Weston, *"Outside" Activities of Faculty Members*, 7 J. C. & U. L. 68, 74 (1980/1981); and time, place, or manner of research regulations promulgated by scientific or governmental bodies in the interest of national security, *see, e.g.*, 42 U.S.C. 2274 (Supp. 1983) (communication of restricted atomic energy data).

172. *See supra* text accompanying notes 119–21 (measures aimed at controlling or prohibiting race-IQ research), *infra* text accompanying note 388.

173. *See supra* text accompanying notes 71–78 (proposals to restrict race-IQ research). *See also* A. JENSEN, GENETICS AND EDUCATION 32–37 (1972) (summarizing opposition to his views and defending his publications); Gomberg, *IQ and Race: A Discussion of Some Confusions*, 85 ETHICS 258, 264–65 (1974) (questioning whether Jensen should have been published based on balancing of scientific merit versus threat to human beings).

174. Articles that have addressed the issue include: Berger, *Government Regulation of the Pursuit of Knowledge: The Recombinant DNA Controversy*, 13 VT. L. REV. 83 (1978); Delgado & Millen, *supra* note 1; Favre & McKinnon, *supra* note 14; Ferguson, *Scientific and Technological Expression: A Problem in First Amendment Theory*, 16 HARV. C.R.-C.L. L. REV. 519 (1981); Ferguson, *supra* note 14; Lederberg, *The Freedoms and the Controls of Science: Notes from the Ivory Tower*, 45 S. CAL. L. REV. 596 (1972); Robertson, *supra* note 14; Note, *First Amendment Protection for Biomedical Research*, 19 ARIZ. L. REV. 893 (1977); Note, *Governmental Control of Positive Eugenics*, 7 U. MICH. J. L. REFORM 615, 631–35 (1974); Note, *Considerations in the Regulation of Biological Research*, 126 U. PA. L. REV. 1420, 1427–35 (1978).

According to Professor Tribe, the Supreme Court has recognized the tendency of government entities to coerce uniformity by restricting the availability of knowledge, and has imposed upon government "a duty not to preempt choices better left within the less centralized decision-making processes" of individuals. L. TRIBE, AMERICAN CONSTITUTIONAL LAW 902 (1978). Tribe nevertheless distinguishes government regulations of scientific inquiry which aim to prevent harms unconnected with the subject of the inquiry itself (*e.g.*, hazardous research methods) from regulations which restrict inquiry "because of harms thought likely to follow from what the research will uncover about the nature of reality . . . ." *Id.* at 904. The former regulations are sub-

generally agree that the communicative or expressive activities of scientific inquiry are protected by the first amendment.[175] They disagree, however, concerning the extent of protection that should be extended to noncommunicative scientific activities[176] and the

---

ject to the relaxed scrutiny appropriate for laws which incidentally restrict the flow of information, *id.*, while the latter are likely to be rejected by the Court because their justification "rests . . . on the advantages of [people] being kept in ignorance." *Id.* at 905 (quoting Virginia State Bd. of Pharmacy v. Virginia Citizens' Consumer Council, 425 U.S. 748, 769 (1976)). Thus, Tribe concludes that any governmental decision to halt a form of scientific inquiry, "because of the fear that its results might dangerously alter popular ways of viewing human nature and might thus erode respect for individual rights and personal dignity, is immediately suspect as a usurpation of the sort of choice that ought to be made at more decentralized, personal levels." *Id.* Tribe qualifies this assessment, however, by stating that the more one can link irreversible shifts in basic conceptions or ideals to a specific line of inquiry, and the less one can accept "as realistic" the model of decentralized choice on the questions at stake, "the stronger becomes the argument for a collective, society-wide decision . . . to suspend . . . an avenue of inquiry." *Id. See also* Tribe, *Technology Assessment and the Fourth Discontinuity: The Limits of Instrumental Rationality*, 46 S. CAL. L. REV. 617, 648–49 (1973).

Professor Tribe's analysis of the Court's concern over decentralized decision making appears to be correct. In the Supreme Court's view, restrictions on the content of speech would undercut the "profound national commitment to the principle that debate on public issues should be uninhibited, robust, and wide-open . . . ." New York Times Co. v. Sullivan, 376 U.S. 254, 270 (1964). Debate is certainly preliminary to, and mandatory for, informed decision making. Thus, once an expression or activity has been characterized as protected speech, the Court has forcefully stated that the first amendment denies the government the power to restrict that expression because of its message, its ideas, its subject matter, or its content. Police Dep't of Chicago v. Mosley, 408 U.S. 92, 95 (1972). To be sure, the initial question as to whether a form of speech is or is not protected will depend upon the content of the speech and the benefits and harms likely to flow from that content. Young v. American Mini Theaters, Inc., 427 U.S. 50, 66 (1976). Within the area of protected speech, however, variations in content rarely justify different government responses. *E.g.*, *New York Times*, 376 U.S. at 254–56. Thus, it is one of the "cardinal principles" of first amendment law that regulations that affect protected expression be content-neutral. *American Mini Theaters*, 427 U.S. at 85–86 (Stewart, J., dissenting). Professor Tribe has applied this principle to any effort to distinguish between government restrictions on scientific inquiry based on the harms sought to be prevented.

175. Commentators generally begin their analyses by breaking down scientific inquiry into its communicative and noncommunicative elements. For example, Delgado & Millen, *supra* note 1, at 372–82, identify the functional components of scientific inquiry as follows: creation of ideas; experimentation and fact gathering; and dissemination of ideas. Favre & McKinnon, *supra* note 14, at 79–83, list the components as including: observation; formulation of hypothesis; experimentation and communication.

176. "The conclusion is reached that all three levels of analysis—constitutional history, first amendment theory, and first amendment case law—support the *inclusion of many forms of basic scientific research* within the system of protected expression." Delgado & Millen, *supra* note 1, at 353–54 (emphasis added).

"It is one effort of this Article to suggest that scientific inquiry—the actual process of experimental investigation—merits *some degree of protection* under the free speech clause of the first amendment. . . ." Ferguson, *supra* note 14, at 639–40 (emphasis added).

"This Article argues that the first amendment protects research by scientists and

rationales for extending such protection.[177] Despite differences in analysis, one common thread runs through the existing literature on the subject: scientific inquiry, consisting of both communicative and noncommunicative activities, constitutes a recognizable and unique *process* of communication which should receive some degree of constitutional protection.

1. Protection for communicative scientific activities

The Supreme Court has stated that "[a]ll ideas having even the slightest redeeming social importance—unorthodox ideas, controversial ideas, even ideas hateful to the prevailing climate of opinion—have the full protection of the [first amendment]".[178] In the last decade, however, the Court has established a "scale of First Amendment values,"[179] within which different kinds of speech will receive different measures of protection depending upon their position on the scale.[180] At one end of the scale, some speech receives no protection because "such utterances are no essential part of any exposition of ideas, and are of such slight social value as a step to truth that any benefit that may be derived from them is clearly outweighed by the social interest in order and morality."[181] Among the unprotected kinds of speech are pornography and obscenity,[182] "fighting words,"[183] speech which incites violence,[184] and ordinary libel of nonpublic figures.[185] If speech

---

others *to the same extent* that more conventional forms of speech are protected, thus granting to scientists a large measure of, but by no means absolute, autonomy in their choice of research topics and methods." Robertson, *supra* note 14, at 1204 (emphasis added).

177. *See infra* text accompanying notes 203–15.

178. Roth v. United States, 354 U.S. 476, 484 (1957) (speech broadly protected).

179. Ohralik v. Ohio State Bar Ass'n, 436 U.S. 447, 456 (1978).

180. Ferguson, *supra* note 14, at 645: "[I]t now appears that the Supreme Court is moving toward a hierarchical view of the first amendment, a view that assigns different levels of constitutional protection to different kinds of expression."

181. Chaplinsky v. New Hampshire, 315 U.S. 568, 572 (1942).

182. Roth v. United States, 354 U.S. 476 (1957).

183. Chaplinsky v. New Hampshire, 315 U.S. 568 (1942).

184. Brandenburg v. Ohio, 395 U.S. 444 (1969).

In addition to state regulation of unprotected forms of speech, regulation of protected speech based on content may be constitutional if justified by the dangers of imminent lawless action. The test for such cases was originally articulated by Justice Brandeis in Whitney v. California, 274 U.S. 357 (1927), *rev'd*, 395 U.S. 449 (1969):

> [N]o danger flowing from speech can be deemed clear and present, unless the incidence of the evil apprehended is so imminent that it may befall before there is opportunity for full discussion. If there be time to expose through discussion the falsehood and fallacies, to avert the evil by the processes of education, the remedy to be applied is more speech, not enforced silence. Only an emergency can justify repression.

Id. at 377 (Brandeis, J., concurring). In Brandenburg v. Ohio, 395 U.S. 444 (1969) (per curiam), the Court narrowed the "clear and present danger test," stating that the state may not "forbid or proscribe advocacy of the use of force or of law violation

does not fall into these categories, it will receive at least some protection. For example, erotic expression and indecent language receive less than full protection because the social value of such speech is limited.[186] Commercial speech also receives intermediate protection because of the government's strong interest in protecting the public from false or misleading advertising[187] and because commercial speech has traditionally been considered to have relatively less significance for first amendment concerns.[188] All speech that does not fall within these exceptional categories, however, has apparently been accorded full protection.[189]

---

except where such advocacy is directed to inciting or producing imminent lawless action and is likely to incite or produce such action." *Id.* at 447.

According to Professor Robertson, publication and research could be penalized under the above standard

> only in extreme situations where there is a high probability of serious risk to others that is uncontrollable by less restrictive means . . . . To ban research, the government would have to show a high probability, approaching imminence, that the research would yield knowledge that, if available, would very likely lead to substantial harms that the government may legitimately prevent, that no other means would as effectively reduce the harm, and that the predicted beneficial uses of the knowledge would be small.

Robertson, *supra* note 14, at 1251-52.

185. Gertz v. Robert Welch, Inc., 418 U.S. 323 (1974).

186. In Young v. American Mini Theaters, Inc., 427 U.S. 50 (1976), Justice Stevens wrote:

> [s]ociety's interest in protecting this type of [erotic] expression is of a wholly different, and lesser, magnitude than the interest in untrammeled political debate that inspired Voltaire's immortal comment. Whether political oratory or philosophical discussion moves us to applaud or to despise what is said, every schoolchild can understand why our duty to defend the right to speak remains the same. But few of us would march our sons and daughters off to war to preserve the citizen's right to see "Specified Sexual Activities" exhibited in the theaters of our choice.

Id. at 70. *See also* Board of Educ. v. Pico, 102 S. Ct. 2799 (1982) (suggesting that school boards may remove "pervasively vulgar" books from school libraries); FCC v. Pacifica Found., 438 U.S. 726 (1978) (the broadcasting of speech which is concededly not obscene but is indecent may nevertheless be regulated because it is patently offensive and lies at the periphery of first amendment concern); Ginsberg v. New York, 390 U.S. 629 (1969) (dissemination of erotic but nonobscene matter to minors may be outlawed).

187. Central Hudson Gas & Elec. Corp. v. Public Serv. Comm'n, 447 U.S. 557, 563 (1980) ("The first amendment's concern for commercial speech is based on the informational function of advertising. . . . The government may ban forms of communication more likely to deceive the public than to inform it.")

188. Ohralik v. Ohio State Bar Ass'n, 436 U.S. 447, 455-56, *reh'g denied*, 439 U.S. 883 (1978) ("We have not discarded the 'common-sense' distinction between speech proposing a commercial transaction, which occurs in an area traditionally subject to government regulation, and other varieties of speech.").

189. L. TRIBE, *supra* note 174, at 577-79. Several commentators, and apparently one Supreme Court Justice, have argued against this broad protection, reasoning that first amendment coverage should be reserved for speech which is expressly political. *See* Buckley v. Valeo, 424 U.S. 1, 235 (1976) (Burger, C.J., concurring & dissenting in

What position should scientific expression—publishing, teaching, lecturing—be assigned in this scale of first amendment values? Although the Court has never directly addressed the issue, it has acknowledged the significant social value of scientific expression in cases decided on other grounds[190] and in dicta.[191] Such indirect statements of the social value of scientific expression are doubtlessly grounded in the liberal tradition of respect for scientific endeavor,[192] a tradition of particular strength in the United

---

appendix). *See also id.* at 14–15 (per curiam opinion) (discussion of public issues and debate on the qualifications of candidates are in an area of the most fundamental first amendment activities). *See also* BeVier, *The First Amendment and Political Speech: An Inquiry Into the Substance and Limits of Principle*, 30 STAN. L. REV. 299 (1978); Bork, *Neutral Principles and Some First Amendment Problems*, 47 IND. L.J. 1, 20 (1971) ("[c]onstitutional protection should be accorded only to speech that is explicitly [sic] political. There is no basis for judicial intervention to protect any other form of expression, be it scientific, literary or . . . obscene or pornographic.").

Nevertheless, the Supreme Court has stated that the societal interest in first amendment protection is broader than political discussion, and extends to discussions of philosophical, social, artistic, economic, or ethical matters. *See* Abood v. Detroit Bd. of Educ., 431 U.S. 209, 231 (1977); L. TRIBE, *supra* note 174, at 579.

190. *See* Paris Adult Theatre v. Slaton, 413 U.S. 49, 67 (1973), *reh'g denied*, 414 U.S. 881 (1973); Epperson v. Arkansas, 393 U.S. 97, 107–09 (1968); Griswold v. Connecticut, 381 U.S. 479, 482 (1965); Sweezy v. New Hampshire, 354 U.S. 234, 261–62 (1957) (Frankfurter, J., concurring). When directly confronted with cases involving first amendment protection for scientific expression, lower courts have also indicated that scientific expression has social value. *See, e.g.*, United States v. Doe (In re Popkin), 460 F.2d 328 (1st Cir. 1972), *cert. denied*, 411 U.S. 909 (1973); Henley v. Wise, 303 F. Supp. 62 (N.D. Ind. 1969); Richards of Rockford, Inc. v. Pacific Gas & Elec. Co., 71 F.R.D. 388 (N.D. Cal. 1976). *But see* Trachtman v. Anker, 563 F.2d 512 (2d Cir. 1977), *cert. denied*, 435 U.S. 925 (1978). *See generally* Robertson, *supra* note 14, at 1240–46.

191. *See, e.g.*, FCC v. Pacifica Found., 438 U.S. 726, 746–47 (1978), *reh'g denied*, 439 U.S. 883 (1978) (although words which "ordinarily lack literary, political or *scientific* value . . . are not entirely outside the protection of the First Amendment. . . . [t]he constitutional protection accorded to a communication containing . . . patently offensive sexual and excretory language need not be the same in every context.") (emphasis added); Miller v. California, 413 U.S. 15, 34 (1973), *reh'g denied*, 414 U.S. 881 (1973) ("The First Amendment protects works which, taken as a whole, have . . . *scientific* value, regardless of whether the government or a majority of the people approve of the ideas these works represent.") (emphasis added); Gertz v. Robert Welch, Inc., 418 U.S. 323, 357–58 n.6 (1974) (Douglas, J., dissenting); Roth v. United States, 354 U.S. 476, 484 (1957).

192. [T]he lessons drawn from . . . historic efforts to restrict the scientific endeavor have informed a Western liberal tradition that takes as its central tenets the inherent dignity of ideas, the sanctity of knowledge and the value of intellectual freedom. Rooted in the rationalist spirit of the eighteenth century Enlightenment, this liberal tradition holds that the essence of human nature lies in the life of the mind; that the acquisition of knowledge is therefore the highest of human pursuits; and that the free exchange of ideas is the *sine qua non* of liberty. From this perspective, the scientific endeavor stands as its own justification, commanding a full measure of protection from the pressures of public opinion and the constraints of official power.

Ferguson, *supra* note 14, at 641.

States.[193] Thus, given the value society places on scientific expression, and the inapplicability of any of the announced exceptions to first amendment protection,[194] it seems clear that scientific expression should be accorded constitutional protection. The question is: how much protection?

There is a strong argument to be made for according scientific expression at least the level of protection accorded to commercial speech. James Ferguson argues[195] that this degree of protection is appropriate because scientific expression promotes the three major societal interests that lie at the heart of the first amendment according to *Virginia State Board of Pharmacy v. Virginia Citizens Council, Inc.*,[196] the seminal commercial speech decision. The three societal interests identified by the Court include: (1) the individual's interest in self-expression;[197] (2) the general societal interest in free flow of information;[198] and (3) the specific social interest in enlightened public decision making.[199] Assuming Ferguson's analysis is generally correct,[200] scientific expression

193. For a collection of historical references to the virtues of science, including several by the Framers, see Delgado & Millen, *supra* note 1, at 354–61. *See also* Favre & McKinnon, *supra* note 14, at 712–19.

194. *See supra* notes 181–84 and accompanying text.

195. Ferguson, *supra* note 14, at 645–48.

196. 425 U.S. 748, 761–65 (1976).

197. "[S]cientists clearly have strong individual interests in the free exchange of scientific data and ideas. These interests . . . are largely intellectual in nature, and thus—unlike the economic concerns that underlie commercial advertising—they are fully consistent with prevailing views of free expression as a mode of self-realization." Ferguson, *supra* note 14, at 647.

198. The public-at-large also has strong interests in the free flow of scientific information. A system of unregulated scientific expression not only enables scientists to draw on the work of colleagues, but also tests the validity of hypotheses against current data and opposing views. In these ways, it promotes the discovery of scientific truth, and thus fosters the technological and intellectual advances that contribute to the quality of modern life and the collective wisdom of the culture.

Ferguson, *supra* note 14, at 647. *See also* Virginia State Bd. of Pharmacy, 425 U.S. at 764 ("Generalizing, society may also have a strong interest in the free flow of commercial information.").

199. "[W]hile commercial information is relevant only to questions of economic policy, scientific information has a direct bearing on questions of national security, the environment, energy, health care, education and agriculture. In these areas and others, therefore, the dissemination of scientific opinion and data is indispensable to informed public participation in the decision making process." Ferguson, *supra* note 14, at 648.

See also First Nat'l Bank v. Bellotti, 435 U.S. 765, 791 (1978), *reh'g denied*, 438 U.S. 907 (1978) ("[T]he people in our democracy are entrusted with the responsibility for judging and evaluating the relative merits of conflicting arguments."); Roth v. United States, 354 U.S. 476, 484 (1957) ("The protection given speech and press was fashioned to assure unfettered interchange of ideas for the bringing about of political and social changes desired by the people."); Meiklejohn, *The First Amendment Is An Absolute*, 1961 SUP. CT. REV. 245, 257.

200. In a similar vein, Professor Delgado and David Millen, *supra* note 1, at

arguably deserves more protection than commercial speech. Unlike commercial speech, scientific expression has not historically been subject to government regulation, nor has it ever been unprotected under first amendment doctrine.[201] Therefore, were the Court to address the issue directly, it is highly probable that scientific expression would receive full protection under the first amendment.[202]

2. Protection for noncommunicative scientific activities

Although scientific expression is protected by the first amendment, the noncommunicative activities of science, including research, are not necessarily accorded the same status. Yet research is so intimately connected with the scientist's goal of generating and communicating information that without protection of this aspect of science, the right to communicate would be meaningless.[203]

One possible approach to finding a basis for protecting the

364–67, find that scientific inquiry generally serves Professor Thomas Emerson's four premises for freedom of expression set out in T. EMERSON, THE SYSTEM OF FREEDOM OF EXPRESSION 6–8 (1970):

> (i) *Freedom of expression advances individual self fulfillment.*
> ("For serious scientists, science is a fully engrossing endeavor that may constitute the principal creative outlet of their lives." Delgado & Millen, *supra* note 1, at 364–65.).
> (ii) *Freedom of expression serves to advance knowledge and discover the truth.*
> ("Because scientific inquiry is a prime means by which new ideas are generated in our society, the goal of attaining the truth requires that scientific inquiry be protected." *Id.* at 366.).
> (iii) *Freedom of expression allows participation in decision making by all members of society.*
> ("Because science is a major determinant of [the] culture as well as a supplier of the information necessary for the intelligent resolution of disputes that are expressly political, it should be entitled to protection . . . ." *Id.* at 367.).
> (iv) *Freedom of expression is a means of assuring a society that is acceptable to its members and therefore stable. It facilitates orderly change.*
> ("When civil authority suppresses scientific investigation, stability is achieved at the price of stagnation, if not lost to outright revolt." *Id.* at 367.).

201. *See supra* notes 187–88 and accompanying text.

202. Scientific expression is also closely related to political speech because information developed through scientific research is necessary for political decision making in a modern, technologically sophisticated society. *See generally* Robertson, *supra* note 14, at 1216:

> Science provides information relevant to a wide variety of individual and societal decisions ranging from one's views about the nature of man and the universe and the wisdom of governmental policies, to individual choices regarding the purchase of certain products. Indeed, one cannot cope with the exigencies of the modern world without access to a wide range of scientific information.

203. *See* Note, *First Amendment Protection for Biomedical Research*, 19 ARIZ. L. REV. 893, 900 (1977).

research component of science is to consider research "symbolic speech." The problem with such an approach, however, is that many research activities are not, in any sense of the word, "symbolic." Unlike cases dealing with symbolic communication, for example the public display of an American flag to which a peace symbol has been attached,[204] the conduct of much scientific research has meaning only to the researcher.[205] Research activities do not ordinarily constitute intentional communications of information from a research scientist to an audience. Therefore, the symbolic speech analysis offers only minimal support for protecting scientific research.

A second approach, which might be called the "peripheral rights" approach,[206] is to observe that research is an essential step in the process of the dissemination of new ideas; therefore, research should have the same constitutional status as dissemination itself.[207] A related approach, which might be labeled "part-whole," or "synergy,"[208] examines the constitutional status of each stage of the scientific process, from generation of an idea through research to dissemination, in order to demonstrate that "if each step in the process is protected, the whole must be protected as well."[209]

---

204. *See* Spence v. Washington, 418 U.S. 405 (1974). In *Spence*, the Supreme Court found that the display of the altered flag presented "[a]n intent to convey a particularized message . . ., and in the surrounding circumstances the likelihood was great that the message would be understood by those who viewed it." *Id.* at 410–11. *See also* United States v. O'Brien, 391 U.S. 367 (1968); Stromberg v. California, 283 U.S. 359 (1931).

205. *See* Favre & McKinnon, *supra* note 14, at 670.

206. *See* Griswold v. Connecticut, 381 U.S. 479 (1965):

> [T]he State may not, consistently with the spirit of the First Amendment, contract the spectrum of available knowledge. The right of freedom of speech and press includes not only the right to utter or to print, but the right to distribute, the right to receive, the right to read . . . and freedom of inquiry, freedom of thought, and freedom to teach . . . indeed the freedom of the entire university community. . . . *Without those peripheral rights the specific rights would be less secure.*

Id. at 482–83 (emphasis added) (footnotes omitted).

207. *See* Robertson, *supra* note 14, at 1217. Robertson also argues that first amendment protection for scientific research can be derived from the scientist's right to *receive*, rather than to disseminate, information:

> If individuals have a first amendment right to acquire information from willing sources, then the acquisition of knowledge and information by scientists in the research process should also be protected by the first amendment because in the research process scientists seek to acquire or receive information from willing collaborators or from materials under their lawful control.

Id. at 1223.

208. *Id. See* Delgado & Millen, *supra* note 1, at 371–92.

209. Delgado & Millen, *supra* note 1, at 371. These authors reduce scientific inquiry to the following series of components, each of which is protected:

(1) *Mentation* (freedom of thought is protected as an essential concomitant of free

The approach most consistent with recent United States Supreme Court decisions would seem to be the "peripheral rights" approach.[210] The Court has recently applied this analysis in two contexts concerning speech: news-gathering[211] and political spending.[212] Scientific inquiry resembles these other two activities in promoting social interests at the heart of the first amendment.[213] Moreover, as with news-gathering and political spending, science's noncommunicative elements are necessary preconditions for the full exercise of the right of free expression.

All the approaches discussed above display a common denominator: "scientific inquiry," in both its communicative and noncommunicative character, describes a unique and recognizable *process* of communication.[214] We find it persuasive that even the most noncommunicative act of scientific inquiry is an essential link in this process.[215] Of course, protection for such noncommunicative acts is not absolute; its reach will depend upon the standard of judicial review accorded to the various governmental regulations on scientific inquiry which may be imposed. But

---

expression, Palko v. Connecticut, 302 U.S. 319 (1937)); (2) *Experimentation* (because experimentation is the information-gathering step in the scientific process, it is similar to the newsgathering operation of the press recognized in Branzburg v. Hayes, 408 U.S. 665 (1972)); (3) *Dissemination* (scientific inquiry does not fit into the narrow first amendment exceptions to protected dissemination); (4) *Reception* (the passive right to know has been held to exist without regard to the perceived social worth of the message conveyed, Stanley v. Georgia, 394 U.S. 557, 564 (1969)); and (5) *Teaching* (right to teach protected under Sweezy v. New Hampshire, 354 U.S. 234 (1957)). Delgado & Millen, *supra* note 1, at 372–79.

210. Ferguson, *supra* note 14, at 651.

211. In Branzburg v. Hayes, 408 U.S. 665 (1972), the Court held that a grand jury had the power to compel reporters to disclose the identities of their confidential sources, because the state's interest in uncovering criminal activity outweighed the largely "speculative" effect of compelled disclosures on the ability of reporters to gather information. *Id.* at 679–709. Nevertheless, the Court pointed out that "without some protection for seeking out the news, freedom of the press could be eviscerated." *Id.* at 681. "Therefore, as the Court recognized, the first amendment right to publish must have as its correlate the right to gather newsworthy information without unwarranted state interference." Ferguson, *supra* note 14, at 653.

212. Buckley v. Valeo, 424 U.S. 1 (1976). In *Buckley*, the Court held that congressionally imposed limits on the amount an individual could spend in direct contribution to a "clearly identified" candidate were unconstitutional. The Court stated that "virtually every means of communicating ideas in today's mass society requires the expenditure of money." Id. at 19. Thus, restrictions on spending necessarily operate as restrictions on speech. *Id.* at 19–20, 39. "[S]ince limitations on spending restrict the exercise of the free speech right, the expenditure of money for political speech must itself be protected as a first amendment freedom." Ferguson, *supra* note 14, at 652.

213. *See supra* notes 195–202 and accompanying text.

214. Although Professors Favre and McKinnon recognize scientific inquiry as a process, *see* Favre & McKinnon, *supra* note 14, at 664, they reject protecting scientific inquiry under the first amendment alone. *Id.* at 663–64.

215. *See supra* text accompanying notes 203-11.

before addressing these standards of review we shall dispose of a potential roadblock: whether race-IQ research is indeed scientific inquiry.

B. *Is Race-IQ Research Scientific Inquiry?*

For race-IQ research to receive the constitutional protection afforded scientific activities, it must appear that race-IQ research is science, rather than pseudoscience or nonscience. This presupposes a common understanding, or definition, of science, yet there are difficulties with providing such a definition. On the one hand, a definition may be drawn too broadly: any fact-gathering activity might conceivably be considered scientific inquiry, but not all fact-gathering activities would have the social value that justifies first amendment protection.[216] On the other hand, a definition of scientific inquiry might be too narrow because it excludes research which some members of the community would consider scientific inquiry.[217]

Although any definition can be criticized as over- or underinclusive, the process of developing a definition must begin somewhere. A promising starting point is the means or method by which scientific information is developed. Arguably, if a research project is not conducted within the bounds of "scientific method,"[218] then its noncommunicative elements should receive

---

216. For example, the dissection of frogs in a biology class certainly serves the students' interests in gaining knowledge, and probably serves the general social interest in the free flow of information, but does not appreciably serve the specific social interest in enlightened public decision making. *See* Favre & McKinnon, *supra* note 14, at 665 n.54. Thus, dissecting frogs should not receive the same protection as the other forms of scientific endeavor. Professors Favre and McKinnon see the problem of overinclusion as an inherent defect of "part-whole" analyses:

> There is a significant disadvantage, however, in breaking scientific inquiry into component parts, because what results is a list of activities [that] may encompass more than the "scientific inquiry" than was originally intended to be protected. For example, the components thinking, analyzing, observing, etc., would also encompass the activities of lawyers, economists, and historians.

Id. at 663–64.

217. Professors Favre and McKinnon, for example, attempt to provide a "workable legal definition" of scientific inquiry. *Id.* at 662–68. Their definition would exclude the activities of a professor of sociology who conducts an opinion survey to determine the cause of the increase in divorce rates. *Id.* at 668. Favre and McKinnon reach this controversial conclusion by defining scientific inquiry to include only acquisition of knowledge about "man's relationship with the natural universe"; knowledge about "man's relationship with man" is excluded. *Id.* at 665. Such a definition would probably be objectionable to social scientists.

218. The scientific method has been variously defined, but generally is thought to include all or most of the following elements: hypothesis-formation, observation or experimentation, verification or falsification of the hypothesis, publication, and, perhaps, the use of quantitative methods. *See* W. FOWLER, THE DEVELOPMENT OF SCIENTIFIC METHOD (1962); Favre & McKinnon, *supra* note 14, at 666–67.

no special treatment under the first amendment.[219] This conclusion would be reached because the communicative elements of the project, such as published results, would be no more deserving of first amendment protection than false statements of fact in a newspaper[220] or false or misleading advertising.[221]

One problem with the use of a methodological criterion to determine whether or not a particular inquiry qualifies as scientific for first amendment purposes is that courts are poorly equipped to make the judgments required for such a determination.[222] Moreover, entrusting such judgments to courts raises the specter of state-imposed orthodoxy, one of the prime dangers that the first amendment is designed to avoid.[223] Another problem with the methodological approach is that even when research is carried out with flawed methodology it may produce valuable results; serendipity has accounted for many major scientific discoveries.[224] Finally, it could be argued that a threshold test based on methodology is unnecessary—that the scientific community and many lay persons are already sensitive to questions of method and would not be likely to accept results derived from poor research methods.[225]

Accordingly, we propose that first amendment protection should attach to research that is carried out pursuant to methods that are "arguably scientific."[226] Under this broad criterion, any study that could reasonably be portrayed as scientific would be entitled to *prima facie* protection as an expressive activity. Most

---

219. Alternatively, a sliding-scale approach might be followed, in which classically scientific disciplines (such as physics and genetics) would receive full protection, while the "softer" disciplines (such as psychology) would receive a lesser degree of protection.

220. "[T]here is no constitutional value in false statements of fact." Gertz v. Robert Welch, Inc., 418 U.S. 323, 340 (1974).

221. *See supra* note 187 and accompanying text.

222. "It appears that the Court at present is ill-equipped to determine whether a particular regulation of scientific inquiry furthers an important government interest." Favre & McKinnon, *supra* note 14, at 694. *But cf.* Reich v. United States, 239 F.2d 134, 136-37 (1st Cir. 1956) (individual challenged authority of Food and Drug Administration to enjoin his continued use of "orgone energy accumulators" because he was engaged in research of "primordial, pre-atomic cosmic orgone energy"; held: these contentions were without merit), *cert. denied*, 352 U.S. 1004 (1957).

223. *See supra* notes 174–86 and accompanying text.

224. Benjamin Franklin's discovery of electrical conduction while investigating the flight of kites, the discovery of penicillin, a mold, and Archimedes' bathtub discovery of the principle of specific gravity are well-known examples.

225. *See* Robertson, *supra* note 14, at 1257–58 n.249. *See generally supra* notes 109, 111, 132–36 and accompanying text.

226. *Cf.* L. TRIBE, *supra* note 174, at 822, 831 (acts considered religious for purposes of religious freedom clauses if they are "arguably religious." The "arguably scientific" test proposed here is likewise intended to give a broad scope to the degree of protection afforded, *see id.* at 831).

race-IQ research would meet this criterion.[227] That which does not would be reviewed under the more relaxed standard appropriate to activities that do not entail expression.[228]

C. *The Appropriate Standard of Review*

Having established that scientific inquiry is protected by the first amendment, the next step is to determine the level of judicial scrutiny, or test, applicable to government regulation restricting the protected right.[229] In those cases where regulation is related directly only to the content of the scientific inquiry's speech elements, the restriction will be unconstitutional[230] unless the government can show that the regulation is necessary to serve a compelling state interest and it is narrowly drawn to achieve that end.[231] Where regulation is aimed at preventing harms unconnected with the subject of the inquiry, reasonable time, place, and

---

227. Most such research at least purports to use scientific methods, including quantitative analysis, THE IQ CONTROVERSY, *supra* note 30 (scholarly debate over merits and demerits of race-IQ studies); *IQ and Scholastic Achievement*, *supra* note 54. It would thus qualify under the broad "arguably scientific" criterion proposed here.

228. Socioeconomic regulation that does not impinge on fundamental rights or classify according to suspect criteria is reviewed under a relaxed standard ("rational basis scrutiny"), Nebbia v. New York, 291 U.S. 502 (1934).

229. "The significance of a constitutional right lies in the test that is applied to determine the validity of government regulations restricting that right, that is, to determine what degree of harm to other state concerns must exist before the right may be limited." Robertson, *supra* note 14, at 1209–10.

230. Police Dep't of Chicago v. Mosley, 408 U.S. 92, 95 (1972) ("[A]bove all else, the First Amendment means that government has no power to restrict expression because of its message, its ideas, its subject matter, or its content."); Erznoznik v. City of Jacksonville, 422 U.S. 205, 210 (1975). *See generally supra* note 174 and accompanying text (discussing Tribe's analytical framework).

231. The Supreme Court's decisions invalidating content-based restrictions on speech demonstrate that strict first amendment scrutiny is reserved for those instances in which the government has sought specifically to "dictat[e] the subjects about which persons may speak and the speakers who may address a public issue." First National Bank v. Bellotti, 435 U.S. 765, 785 (1978). The application of this high standard is appropriate "[e]specially where . . . the legislature's suppression of speech suggests an attempt to give one side of a debatable public question an advantage in expressing its views . . . ." *Id. See, e.g.*, Widmar v. Vincent, 454 U.S. 263 (1981) (invalidating, on free speech grounds, state university rules that permitted general use of campus facilities but denied use for religious purposes); Metromedia, Inc. v. City of San Diego, 453 U.S. 490 (1981) (invalidating ordinance that permitted commercial expression while prohibiting noncommercial expression in identical circumstances); Central Hudson Gas & Electric Corp. v. Public Serv. Comm'n, 447 U.S. 557 (1980) (invalidating regulation that prohibited utility from promoting use of electricity); Consolidated Edison Co. v. Public Serv. Comm'n, 447 U.S. 530 (1980) (invalidating regulation that prohibited utility from expressing views on "controversial issues of public policy"); Carey v. Brown, 447 U.S. 455 (1980) (invalidating ordinance that permitted labor picketing while prohibiting other picketing); Police Dep't of Chicago v. Mosley, 408 U.S. 92 (1972) (same).

manner restrictions will be upheld.[232] Finally, where "speech" and "nonspeech" elements are combined in the same course of conduct, as is often the case with scientific inquiry, "a sufficiently important government interest in regulating the nonspeech element can justify incidental limitations on the first amendment freedom."[233] The standard of review for activities which combine both speech and nonspeech elements is lower than that for pure speech because "[t]here are few restrictions on action which could not be clothed by ingenious argument in the garb of decreased data flow."[234] The test for such incidental limitations is stated in *United States v. O'Brien*.[235]

> To characterize the quality of the governmental interest which must appear, the Court has employed a variety of descriptive terms: compelling; substantial; subordinating; paramount; cogent; strong. Whatever imprecision inheres in these terms, we think it clear that a governmental regulation is sufficiently justified if it is within the constitutional power of the Government; if it furthers an important or substantial government interest; if the government interest is unrelated to the suppression of free expression; and if the incidental restriction on alleged first amendment freedoms is no greater than is essential to the furtherance of that interest.[236]

---

232. *E.g.*, Kovacs v. Cooper, 336 U.S. 77, 83 (1949); Cox v. New Hampshire, 312 U.S. 569, 574 (1941). *See generally* L. TRIBE, *supra* note 174, at 580–84.

233. United States v. O'Brien, 391 U.S. 367, 376–77 (1968) (upholding law banning the burning of draft cards against challenge that burning constitutes symbolic speech; government had valid interest in functioning of Selective Service System).

234. Zemel v. Rusk, 381 U.S. 1, 16–17 (1965).

235. 391 U.S. 367 (1969).

236. *Id.* at 376–77 (footnotes omitted). *See also* Consolidated Edison Co. v. Public Serv. Comm'n, 447 U.S. 530 (1980). The various elements of the *O'Brien* test can be explained as follows:

> (i) *Regulations must be within the constitutional power of government.*
> For state governments, in order to meet this requirement the regulation must fall within the police power, which includes the power to protect the public health, safety, or welfare. *See* Lawton v. Steele, 152 U.S. 133 (1894). For the federal government, the regulation must be promulgated within one of the enumerated powers in the Constitution. *See* L. TRIBE, *supra* note 174, at 225–27.
> (ii) *The state interest must be important or substantial.*
> Cases where the Supreme Court has recognized interests substantial enough to justify the regulation include: United States v. O'Brien, 391 U.S. at 380 (protection of the selective service system); Zemel v. Rusk, 381 U.S. 1, 14–15 (1965) (protection of national security); Branzburg v. Hayes, 408 U.S. 665, 690 (1972) ("public interest in law enforcement and in ensuring effective grand jury proceedings"); Procunier v. Martinez, 416 U.S. 396, 412–13 (1974) ("order and security of penal institutions").
> (iii) *The regulation must further the state interest.*
> Various regulations have failed to meet the furtherance requirement: Village of Schaumburg v. Citizens for a Better Env't, 444 U.S. 620 (1980) (ordinance prohibiting solicitations by unqualified charitable organizations found overbroad with respect to the legitimate government

The following discussion applies the above standards to a series of possible restrictions on the activities of race-IQ researchers at various stages of their inquiry.[237]

1. *Restrictions on employment*. Governmental restrictions on scientific research are certain to include denial of at least some government benefits. Because employment and funding are benefits of great importance to researchers and necessary to the inception of inquiry, they are the earliest stages at which governmental restraint on research is likely to be imposed.

For purposes of illustration, assume that a government employer, such as a state-funded university, discharges or denies tenure to an race-IQ researcher because the employer believes that the research is "inopportune."[238] If this denial of employment is perceived to be based purely on ideological grounds, a long line of cases would be implicated.[239] Courts first addressed the question of a government employee's discharge because of the employee's

---

interest in protecting citizens from fraud, crime, and undue annoyance); Linmark Assocs. v. Township of Willingboro, 431 U.S. 85 (1977) (prohibition of "for sale" signs on residential real estate did not advance the state's interest in promoting racially integrated housing); Buckley v. Valeo, 424 U.S. 1 (1976) (per curiam) (goal of stemming corruption in election process was legitimate but expenditure ceiling would fail to further this interest).

(iv) *The restriction must be no greater than is essential to the furtherance of the government interest*.

See Erznoznik v. City of Jacksonville, 422 U.S. 205 (1975) (state interest in protecting individual privacy by prohibiting drive-in theaters from showing films containing nudity could be less restrictively met if viewer simply averts his eyes); Martin v. City of Struthers, 319 U.S. 141 (1943) (municipal ordinance prohibiting ringing door bells to distribute pamphlets struck down because privacy of individuals could be protected by less restrictive means).

237. Such an approach for judicial review of scientific inquiry has been previously suggested by Ferguson:

> [I]n dealing with restrictions on scientific speech, the Court should adopt a case-by-case approach in which it starts with the assumption that scientific expression warrants a full measure of constitutional protection, and then determines whether the particular state interests implicated by the information at issue are sufficient to justify an abridgement of fully protected speech. Under this approach, the Court could best serve the values of free expression while, at the same time, recognizing that certain types of scientific information pose significantly greater dangers than more conventional forms of expression.

Ferguson, *supra* note 14, at 649 n.35.

238. In 1973, William Shockley was denied the opportunity to speak or teach at Stanford, Princeton, and Harvard. *See* N.Y. Times, Dec. 2, 1973, at A-51, col. 1; *id*., Nov. 16, 1973, at A-41, col. 5; *id*., May 2, 1972, at 9, col. 1. *See also* TIME, Aug. 1, 1977, at 54 (leader of sociobiology movement denied tenure at Harvard).

239. According to Professor Emerson, the employment cases drift from established first amendment doctrine: "Even more than in the case of sedition laws, the courts here deal with First Amendment problems without relying upon First Amendment doctrines. Nevertheless the presence of First Amendment factors influences the

exercise of first amendment rights at the turn of the century. The doctrine which prevailed at that time was that government employment was a "privilege," not a constitutionally protected right. Employment could therefore be withheld absolutely or conditionally—even if the condition, viewed independently, would have violated a constitutional provision.[240] For example, in *McAuliffe v. Mayor of New Bedford*,[241] Massachusetts Supreme Court Justice Holmes succinctly expressed the principle: "The petitioner may have a constitutional right to talk politics, but he has no constitutional right to be a policeman."[242] For the next half-century, American courts adhered to this principle.[243]

During the 1950's and early 1960's, however, the Supreme Court began to strike down state "loyalty oath" statutes on grounds of vagueness and overbreadth.[244] In a 1967 decision, *Keyishian v. Board of Regents*,[245] the Court expressly rejected the notion that public employment, including academic employment, may be conditioned upon the surrender of constitutional rights which otherwise could not be abridged by direct government action.[246] Quoting from an earlier case,[247] the Court stated, "[i]t is too late in the day to doubt that the liberties of religion and ex-

---

manner in which courts apply non-First Amendment principles." T. EMERSON, *supra* note 200, at 163.

240. *See* L. TRIBE, *supra* note 174, at 509–11; cases cited *infra* notes 241–43.

241. 155 Mass. 216, 29 N.E. 517 (1892).

242. 155 Mass. at 220, 29 N.E. at 517. Holmes went on to say: "There are few employments for hire in which the servant does not agree to suspend his constitutional right of free speech, as well as idleness, by the implied terms of his contract. The servant cannot complain, as he takes the employment on the terms which are offered him." *Id.* at 518.

243. *See, e.g.*, Adler v. Board of Educ., 342 U.S. 485 (1952) (upholding a provision of the New York Civil Service Law disqualifying from the civil service and public school system any person who "advocates, advises or teaches" governmental overthrow by force or violence or who organizes or joins any group advocating such doctrine); Bailey v. Richardson, 182 F.2d 46, 65 (D.C. Cir. 1950), *aff'd* 341 U.S. 918 (1951) (upholding power of President to remove from government service anyone whose loyalty he questions). *See generally* Frug, *Does the Constitution Prevent Discharge of Civil Service Employees?*, 124 U. PA. L. REV. 942, 961 (1976) (until the 1950's, courts refused to review challenges to the executive's power to remove employees).

244. *See, e.g.*, Elfbrandt v. Russell, 384 U.S. 11 (1966) (overbreadth); Baggett v. Bullitt, 377 U.S. 360 (1964) (vagueness and overbreadth); Cramp v. Board of Pub. Instruction, 368 U.S. 278 (1961) (vagueness). *See also* Shelton v. Tucker, 364 U.S. 479 (1960) (overbreadth); Wieman v. Updegraff, 344 U.S. 183 (1952) ("indiscriminate classification").

245. 385 U.S. 589 (1967). In *Keyishian*, the Court held that the statutes found constitutional in Adler v. Board of Educ., 342 U.S. 485 (1952), were now unconstitutionally overbroad and invalid insofar as they proscribed membership without any showing of specific intent to further the unlawful aims of the Communist Party. *Id.* at 609–10.

246. *Id.* at 605.

247. Sherbert v. Verner, 374 U.S. 398, 404 (1963).

pression may be infringed by the denial of or placing of conditions upon a benefit or privilege."[248]

The Court has repeatedly affirmed the principle set forth in *Keyishian*. For example, in 1972, Justice Stewart's decision for the Court in *Perry v. Sindermann* stated that "even though a person has no 'right' to a valuable governmental benefit and even though the government may deny him the benefit for any number of reasons, there are some reasons upon which the government may not rely."[249] In particular, the government may not deny a benefit because of a person's exercise of a constitutionally protected right of speech or association.[250] This doctrine has been further refined in subsequent cases.[251] Now, once the employee succeeds in establishing that constitutionally protected conduct was a "substantial factor," or "motivating factor," in the government employer's decision not to rehire, the burden shifts to the government to show "by a preponderance of the evidence that it would have reached the same decision as to . . . reemployment even in the absence of the protected conduct."[252]

Despite the protections for teachers and other government employees[253] articulated in *Keyishian* and subsequent cases, the

248. Keyishian v. Board of Regents, 385 U.S. 589, 606 (1967).

249. 408 U.S. 593, 597 (1972).

250. *Id.*

251. Givan v. Western Line Consol. School Dist., 439 U.S. 410 (1979) (unanimous per Rehnquist, J.) (reinstating public school teacher who criticized school policies in private meeting with principal; public employee does not "forfeit" first amendment protection by communicating privately with employer rather than spreading views before the public); Mt. Healthy City School Dist. Bd. of Educ. v. Doyle, 429 U.S. 274 (1977) (unanimous, per Rehnquist, J.) (even though untenured teacher can be dismissed "for no reason whatever," he or she cannot be fired for exercising first amendment freedoms, in this case conveying contents of school memorandum on teacher dress code to local radio station); Pickering v. Board of Educ., 391 U.S. 563 (1968) (Board of Education dismissed teacher for writing and publishing a letter of criticism in a newspaper regarding the Board's allocation of school funds; Court held that, "absent proof of false statements knowingly or recklessly made by him, a teacher's exercise of his right to speak on issues of public importance may not furnish the basis for his dismissal from public employment." *Id.* at 574) (footnotes omitted). *See also* cases cited in Perry v. Sindermann, 408 U.S. 593, 597.

252. Mt. Healthy City School Dist. Bd. of Educ. v. Doyle, 429 U.S. 274, 287 (1977). Justice Rehnquist has stated, however, that the government as employer or school administrator may impose upon employees reasonable regulations that would be impermissible if imposed by the government upon all citizens. *See* Healy v. James, 408 U.S. 169, 203 (1972) (Rehnquist, J., concurring); Papish v. Board of Curators, 410 U.S. 667, 677 (1973) (Rehnquist, J., dissenting).

253. *See, e.g.*, Branti v. Finkel, 445 U.S. 507 (1980) (public employees protected from firing because of political associations); *accord* Elrod v. Burns, 427 U.S. 347 (1976). *See also* United States v. Robel, 389 U.S. 258 (1967) (federal act which imposed heavy criminal penalties on any member of a "communist action" organization who engaged in any employment in any defense facility violated the first amendment guarantee of freedom of association on overbreadth grounds); Bond v. Floyd, 385 U.S. 116 (1966) (Court found first amendment violation when state legislature denied

Court has upheld the Hatch Act[254] and similar state regulations which prohibit plainly identifiable acts of political campaigning by civil service employees.[255] The Court upheld these statutes because they were aimed at conduct, not "pure speech,"[256] and because the regulations were content-neutral—they did not discriminate on the basis of the employees' political affiliations.[257] These cases, therefore, are distinguishable from *Keyishian* and related cases which involved discharge of employees precisely because the content of their speech was objectionable to the employer.

Where a public university discharges a scientist because it disapproves of his or her research topic, the principle of *Keyishian* and its successors may come into play. Arguably, the research activities of the discharged scientist are protected under a first amendment right to free scientific inquiry.[258] This right, it may be argued, has been infringed by the university's discharge of the scientist, because the discharge was based on the content of the research and thus on the content of the scientist's speech. Since the employment policies of the university administration have not been applied in a content-neutral manner, the researcher should be reinstated.

There is a situation in which this question is not susceptible to a clear-cut answer, however. That situation arises where the university's decision not to employ the researcher to do a particular type of research is based on reasons other than disapproval of the information or conclusions which may be revealed. That is, the researcher is denied employment not because the *content* of his or her inquiry is inopportune, or otherwise disapproved, but because the *topic* may not rank sufficiently high on the university's list of research priorities. Universities and other governmental institutions operate under budgetary constraints which limit the number of positions available for employment of teachers and research scientists. Just as an educational institution must allocate resources across departments, so must it allocate resources within departments. This allocation necessarily entails some system of

---

seat to duly elected member of legislature because sincerity of oath of office questioned).

254. 5 U.S.C. § 7324(a) (1976) (certain federal employees prohibited from engaging in identifiable acts of political campaigning).

255. *See, e.g.*, United States Civil Service Comm'n v. National Ass'n of Letter Carriers, 413 U.S. 548 (1973) (Hatch Act); Broadrick v. Oklahoma, 413 U.S. 601 (1973) (state regulation similar to Hatch Act).

256. Broadrick v. Oklahoma, 413 U.S. 601, 615 (1973).

257. *Id.* at 616. ("The statute . . . seeks to regulate political activity in an even-handed and neutral manner . . . such statutes have in the past been subject to a less exacting overbreadth scrutiny." *Id.*)

258. *See supra* Part IIIA.

priorities which will inevitably limit scholarly inquiry into certain areas in order to allow inquiry into other areas. The denial of tenure or discharge of an race-IQ researcher based on such a system of priorities may be conceived simply as the necessary and legitimate allocation of resources according to curricular or research priorities.[259]

The cases concerning unconstitutional discharge of government employees for exercising their first amendment freedoms in academic environments provide little guidance in analyzing this issue. For example, *Keyishian* concerned a state statute requiring faculty members to sign certificates stating that they were not communists; failure to sign was punishable by discharge.[260] Such a statutory constraint bears little resemblance to a situation in which allocation of faculty positions may be made on the basis of research topic. In *Pickering v. Board of Education*,[261] a teacher was dismissed for writing a letter to a newspaper criticizing the school board's allocation of resources. Similarly, *Perry v. Sindermann*[262] concerned the dismissal of a state college teacher for public criticism of the policies of the college administration. *Mt. Healthy City School District Board of Education v. Doyle*[263] involved the attempted discharge of a teacher who had conveyed the contents of a school memorandum relating to teacher dress and appearance to a local radio station. In all of these cases, the teachers were unconstitutionally "compelled to relinquish First Amendment rights they would otherwise enjoy *as citizens* to comment on matters of public interest in connection with the operation of the public schools in which they work."[264] Thus, these employees were not discharged, or threatened with discharge, because of the content of their teaching, but because they exercised their right to freedom of expression *as citizens*, a right which they may enjoy outside the classroom.

To begin with, these cases are distinguishable from the case of the discharged race-IQ researcher in the sense that his or her discharge would be for conduct and statements inside the classroom, laboratory, or research environment—"speech" having to do with the very content of the research. More important, al-

259. "Because hiring, promotion, and research grant decisions involve resource allocation and there is no right to have the institution provide those resources to a particular individual or project, the institution may allocate its research funds according to content and manner criteria that it chooses." Robertson, *supra* note 14, at 1272. *See also* Goldstein, *The Asserted Constitutional Right of Public School Teachers to Determine What They Teach*, 124 U. PA. L. REV. 1293 (1976).

260. Keyishian v. Board of Regents, 385 U.S. 589, 592, 597 (1967).

261. 391 U.S. 563 (1968).

262. 408 U.S. 593 (1972).

263. 429 U.S. 274 (1977).

264. Pickering v. Board of Educ., 391 U.S. 563, 568 (1968) (emphasis added).

though the researcher certainly has the right to speak freely as a citizen, these cases do not support the proposition that the researcher enjoys, *as a citizen*, a right to conduct state-funded research. Thus, *Keyishian* and its line of cases provide persuasive but inconclusive authority for reinstating the discharged race-IQ research scientist who has conducted research in a disapproved area of scientific inquiry.

A closer analogy to the case of the researcher who is either dismissed or not employed to do race-IQ research may be drawn from patronage cases where government employees have been discharged for being members of the political party that no longer controls the government agency which employs them. In *Elrod v. Burns*,[265] the Court held that party affiliation may be an acceptable requirement for some types of government employment,[266] but not if the employee is in a "nonpolicymaking, nonconfidential" position.[267] Recently, in *Branti v. Finkel*[268] the Court reformulated the test for this situation. "[T]he ultimate inquiry is not whether the label 'policymaker' or 'confidential' fits a particular position; rather, the question is whether the hiring authority can demonstrate that party affiliation is an appropriate requirement for the effective performance of the public office involved."[269] The patronage cases thus employ a "balance" of the public employees' first amendment rights against the "State's vital interest in maintaining governmental effectiveness and efficiency."[270] If the same balancing analysis is applied to the case of a race-IQ researcher, it could be argued that continued research along a disapproved avenue of inquiry would be ineffective or inefficient performance of the university's mission to allocate research resources to the most "valuable" inquiry topics. It may thus be said that the first amendment rights of the scientist to choose his or her area of inquiry are here being balanced against the university's duty to encourage research in areas of greater social importance.[271]

---

265. 427 U.S. 347 (1976).

266. *Id.* at 367.

267. *Id.* at 375 (Stewart, J., concurring).

268. 445 U.S. 507 (1980).

269. *Id.* at 518.

270. *Id.* at 517. Note that the balance referred to is similar to the balance in the education cases; see, e.g., Pickering v. Board of Educ., 391 U.S. 563 (1968): "The problem in any case is to arrive at a balance between the interests of the teacher, as a citizen, in commenting upon matters of public concern and the interest of the State, as an employer, in promoting the efficiency of the public services it performs through its employees." *Id.* at 568.

271. Robert Sinsheimer, Chancellor of the University of California, Santa Cruz, has suggested that university administrators would, in fact, make such value judgments with respect to race-IQ research:

> You also ask about research into relationships between intelligence and genetics. Leaving aside the formidable difficulties which confront such

Given the countervailing claims that can be made by both the researcher and the university,[272] the factual context in which the dispute arises would probably have a great effect on a court's decision. In a case where the university/employer were clearly discharging the scientist for public statements concerning correlations between race and intelligence (followed, perhaps, by wide publicity and public outcry), the court might very well come down on the side of the scientist's right, *as a citizen*, to speak out. However, if the researcher were discharged as a result of the university's normal allocation of research positions, it is doubtful that his or her right to engage in a chosen line of inquiry *as a research scientist* would outweigh the university's duty to choose areas of inquiry most appropriate for accomplishing the task of advancing knowledge.[273] The cases will present problems, nevertheless, to

---

> research—the problems of the definition of "intelligence," the problems of separation of genetic and developmental (cultural) influences in a situation wherein controlled mating is infeasible—I would raise similar questions as to the priority that might be assigned to such research. Assuming that valid and meaningful results could be obtained, what use could our society make of such? Would they merely serve as grist for social polemics? In short, would—at this time—the net social benefit of a successful research program be positive or negative? My surmise is the latter. Others may differ and I would be interested to hear their arguments.

Letter from Robert Sinsheimer to David Burkenroad (Nov. 5, 1982) (on file at *UCLA Law Review*).

272. The scientist might reply that the balance should generally be struck in favor of freedom of inquiry. *See, e.g.*, Sweezy v. New Hampshire, 354 U.S. 234 (1957); Delgado & Millen, *supra* note 1, at 386–88 ("A professor denied employment, advancement, or tenure because his employer objected to the content of his research could challenge the university's decision as a violation of his academic freedom." *Id.* at 353). *Cf.* Ferguson, *supra* note 14, at 650 n.41 (the availability of the concept of academic freedom to scientific research is limited because Supreme Court cases referring to academic freedom all involve obvious speech infringement).

273. A scientist's right to conduct race-IQ research can also be analyzed under the liberty clause of the 5th and 14th amendments. In a long line of cases extending back to Butchers' Union Slaughter-House & Livestock Landing Co. v. Crescent City Live-Stock Landing & Slaughter-House Co., 111 U.S. 746 (1884), the Supreme Court has recognized the importance of the right to pursue one's occupation. In the seminal case, Meyer v. Nebraska, 262 U.S. 390 (1923), the Court held that a state legislature could not, without a valid state objective, prohibit the teaching of foreign languages and thus prevent a teacher of German from practicing his profession: "liberty . . . denotes not merely freedom from bodily restraint but also the right of the individual to . . . engage in any of the common occupations of life . . . ." *Id.* at 399.

The *Meyer* decision did not, however, stand exclusively upon the right to pursue a profession. The right of parents to choose an education for their children and the right of children to receive knowledge were essential to the decision. *Id.* at 401. Thus, it was not clear how much weight the Court actually assigned to the teacher's liberty interest.

The Court has been reluctant to state squarely what constitutional weight it will assign to the right to pursue one's profession. This reluctance is exemplified by Epperson v. Arkansas, 393 U.S. 97 (1968), a case involving a statute that made it unlawful for a public school teacher to teach evolution. The Court rejected both the right of

the extent that, in either situation, the university has not been neutral in its assessment of the content of the researcher's topic and speech. Probably the strongest claim would be one made by a race-IQ researcher fired because he or she proposed to establish the existence of genetically-determined racial differences while a colleague who set out to prove the opposite was retained, or vice-versa. Few, if any, cases will be that simple.

2. *Restrictions on funding*. Like employment, funding is crucial to successful scientific inquiry. Furthermore, governmental enti-

---

free speech and the liberty clause as grounds for overturning the statute and decided the case instead on establishment of religion grounds. *Id.* at 105–06.

It is equally unclear whether the right to pursue a profession is a "fundamental" interest, like freedom of speech, that requires the Court to scrutinize strictly the state's motives and purposes in regulating it. Justice Marshall referred to that uncertainty in his dissent in Massachusetts Bd. of Retirement v. Murgia, 427 U.S. 307 (1976), by beginning an analysis of the right to pursue one's occupation with the statement, "Whether 'fundamental' or not . . . ." *Id.* at 322 (Marshall, J., dissenting).

Despite the Court's uncertain position, some scholars do argue that employment as a scientist is a fundamental interest. Favre & McKinnon, for example, argue that science, by being mentioned in the patent clause of the Constitution, "is found within the structure of the Constitution . . . . [Additional] support for a fundamental right can be found in the decisions of the Supreme Court . . . . In *Meyer v. Nebraska* the Court stated that the term liberty in the fourteenth amendment included the right to acquire useful knowledge." Favre & McKinnon, *supra* note 14, at 709–10.

But this analysis is not compelling. Favre and McKinnon fail to see that the *Meyer* holding would not necessarily have been reached had parents' and children's rights not also been involved. Nor, it would seem, does the mere mention of science in the patent clause render science an interest that will be treated as "fundamental" in constitutional analysis.

It is more likely that when confronted with the issue the Court will not recognize a fundamental right to research grounded in the liberty clause. *See* Robertson, *supra* note 14, at 1213. Thus, a researcher's work would not be a fundamental interest, strict scrutiny of governmental regulation through discharge or denial of employment would not be required, and the employment decision would not have to be justified by a compelling state interest.

Most decisions concerning the right to pursue a given profession actually deal with the right to a *livelihood*. See Barsky v. Board of Regents, 347 U.S. 442, 472 (1954) (Douglas, J., dissenting); Massachusetts Bd. of Retirement v. Murgia, 427 U.S. 307 (1976). There is no infringement upon a constitutional right to livelihood where the state's action does not interfere with an individual's right to future employment. In Board of Regents v. Roth, 408 U.S. 564 (1972), the employer denied tenure to a professor with a one-year employment contract. The Court found that the employee had no property interest in employment, since he had a limited contract. *Id.* at 578. Furthermore, his freedom to seek other employment had not been infringed upon because no stigmatizing charges had been made against him that would interfere with potential future employment. *Id.* at 573. Finally, the right to livelihood is not absolute; to the extent that one's work affects public matters, it becomes subject to regulation by the state. Meyer v. Nebraska, 262 U.S. 390, 400 (1923) (right to work can be interfered with by legislative action that has a "reasonable relation to some purpose within the competency of the State."). Thus, while a scholar may have a right to pursue his or her calling, the state also has a right to regulate it under the police power. The legitimacy and strength of the state's concerns are discussed in Part IV of this Article.

ties, especially federal agencies, are the primary sources of support for basic research in the United States.[274] Government funding restrictions can be considered under two headings: denial of funding and conditional funding.

(a) *Denial of funding*. It has been argued that a research scientist denied public money to pursue a controversial line of inquiry can sustain an action against the government funding agency to compel adoption of nondiscriminatory criteria for disbursing funds.[275] What issues would be raised by such a case if the research in question were race-IQ research, and denial of funding based upon the belief that the research was "inopportune"?

Generally, the Supreme Court has found that constitutional rights are not abridged merely because the government refuses to subsidize those rights,[276] or makes value judgments favoring alternative activities.[277] As stated in *Maher v. Roe*:[278]

> There is a basic difference between direct state interference with a protected activity and state encouragement of an alternative activity consonant with legislative policy. Constitutional concerns are greatest when the State attempts to impose its will by force of law; the State's power to encourage actions deemed to be in the public interest is necessarily far broader.[279]

As in the case of employment,[280] government must be permitted to allocate its resources in a manner consistent with its goals. Therefore, a potential recipient of governmental funding cannot successfully make, as his or her sole argument, the claim that de-

---

274. "In the post-World War II period, the Federal Government has become the dominant source of support for basic research." National Science Foundation, 26th Annual Report for Fiscal Year 1976, at xi (1976) (statement of acting NSF Director Richard C. Atkinson). *See generally* Delgado & Millen, *supra* note 1, at 397 n.272.

275. Delgado & Millen, *supra* note 1, at 353.

276. *See, e.g.*, Harris v. McRae, 448 U.S. 297, 317-18 (1980) ("Although the liberty protected by the Due Process Clause affords protection against unwarranted government interference with freedom of choice . . . , it does not confer an entitlement to such funds as may be necessary to realize all the advantages of that freedom. . . . Whether freedom of choice that is constitutionally protected warrants federal subsidization is a question for Congress to answer, not a matter of constitutional entitlement"); L. TRIBE, *supra* note 174, at 1098–1106, and cases cited therein (wealth not a suspect classification; government under no obligation to assure equal purchasing power for commodities necessary to full enjoyment of life and liberty).

277. Maher v. Roe, 432 U.S. 464, 474 (1977) (Court rejecting challenge to Medicaid program which subsidizes medical services incident to childbirth, but not services incident to nontherapeutic abortions; held: constitutional right to undergo nontherapeutic abortion does not prevent state from making "a value judgment favoring childbirth over abortion, and . . . implement[ing] that judgment by the allocation of public funds.")

278. 432 U.S. 464 (1977).

279. *Id.* at 475–76 (footnotes omitted).

280. *See supra* notes 260–71 and accompanying text.

nial of funding to support the exercise of the protected right of free expression is unconstitutional.

In 1959, the Court addressed the question of first amendment abridgment through discriminatory denial of a valuable government benefit.[281] In *Cammarano v. United States*,[282] the Court upheld Treasury regulations that prohibited business deductions of lobbying expenses on the ground that, although lobbying is protected by the first amendment, governmental refusal to underwrite lobbying costs does not violate the first amendment.[283] Justice Harlan's opinion for the Court upheld these regulations because they did not discriminate among lobbyists, or their messages, in denying the deductions.[284]

In 1976, the Court returned to the issue of discriminatory funding in *Buckley v. Valeo*,[285] where it heard challenges to public financing provisions for presidential campaigns that provided far greater financial support to major-party candidates than to others. In determining the standard of review, the Court stated that "restrictions on access to the electoral process must survive exacting scrutiny."[286] Nevertheless, the Court found that denial of funding to some candidates was not a "direct burden" on first amendment rights, unlike cases covering restricted access to the ballot,[287] thereby implying that some standard less than "exacting scrutiny"

---

281. See generally the scholarly debate between Judges Mikva and MacKinnon in Taxation with Representation of Washington v. Regan, 676 F.2d 715, 724–31, 748–49 (D.C. Cir. 1982), *rev'd*, 103 S. Ct. 1997 (1983) (Lobbying restrictions on certain nonprofit organizations required by the Internal Revenue Code found not to violate the first amendment as "unconstitutional conditions," *id.* at 726, but do violate first amendment and equal protection guarantees because such restrictions subsidized lobbying activities of veterans' organizations while failing to subsidize lobbying of other charitable groups, *id.* at 744-45.).

282. 358 U.S. 498 (1959).

283. *Id.* at 513.

284. Petitioners are not being denied a tax deduction because they engage in constitutionally protected activities, but are simply being required to pay for those activities entirely out of their own pockets, *as everyone else engaging in similar activities is required to do* under the provisions of the Internal Revenue Code. *Nondiscriminatory* denial of deduction from gross income to sums expended to promote or defeat legislation is plainly not "aimed at the suppression of dangerous ideas."

358 U.S. at 513, quoting Speiser v. Randall, 357 U.S. 513, 519 (1958) (emphasis added). Although *Cammarano* was decided before the Court adopted its current first amendment terminology regarding "content-neutrality," *see supra* notes 243–45 and accompanying text, the holding of that case is consistent with modern doctrine: the Court will apply a strict standard of review in situations where the government has withheld a valuable benefit affecting first amendment rights on a content-discriminatory basis.

285. 424 U.S. 1 (1976).

286. *Id.* at 94.

287. *Id. See, e.g.*, Lubin v. Panish, 415 U.S. 709, 718 (1974) (indigent candidates may not be required to pay filing fees absent alternative means of ballot access); Williams v. Rhodes, 393 U.S. 23, 31 (1968) (appearance of minor parties on ballot may

was appropriate. Without declaring a standard of review for the issue, the Court went on to state, "*[i]n any event*, Congress enacted [the challenged statute] in furtherance of sufficiently important governmental interests. . . ."[288] Despite the limitations of this analysis, it appears that discriminatory funding of first amendment activities is still subject to heightened scrutiny; however, whether the government need demonstrate that the discrimination furthers a compelling state interest remains open to question.

Applying these principles to the case of the unfunded race-IQ researcher, it is clear under *Maher v. Roe* that the right to engage in scientific inquiry is a right against government interference, not an entitlement to a particular allotment of public funds.[289] Arguably, the choice of specific areas of inquiry to be funded by the government should remain a matter of governmental discretion.[290] However, the scientist may succeed in his or her action against the government to compel nondiscriminatory criteria for disbursing funds if the government's asserted interests in, and manner of, disbursement do not meet the standards of exacting scrutiny, or whatever intermediate standard of scrutiny was indicated in *Buckley*. Finally, *Buckley* suggests that if the researcher does receive funds, he or she may have to "voluntarily" accept conditions on the funding which to some extent burden the freedom of scientific inquiry.[291] It is to that issue that we now turn.

(b) *Conditional funding*. If the government does grant benefits, it may not condition receipt of those benefits on relinquishment of constitutional rights.[292] Cases regarding such conditional

---

not be conditioned on whether they can obtain voter petitions with signatures totaling 15 percent of the number of ballots cast in the previous gubernatorial election).

288. Buckley v. Valeo, 424 U.S. 1, 95 (1975) (emphasis added).

289. Robertson, *supra* note 14, at 1206, 1268. *See also* Maryland Pub. Interest Research v. Elkins, 565 F.2d 864, 866 (4th Cir. 1977) ("There is no affirmative commandment upon [the government] to activate [the citizen's] exercise of First Amendment guarantees; the only commandment is not to infringe their enjoyment").

290. Professor Robertson argues that scientists should enter the political arena for their specific projects.

> [T]he first amendment right to research, like other rights, is no help to the scientist who wants both government funds and total discretion on how to use them. If scientists wish their views about the research budget to prevail, they, like other professions and groups, are relegated to the political process, for there the polity's commitment to the utility of research and new knowledge must ultimately be determined.

Robertson, *supra* note 14, at 1279.

291. *Buckley*, 424 U.S. at 95.

292. [The government] may not deny a benefit to a person on a basis that infringes his constitutionally protected interests—especially, his interest in freedom of speech. For if the government could deny a benefit to a person because of his constitutionally protected speech or associations, his exercise of those freedoms would in effect be penalized and inhibited.

Perry v. Sindermann, 408 U.S. 593, 597 (1972). *See also* Van Alstyne's statement that

benefits have given rise to what is termed the doctrine of "unconstitutional conditions."[293]

Among first amendment cases, the cornerstone decision is *Speiser v. Randall*,[294] in which the Court established the principle that enjoyment of a government-conferred benefit cannot be made contingent upon compliance with a condition that violates the first amendment rights of one who would otherwise qualify for the benefit.[295] *Speiser* invalidated a requirement that persons seeking to qualify for a state property tax exemption for veterans sign a loyalty oath. The Court rejected the contention that because a tax exemption is a "privilege," its denial based upon refusal to sign did not infringe upon free expression.[296] The Court found that the loyalty oath requirement improperly created a presumption of disloyalty on the part of the applicants, and likened the denial of the tax exemption to a penalty for the exercise of rights of free expression.[297] Thus, the Court held that the requirement allowed the government to "produce a result which [it] could not command directly."[298] Cases following *Speiser* have applied its principle to denials of unemployment benefits,[299] welfare payments,[300] and, most often, denials of public employment.[301]

From *Speiser* and its progeny, it is clear that the government may not dictate conditions through its grant of funds to a research scientist if the conditions infringe the recipient's exercise of first amendment rights. Conversely, content-neutral restrictions on scientific inquiry do not infringe on the recipient's first amendment rights, so long as the standards of *United States v. O'Brien*

> under appropriate circumstances one's interest in his government job, his publicly financed home, his food stamp meals, or his state university educational opportunities may indeed be constitutional rights in the positive-law sense ought no longer be denied. . . . Any per se constitutional distinction which would exclude governmental regulation of status in the public sector from constitutional review would, to steal a phrase from Mr. Justice Holmes, reflect neither logic nor experience in the law.

Van Alstyne, *The Demise of the Right-Privilege Distinction in Constitutional Law*, 81 HARV. L. REV. 1439, 1463–64 (1968).

293. *See generally* L. TRIBE, *supra* note 174, at 509–11; *see also* T. EMERSON, *supra* note 200, at 191–92; O'Neil, *Unconstitutional Conditions: Welfare Benefits with Strings Attached*, 54 CALIF. L. REV. 443 (1966).

294. 357 U.S. 513 (1958).

295. *Id.* at 518–19.

296. *Id.*

297. *Id.* at 518–20.

298. *Id.* at 526.

299. Sherbert v. Verner, 374 U.S. 398, 404–05 (1963).

300. Graham v. Richardson, 403 U.S. 365, 374 (1971); Shapiro v. Thompson, 394 U.S. 618, 627 n.6 (1969).

301. *See* cases cited *supra* notes 244–52 and accompanying text.

are met.[302] In addition, if the conditions are content-based, then they must pass the test of strict scrutiny in order to be permissible.[303] In order to determine into which category conditions on race-IQ research funding would fall if justified on the grounds that such research is "inopportune," we examine some existing conditions imposed on government-funded research.

To a certain extent, race-IQ research is already subject to conditional government funding because it includes the study of human subjects. Existing federal regulations on human experimentation[304] protect research subjects who may be exposed to the possibility of physical, psychological, or social injury[305] by requiring the scientist to obtain informed consent from the subject as well as prior administrative approval.[306]

Race-IQ researchers may object to such informed consent requirements because it may be impossible to persuade parents to permit access to their children's school records once they understand that the researcher is interested in exploring the IQ level of different racial groups.[307] Arguably, these consent requirements are not content-neutral because they discriminate against areas of scientific inquiry which raise controversial questions to which the subjects may object. Such arguments do not appear convincing. The consent requirements do not single out race-IQ research for restrictive treatment; the requirements apply to all human subject experimentation. They are content-neutral because the particular area explored does not trigger the requirement; the use of human subjects does. Therefore, the consent requirements may be best classified as manner restrictions subject to the lower scrutiny indicated in *United States v. O'Brien*.[308]

Although the federal consent requirements are manner restrictions, other aspects of the administrative review requirement may not be. Regulations permit an Institutional Review Board (IRB) to deny approval of a research project if it finds that the risks to the subject outweigh the value of the knowledge to be gained from the experiment.[309] According to two critics, "the [IRB] regulations contain no objective criteria for valuing either benefits or knowledge, thus relegating the process to a subjective

302. *See supra* notes 235–36 and accompanying text.

303. *See supra* notes 229–31 and accompanying text.

304. Basic HHS Policy for Protection of Human Research Subjects, 45 C.F.R. §§ 46.101–.211 (1980).

305. *Id.* §§ 46.102, .103.

306. *Id.* §§ 46.116–.117, .109.

307. *See* Diamond, *supra* note 74.

308. *See supra* notes 232–36 and accompanying text.

309. 45 C.F.R. §§ 46.111–.112 (1980).

weighing of values."[310] Assuming the IRB denies approval of a scientist's race-IQ research project on the ground that the research is "inopportune," that determination could be seen as an essentially unguided judgment that the research is valueless or pernicious. Such a judgment would clearly *not* be content-neutral, and both the decision of the IRB and the federal regulation would consequently fall under the strict scrutiny standard if tested in court. Were the court to find that the regulation did not further very strong governmental interests, it would be struck down as an unconstitutional condition on a governmental benefit.

3. *Restrictions on publication, lecturing, and teaching.* Even if a race-IQ researcher is successful in obtaining a position and funding, a government agency may still attempt to prevent dissemination of research results through lecturing, presenting papers, or publishing an article or book. Judicial solicitude reaches its highest pitch in connection with first amendment protection of publishing and teaching. Nevertheless, as noted earlier,[311] some expressive activities have been held to lie outside the scope of protected speech, or to qualify only for limited protection. Official interference might be justified on three separate grounds: (1) that the scholar's communication poses a danger of immediate harm; (2) that a community may restrict certain speech to enhance the quality of its environment; and (3) that impressionable listeners, especially schoolchildren, may be protected from controversial or disapproved speech. This section will not attempt to assess the strengths or weaknesses of these justifications. It only identifies the applicable standard of review when such justifications are offered to support government prohibition, as well as the factors relevant to determining whether the standard has been satisfied, and concludes by discussing the state's burden of proof in establishing that harms will flow from speech sought to be regulated.

a. Justification No. 1: Immediate Harm Under Group Libel and Group Vilification Statutes

Dictum in *Chaplinsky v. New Hampshire*[312] established that words which by their "very utterance inflict injury or tend to incite an immediate breach of the peace" fall outside the protection of the first amendment.[313] Such "fighting words" can be prohibited when they inevitably lead to "substantive evils"—violence, disor-

310. *See* Favre & McKinnon, *supra* note 14, at 698.

311. *Supra* notes 179–89 and accompanying text.

312. 315 U.S. 568 (1942).

313. *Id.* at 571–73.

der, lawless action—that the government has a right to prevent.[314] To be prohibited under the doctrine, the words must have been uttered under circumstances in which they cannot be countered by further speech[315] and are really a form of conduct[316] with "all the effect of force."[317] Thus, advocacy of a particular point of view cannot be prohibited unless the advocacy is directed to inciting or producing imminent lawless action and is likely to incite or produce such action.[318]

The government could attempt to prevent dissemination of race-IQ research results under a theory of protecting the public from incitement to violence or imminent lawless action. Words that constitute libel, group libel, or group vilification have been analyzed in terms similar to the "imminent lawless action" standard, particularly when the words injure members of a racial or ethnic minority group.[319] For example, *Beauharnais v. Illinois*,[320] the classic group libel case,[321] sustained a prosecution under an Illinois criminal libel statute[322] which had been construed by the Illinois Supreme Court to prohibit only utterances that were both

314. Brandenburg v. Ohio, 395 U.S. 444, 447 (1969); Schenk v. United States, 249 U.S. 47, 52 (1919).

315. L. TRIBE, *supra* note 174, at 603.

316. *Id.* at 598–601.

317. Near v. Minnesota, 283 U.S. 697, 716 (1931).

318. *See supra* note 184 and accompanying text.

319. *See, e.g.*, Delgado, *Words That Wound: A Tort Action for Racial Insults, Epithets, and Name-Calling*, 17 HARV. C.R.-C.L. L. REV. 133 (1982); Brown & Stern, *Group Defamation in the U.S.A.*, 13 CLEV.-MAR. L. REV. 7 (1964); Beth, *Group Libel and Free Speech*, 39 MINN. L. REV. 167 (1955); Note, *Group Vilification Reconsidered*, 89 YALE L.J. 308 (1979).

320. 343 U.S. 250 (1959).

321. *See* New York Times v. Sullivan, 376 U.S. 254, 268 (1964). Libel is generally a written communication that holds the plaintiff up to hatred, contempt or ridicule in the community. W. PROSSER, HANDBOOK OF THE LAW OF TORTS 739 (4th ed. 1971). Opinions, however, particularly ones that do not carry assertions of fact, may not be actionable as libel, *id.* at 742. Truth is also a defense to a libel suit, *id.* at 797–99. When the libel is directed at a group, the plaintiff must not only show that he is a member of the defamed group, but that the words apply personally to him. Where the group is large, as it would be in the case of race-IQ research, neither the group nor an individual has a cause of action, *id.* at 750.

While individual libel laws protect an individual's reputation, group libel laws are designed to promote order by reducing friction among groups. T. EMERSON, *supra* note 200, at 391–92. Thus, while group libel laws are extensions of the individual libel laws, they serve a different purpose. Instead of providing compensation for injury to an individual's reputation, they are justified instrumentally as preserving social order. Thus, while a civil remedy for group defamation may be difficult to obtain, as indicated above, criminal prosecution may be possible, W. PROSSER, *supra* at 751, as was the case in *Beauharnais*.

322. It shall be unlawful for any person . . . to . . . publish . . . in any public place in this state any lithograph . . . which publication . . . portrays depravity, criminality, unchastity, or lack of virtue of a class of citizens, of any race, color, creed or religion which said publication . . . exposes the citizens of any race, color, creed or religion to contempt,

libelous and likely to cause violence.[323] In allowing Illinois to enforce its criminal group libel law in a situation where the publication was both defamatory of blacks as a race and likely to cause violence and disorder,[324] the Court treated libel as a form of speech that falls outside the first amendment. Thus, it found no need to apply the clear and present danger test or its modern variant, "imminent lawless action."[325] Nevertheless, the narrow construction given to the statute by the Illinois Supreme Court was an implicit recognition of that test: the Illinois legislature was justified in criminalizing racial propaganda only because the legislature could reasonably find that it led to danger in the form of violence and breach of the peace.[326]

The constitutional validity of civil and criminal libel laws has been in doubt since *Garrison v. Louisiana*[327] and *New York Times v. Sullivan*[328] were decided in 1964. Application of the *Garrison* and *Sullivan* standards to a group libel statute would require the government to demonstrate that the prohibited expression is knowingly false, or false and made with reckless disregard for the truth. If such a showing cannot be made, the expression would be protected by the first amendment. Arguably, racially harmful speech can rarely be proven false. If the speech consists of opinion, there will be no objective measure of its falsity. Thus, it is doubtful whether even the statements held to be criminal in *Beauharnais* would be unprotected speech under current standards of libel. Only if the racially harmful statement consists of "false facts" would the speech be unprotected.

If racially harmful statements of an race-IQ researcher are nevertheless protected, the appropriate standard of judicial review in a group libel action brought against the researcher must be de-

---

derision, or obloquy or which is productive of breach of the peace or riots. . . .

343 U.S. at 251.

323. *Id.* at 254. *See Collin v. Smith*, 578 F.2d 1197, 1204 (7th Cir.), *cert. denied*, 439 U.S. 916 (1978).

324. There was little doubt about the asserted violation of the libel statute; the lithograph in question stated: "If persuasion and the need to prevent the white race from becoming mongrelized by the negro will not unite us, then the aggressions . . . rapes, robberies, knives, guns and marijuana of the negro, surely will." 343 U.S. at 252.

325. 343 U.S. at 266. *See also* T. EMERSON, *supra* note 200, at 354.

326. 343 U.S. at 261.

327. 379 U.S. 64, 72–73 (1964) (allegations that judges were inefficient, lazy, and opposed to the enforcement of vice laws were protected speech).

328. 376 U.S. 254, 279–80 (1964) (public official as defamation plaintiff must prove that newspaper printed untruth with knowledge of its falsity or with reckless disregard for its falsity). *See also* Tollett v. United States, 485 F.2d 1087, 1094 and n.14 (8th Cir. 1973) (validity of criminal libel laws in doubt); T. EMERSON, *supra* note 200, at 396.

termined. Thomas Emerson has written that "it is virtually impossible to reconcile group libel laws with constitutional requirements. . . ."[329] Such laws are inconsistent with the first amendment because they "are premised on the proposition that the government is entitled to determine the social value of expression."[330] If Emerson is correct, group libel laws appear to be, by their very nature, content discriminatory regulations which require exacting judicial scrutiny of their enforcement.[331] The usefulness of the group-libel statutes for justifying prohibitions on the expression or publication of race-IQ research, therefore, will be limited to cases where the government interests are truly compelling.

Narrower forms of government intervention, directed specifically at prohibiting incitement to violence or averting immediate psychological injury, may be subject to a less exacting standard of judicial review. One such form was recently proposed under a "group vilification" theory of racial utterances.[332] Group vilification statutes are concerned with statements directed at prejudiced hearers and intended to inflame their unconscious prejudices.[333] Arguably, such statements would be more like action than speech, tend to have "all the effect of force,"[334] and would thus be unprotected speech under *Chaplinsky-Beauharnais.*[335] Because the first amendment does not protect such speech, less than exacting judicial scrutiny would be appropriate. Whether the statements of a race-IQ researcher are likely, in fact, to present the dangers that a group-vilification statute seeks to prevent is treated in the next section of this Article.[336]

A number of uncertainties concerning the constitutionality of restrictions on racially harmful speech were addressed, but not resolved, by *Collin v. Smith*.[337] *Smith* arose when the Village of Skokie, a predominantly Jewish suburb of Chicago, attempted to prevent members of the National Socialist (Nazi) Party of

329. T. EMERSON, *supra* note 200, at 397.

330. *Id.* at 398.

331. If such a statute is aimed at prevention of harm to listeners or at prevention of civil disorder, the government agency seeking to enforce the regulation must assess the content of the speech for its intrinsically harmful qualities, or for the likelihood that such speech will cause immediate lawless or violent reactions by listeners. Such a statute must be content-discriminatory because it is the content of the speech that determines whether or not prohibition is appropriate.

332. Note, *Group Vilification Reconsidered*, 89 YALE L.J. 308 (1979).

333. *Id.* at 312–14; *see also* T. EMERSON, *supra* note 200, at 397.

334. *See supra* note 317 and accompanying text.

335. *See* 343 U.S. 250, 284 (1952) (Douglas, J., dissenting); *see also supra* text accompanying notes 315–17.

336. *See infra* Part IV.

337. 578 F.2d 1197 (7th Cir.), *cert. denied*, 439 U.S. 916 (1978).

America from demonstrating in the community. Three municipal ordinances were enacted, one of which prohibited "[t]he dissemination of any materials within the Village of Skokie which promotes and incites hatred against persons by reason of their race, national origin, or religion, and is intended to do so . . . ."[338] Despite the questionable vitality of *Beauharnais*, the Village of Skokie could find no better support from existing case law to justify the ordinance.[339]

The Seventh Circuit Court of Appeals held the statute unconstitutional on two grounds. First, the Nazis' promotion of hatred was not equivalent to causing disorder and therefore the "incitement" portion of *Beauharnais* did not apply.[340] Moreover, the court found that "libel does indeed now raise serious and knotty First Amendment problems" that the Village of Skokie had failed to overcome.[341] Thus, if *Beauharnais* implicitly allowed the prohibition of race-libelous statements, *Garrison*, *Sullivan*, and other recent cases cast doubt on the continued tenability of that portion of the opinion.[342] When *Smith* reached the Supreme Court, *certiorari* was denied, although two justices dissented from the denial on the ground that there was a need to determine the continued viability of *Beauharnais*.[343] The language of the dissenting opinion suggests that the Supreme Court has not yet made a final decision on whether speech that is potentially injurious to particular races and groups within a community is protected by the first amendment.[344]

---

338. *Id.* at 1199.

339. *Id.* at 1204.

340. *Id.*

341. *Id.* at 1205.

342. *Id.* at 1205 n.14. The District Court in Collin v. Smith, 447 F. Supp. 676, 694 (N.D. Ill. 1978), found this interpretation plausible. The statute (*see supra* note 322) in fact allowed prosecution of a publication which either defamed a group *or* caused a breach of the peace.

343. 439 U.S. 916, 918–19 (1978) (Blackmun, J., and White, J., dissenting).

344. *See* Delgado, *supra* note 319, at 172. The tripartite description of social interests served by the first amendment in Virginia State Bd. of Pharmacy v. Virginia Citizens Council, 425 U.S. 748, 761–65 (1976), *see supra* notes 195–99 and accompanying text, could provide a point of departure for such an assessment of potentially injurious speech:

> (1) *The individual's interest in self-expression.*
> Presumably, this interest is served by any racially harmful speech because the speaker wishes to speak.
> (2) *The general societal interest in free flow of information.*
> The operative term in this phrase is "information": racially harmful speech does not necessarily inform any listener. For example, a racial epithet arguably communicates no "information" other than the speaker's attitude towards members of other racial groups; the epithet itself need not be protected in order to convey the speaker's point of view.
>
> Similarly, speech which purports to be "scientific," but which is

Lying in the gap between *Beauharnais* and the *Smith* case is a broad, unresolved first amendment issue: can the government regulate speech in order to enhance the quality of life in a community—to enhance racial integration and harmony, for example?

b. Justification No. 2: Quality of environment and time, place, and manner restrictions.

The Supreme Court has allowed communities to prohibit certain kinds of speech to enhance the quality of their environments.[345] In *Paris Adult Theatre I v. Slaton*,[346] the Court allowed Georgia to prohibit the public showing of obscene films, even if the audience was composed of consenting adults.[347] According to *Paris*, the state had a legitimate interest in "stemming the tide of commercialized obscenity . . .[and in promoting] the quality of life and the total community environment, the tone of commerce in the great city centers, and, possibly, the public safety itself."[348] For all intents and purposes, the Court was upholding the exercise of the state's police power in the first amendment area.[349] The *Paris* Court also pointed out that the legislature was not required to demonstrate scientifically that the harm it intended to prevent would, in fact, flow from the forbidden speech; the Court found that legislatures were entitled to act upon "unprovable

---

clearly fraudulent, *see supra* notes 216–408 and accompanying text, does not serve the "general societal interest" because it also is not "information," *id.*

(3) *The specific social interest in enlightened public decision making.* Conceivably, speech can be harmful and "enlightening" at the same time. Racially harmful speech could, for example, inform decision makers regarding the necessity for governmental measures which alleviate racial tensions through positive social programs that promote racial harmony. On the other hand, if such speech fails to "inform," then such speech arguably does not, and cannot, "enlighten" decision making.

345. *See* L. TRIBE, *supra* note 174, at 677.

346. 413 U.S. 49, 68–70 (1973).

347. The Court did so despite having held in Stanley v. Georgia, 394 U.S. 557, 565 (1969), that adults were free to examine obscene materials in the privacy of their homes.

348. 413 U.S. at 57–58.

349. *See* Nebbia v. New York, 291 U.S. 502, 523–28 (1934). The police power allows governmental regulation of private interests. It is an attribute of sovereignty and a broad legislative prerogative. *See* El Paso v. Simmons, 379 U.S. 497, 508–09 (1965). As such, it is flexible and dynamic, capable of being adapted to changing economic and social conditions. *See* Firemen's Ins. Co. v. Washington, 483 F.2d 1323, 1328 (D.C. Cir. 1973). The primary requirement for the exercise of police power is that it be a reasonable, non-arbitrary, and non-capricious legislative decision that promotes the public good without infringing upon individual constitutional rights. *See* Lawton v. Steele, 152 U.S. 133, 137 (1894). While the protection of the *physical* safety of persons and property is at its core, *see* Kelley v. Johnson, 425 U.S. 238, 247 (1976), cases such as *Paris Adult Theater I* demonstrate that the power can be exercised to protect interests of a less tangible nature.

assumptions."[350]

Paris involved unprotected speech. *Young v. American Mini Theaters*[351] held that certain protected kinds of speech also can be regulated to improve the quality of an environment. In *American Mini Theaters*, the Court upheld a Detroit zoning ordinance regulating the location of "adult" theaters showing sexually explicit, but not obscene, films.[352] A plurality of four justices upheld the ordinance despite its apparently content-based classification, finding that the content classification was used only to limit the location and number of theaters and not to suppress entirely the showing of certain films.[353] The zoning ordinance was thus only a place restriction subject to an intermediate level of scrutiny.[354] The Court found the ordinance to be reasonable because it was enacted after a legislative investigation had determined that a concentration of "adult" theaters led to economic deterioration of a neighborhood and to an increase in crime.[355] Moreover, the speech in question was commercial in nature, and thus entitled to limited protection.[356]

The Court has observed that time, place, and manner restrictions are permissible if "they are justified without reference to the content of the regulated speech, . . . serve a significant governmental interest, and . . . leave open ample alternative channels for communication of the information."[357] *American Mini Theaters* casts some doubt on the mandatory nature of the first part of this rule. Three justices joined Justice Stewart's dissent in *American Mini Theaters*, which found that the decision "rides roughshod" over the requirement of content-neutrality,[358] rendering the decision an "aberration" in first amendment adjudication.[359] Professor Laurence Tribe has been less critical of the decision, proposing that Justice Stevens' plurality opinion seems "likely to have broader implications for the course of first amendment adjudication over the next decade . . . ."[360] One of the inferences Tribe draws is that some members of the Court may be willing to

350. 413 U.S. at 60, 61.

351. 427 U.S. 50 (1976).

352. *Id.* *See* Tribe, *supra* note 174, at 673.

353. 427 U.S. at 69–72.

354. *Id.* at 63 n.18.

355. *Id.* at 68–70, 70 n.34.

356. *Id.* at 71.

357. Metromedia, Inc. v. San Diego, 453 U.S. 490, 516 (1981); Heffron v. Int'l Soc. for Krishna Consciousness, 452 U.S. 640, 648 (1981); Virginia State Bd. of Pharmacy v. Virginia Citizens Consumer Council, 425 U.S. 748, 771 (1976).

358. Young v. American Mini Theaters, Inc., 427 U.S. 50, 85 (1976) (Stewart, J., dissenting; Brennan, Marshall, and Blackmun, J.J., joining in the dissent).

359. *Id.* at 87.

360. Tribe, *supra* note 174, at 674.

uphold content-based regulations of protected speech so as to "accommodate the conflicting demands of individuals and communities to have government shield each from intrusion by the other."[361]

Assuming *American Mini Theaters* is not limited to erotic, albeit nonobscene, speech,[362] then race-IQ research could bring into play the kinds of conflicting demand[363] which the Court may be willing to accommodate by way of content-discriminatory time, place, and manner restrictions on "inopportune" knowledge. The concept of inopportune knowledge is based on the notion that society is not capable of absorbing certain kinds of knowledge at the present time.[364] The concept carries with it, however, the implication that inopportune knowledge will or may become opportune in the future. Assuming that the Court will uphold a content-discriminatory regulation of speech the purpose of which is to enhance the environment by reducing social conflict, prohibition of the dissemination of inopportune knowledge may qualify as a permissible "time, place, and manner" restriction.

Although enhancement of the environment arguably serves to overcome the requirement of content-neutrality, a valid time, place, and manner regulation must also "serve a significant government interest, and . . . leave open ample alternative channels for communication of the information."[365] Whether or not the government interests served by suppression of inopportune knowledge are significant is reserved for later treatment in this Article.[366] However, at this point we can speculate that the Court's third requirement for permissible time, place and manner restrictions, that of "ample alternative channels," might not be satisfied by suppression of "inopportune" knowledge. It is one thing to refuse to allow a speech to be made on Monday because

361. *Id.* at 679. Two caveats are in order. First, it may be that *American Mini Theaters*' relaxation of the content-neutrality requirement is based on, and limited to, cases involving nonobscene sexually explicit displays rather than "forms of speech less physiological and anatomical in their content and appeal." *Id.* at 680. Furthermore, Tribe suggests that a "content-based discrimination is more likely to be upheld if the government's real interest is not in protecting citizens from exposure to the speech as such but rather in such 'secondary effects' as the physical deterioration and crime which accompany the concentration of 'adult' theaters in a 'red light' district." *Id.* at 679. The remainder of our discussion in this section proceeds on the premise that *American Mini Theaters* may stand for a broader assault on content-neutrality, outside the area of erotic or near-obscene speech.

362. *See supra* text accompanying notes 360-61.

363. *See generally infra* Part IV (discussing varieties of state interest that could be urged to justify restrictions on race-IQ research).

364. *See supra* note 16 (defining "inopportune knowledge").

365. *See supra* note 357 and accompanying text.

366. *See infra* Part IV (discussing state interests in regulating or forbidding research).

another is already scheduled at the desired public forum for that day, but permit the speech to be made the Monday following. It is quite another matter to prohibit the publication of race-IQ research findings in 1984 on the grounds that society will not be capable of absorbing them until 1985 or 2001. The latter time regulation is in effect a prohibition of *all* discussion on a current and controversial issue of public policy. The Court has repeatedly rejected such total prohibitions.[367] Because such extended time regulations appear to leave open no "alternative channels," the regulations cannot remain within the domain of time, place, and manner restrictions. Accordingly, strict judicial scrutiny of the regulation would be the appropriate standard of review.

c. Justification No. 3: Protection of impressionable listeners

When a proponent of race-IQ theories publishes his or her views in the form of an article or book, the reader exercises a choice to read or not read the offered material. Classroom teaching or lecturing, however, deals with audiences whose choices are limited, or who are young and impressionable.[368] Further, if the school or university is public, the state may assert an interest in the selection of curricula or materials that conflict with the interest of the teacher in teaching or presenting whatever ideas he or she chooses. For these reasons, the right of a researcher-teacher to present controversial scientific ideas in classroom or lecture hall may be somewhat more restricted than the right to put those same ideas in print.

The government's right to regulate the content of speech activities in the classroom is clearest when young children are concerned. In *Trachtman v. Anker*,[369] the Second Circuit Court of Appeals held that a school board could prohibit the distribution of a questionnaire on sex to ninth and tenth grade children. The court reasoned that the board was not curtailing first amendment rights, but protecting the psychological well-being of children in its care;[370] the first amendment does not protect the right to present material that the school board could reasonably believe is harmful.[371] A concurring opinion explained that while the harmful consequences may not provoke a breach of the peace, "a blow to the psyche may do more permanent damage than a blow to the chin."[372]

---

367. *See, e.g.*, Metromedia Inc. v. San Diego, 453 U.S. 490, 518 (1981); Consolidated Edison Co. v. Public Serv. Comm'n, 447 U.S. 530, 537 (1980).

368. *See* Tribe, *supra* note 174, at 677–78, 678 n.13.

369. 563 F.2d at 512 (2d Cir. 1977), *cert. denied*, 435 U.S. 925 (1978).

370. 563 F.2d at 519.

371. *Id.* at 520.

372. *Id.* at 520 (Gurfein, J., concurring). On the other hand, Judge Mansfield,

One of the factors implicit in the *Trachtman* decision was recognition that school administrators were competent to determine whether harm would flow from particular material.[373] Since school administrators would appear equally competent to determine the harmfulness of lectures or teaching materials containing race-IQ theories, courts would probably give their determinations considerable deference.

In general, the Supreme Court has looked particularly sympathetically on the need to protect children from potentially threatening situations.[374] In *Ginsberg v. New York*,[375] for example, the Court upheld a statute prohibiting the sale of material which, while not necessarily "obscene" for adults, was perceived by the state and the Court to be harmful to children. The well-being of children is most clearly a matter of legitimate state concern when the setting is the lower schools, to which the community has entrusted the care of its children *in loco parentis*.[376] With older students, the ability of the state to limit what an instructor

---

dissenting, reasoned that since the questionnaire would not inevitably lead to a breach of the peace, it could not be proscribed under the clear and present danger test of Schenck v. United States, 249 U.S. 47, 52 (1919). He also thought that allowing the school board to prevent "psychological harm" threatened constitutionally protected speech by its very vagueness. Judge Mansfield would make the test for determining psychological harm turn on the impact on average students rather than on impressionable ones. 563 F.2d at 520–22.

373. 563 F.2d at 519–20. Tribe has referred to this recognition of competence in discussing a case in which the Civil Service Commission issued a regulation excluding aliens from holding federal jobs. *See* L. TRIBE, *supra* note 174, at 286. In this case, Hampton v. Mow Sun Wong, 426 U.S. 88 (1976), the Court invoked strict scrutiny because aliens were a suspect class. The same standard would be applied, of course, if speech—a fundamental interest—were allegedly abridged.

In *Hampton*, 426 U.S. at 104, 114, the Court held that in evaluating the constitutionality of a rule, whether or not the promulgating body has direct responsibility for protecting the interest served by the rule is an important consideration. The Court found that the reasons given by the Commission for justifying the rule, including the national security and the need for providing incentives for aliens to become citizens, simply did not fit within the actual purpose of the Commission, whose sole purpose was the promotion of efficiency in the federal civil service. In effect the Court held that the rule exceeded the "competency" of the agency promulgating it.

The reasoning of *Trachtman* was also used in Eisner v. Stamford Bd. of Educ., 440 F.2d 803 (2d Cir. 1971). Recognizing that a school was a "marketplace of ideas" (*cf.* Tinker v. Des Moines Indep. School Dist., 393 U.S. 503, 507 (1969); *see also infra* text accompanying notes 277–79), the Court held that a state nevertheless had the "authority to minimize or eliminate influences that would dilute or disrupt the effectiveness of the educational process." *Eisner*, 440 F.2d at 807.

374. *See* Tribe, *supra* note 174, at 662 n.44.

375. 390 U.S. 629, 639–40 (1968).

376. Trachtman v. Anker, 563 F.2d at 519. *See also* Goldstein, *supra* note 259, at 1342–44. According to Goldstein, schools can protect the well-being of the young children under their care in great part because one of the principal roles of educational institutions is that of *inculcating* them with societal values. This paternalistic function, argues Goldstein, is inherently incompatible with the premises underlying the exercise of first amendment rights in the educational context.

may teach them is still unsettled.[377] *Tinker v. Des Moines Independent Community School District*[378] held that first amendment rights were available to secondary school teachers and students, at least to the extent of permitting them to wear symbolic armbands protesting the Vietnam War. But the protective mantle of the first amendment was limited by the Court's recognition of the "comprehensive authority of the . . . school officials, consistent with constitutional safeguards, to prescribe and control conduct in the schools"[379] and by its observation that the amendment is to be applied "in the light of the special characteristics of the school environment."[380]

At the university level, the content of a teacher's lectures or writings presents fewer dangers of indoctrination and psychological trauma than at the primary or secondary level, and the state's *parens patriae* concerns are, accordingly, weaker. Still, a university professor cannot automatically invoke the first amendment to teach anything he or she wishes.[381] According to Thomas Emerson, university regulations, whether emanating from the governing board, administration, faculty groups, or other sources, may legitimately specify the scope of the knowledge and values that are taught.[382] In particular, regulations concerning assignment of professors to courses, assignment of textbooks, and the scope of subject matter for particular courses are all proper exercises of supervisory authority and do not abridge a faculty member's rights of free speech. Infringement may occur, however, when the regulations prescribe the manner in which the faculty member must present the material,[383] or when the university seeks to muffle a professor in the role of social critic. In this latter situation, the university's institutional control is much less legitimate than it is with respect to curriculum. When a professor exercises the function of social critic, Emerson argues, the university can demand scholarly competence, but not much more.[384]

If Emerson's analysis is correct, a university could legitimately tell particular faculty members not to teach psychology, or

377. Two "loyalty oath" cases, Barenblatt v. United States, 360 U.S. 109, 112 (1959), and Sweezy v. New Hampshire, 354 U.S. 234, 250 (1957), recognize the importance of academic freedom in general. Epperson v. Arkansas, 393 U.S. 97 (1968), which presented the issue of a right to teach evolutionary theory, was decided on establishment of religion grounds, a rationale not applicable in the race-IQ context, *id.* at 105–06.

378. 393 U.S. 503, 506–08 (1969).

379. *Id.* at 507.

380. *Id.* at 506.

381. *See generally* Goldstein, *supra* note 259, at 1340.

382. T. EMERSON, *supra* note 200, at 618–21.

383. *Id.* at 624.

384. *Id.* at 619. *See generally supra* text accompanying notes 238–73.

IQ theories, or population genetics, and it could discipline them if they violated these orders. But a professor who had university approval to teach in any of these fields could not be ordered to avoid all mention of race-IQ theories. Nor could the university interfere with the professor's activities in non-teaching roles such as social commentator or advocate—activities like public lecturing, writing of letters to the editor, or testimony before congressional groups. In these circumstances, the university may only require its faculty to meet professional standards of competence. Punishment should be permitted only if the professor acts irresponsibly or unprofessionally—for example, by failing to substantiate opinions with any facts or evidence.[385] It would seem that few race-IQ researchers would be subject to sanction under this standard.

Within these broad limitations, universities may institute reasonable time, place, and manner restrictions on university speech to assure the tranquility of the campus.[386] Thus, they could prevent a race-IQ speaker from delivering a highly provocative speech at a time when racial tensions are running high on campus, so long as they make clear that the speaker could appear at a later time. The university could also prohibit a race-IQ speaker from appearing because the subject of the speech does not have a high educational or intellectual priority or because the speaker's credentials appear inadequate.[387] Indeed, it was on the latter basis that a Stanford University Dean of Graduate Studies denied William Shockley's request to teach a graduate seminar in human genetics. Shockley's competence in mathematics and engineering was not viewed as extending to the field of genetics.[388]

A final consideration relates to the type of free speech limitations a university can impose on a teacher. In the context of this Article, it concerns the university's "competence" to determine whether theories concerning racial differences in intellectual capacity should be explored or taught.[389] A university may be man-

385. T. EMERSON, *supra* note 200, at 620.

386. *Id.* at 621.

387. Moreover, priorities set by the university may determine the allocation of scarce educational resources or facilities. T. EMERSON, *supra* note 200, at 621; *see also supra* notes 275–91 and accompanying text. This rationale was used in connection with the right to publish an article in a state-subsidized journal. In Avins v. Rutgers, 385 F.2d 151 (3d Cir. 1967), *cert. denied*, 390 U.S. 920 (1968), a federal appeals court rejected the arguments of a plaintiff who contended that the editors of the *Rutgers Law Review* had discriminated against his conservative ideas when they rejected his article on the issue of school desegregation. The court held that the editors had the discretion to determine the suitability of articles submitted to them. *Id.* at 153.

388. W. Turner, *Stanford Vetoes Shockley Course*, N.Y. Times, May 2, 1972, Pt. A, at 9, col. 1.

389. *See supra* note 373.

Stephen Goldstein, *supra* note 259, has also argued that at least lower-school authorities have the competence to decide what can be taught to children under their

ifestly competent to determine that a race-IQ speech could cause a temporarily volatile situation on campus to explode with violence, or to determine that it already has enough race-IQ researchers in its employ. But suppose a university attempted to interfere with the research or teaching of an educational psychologist already in its employ, on the ground that the work threatens to cause broad social harms, such as an increase in prejudice in society. Here, the outcome is not so clear. In *Regents of the University of California v. Bakke*,[390] a case that addressed the validity of a racial "quota" for selecting students at the UC Davis medical school, the Court, quoting *Hampton v. Mow Sun Wong*,[391] declared that the university's "broad mission is education, not the formulation of any legislative policy. . . . [I]solated segments of our vast governmental structures are not competent to make those decisions, at least in the absence of legislative mandate. . . ."[392] If the same rationale is applied to university restrictions on the teaching of race-IQ theories, *Bakke* may mean that a legislature is competent to regulate race-IQ teaching but that the university is not.

d. Proof of harm.

Whoever imposes the race-IQ teaching restrictions, whether university or legislature, will have to demonstrate the plausibility of the cause-effect relationship believed to justify the abridgment of expressive acts.[393] This holds true whether the effect is psycho-

---

supervision because of the school's *inculcatory* role. Goldstein believes that lower school authorities could demand that a teacher not make known to his students the existence of theories of possible genetic differences in intelligence among racial groups because such discussion would lead to racial prejudice. Goldstein, *Academic Freedom: Its Meaning and Underlying Premises as Seen Through the American Experience*, 11 ISRAEL L. REV. 52, 73–74 (1976).

In emphasizing the inculcatory role of schools, however, Goldstein does limit the reach of his conclusions. Indeed, he admits that the emphasis given to the inculcatory role will vary from institution to institution and that therefore it will have to be taken into account on a case-by-case basis in deciding the scope of academic freedom. *Id.* at 74.

A wide scope for regulating the activities of university researchers is found in a view of academic freedom that emphasizes the role of political bodies in setting university policy. Goldstein argues that the issue is *not* whether teachers have a constitutional right to teach what they please, even if it is contrary to the instructions of school authorities. Rather, the issue is *who* should make these decisions. Then, emphasizing the inculcatory role of educational institutions, Goldstein concludes that this decision is ultimately one of political policy, which should be decided by school boards or other "politically responsive groups." Goldstein, *supra* note 259, at 1356.

390. 438 U.S. 265 (1978).

391. 426 U.S. 88 (1976). *See also supra* note 373.

392. 438 U.S. at 309.

393. *See supra* text accompanying note 350. *Paris Adult Theatre I* established that when a protected right is infringed, the Court will closely examine any legislative assertions about the relationship between cause and effect, 413 U.S. at 60. Linmark Associates v. Township of Willingboro, 431 U.S. 85 (1977), for example, concerned

logical trauma, the danger of a riot, or an increase in social prejudice. In *Larry P. v. Riles*,[394] a federal district court confronted a challenge by black plaintiffs to California's use of IQ tests in placing children in special classes for the educable mentally retarded. After weighing all the evidence, Judge Peckham made a finding that "native intelligence" could not be measured by IQ tests, and that those tests measure only the skills tested.[395] The court also noted the differential impact of the tests on members of racial minorities, pointing out that the history of the IQ test was "at least in the early years, a history of racial prejudice, of Social Darwinism, and of the use of scientific 'mystique' to legitimate such prejudices."[396] For these reasons, the court held that the state could establish no compelling interest to justify the use of IQ tests that resulted in educable mentally retarded classes with "overwhelming disproportions of black children."[397] It therefore enjoined the use of any tests until the State Board of Education made a determination that the tests were not racially or culturally biased.[398]

Although the actions and goals of a high school testing psychologist and those of a race-IQ researcher differ somewhat, some of the principles of the *Riles* case seem applicable to any case involving regulation of the researcher. First, any state agent seeking to abridge the researcher's rights must prove that the research program will be harmful. Second, by conditioning the use of the IQ test on the results of further research, *Riles* implies that race-based harms may sometimes be countered by "more speech," in this case speech that points to a test's bias.[399] Finally, the case points out that there is a difference between knowledge and policy. The state stands between scientific knowledge and social policy and is free to *ignore* scientific knowledge, especially where it appears to be of questionable cross-cultural or cross-racial validity. The *Riles*

---

the attempt of a community to stem the flight of white homeowners from a racially integrated area by prohibiting the posting of "For Sale" or "Sold" signs. The Court held that the promulgator of the regulation must show that the prohibition of "for sale" signs was necessary to achieve the objective of retaining the city's integrated character. The Court was not convinced by the record that prohibiting the signs would "reduce public awareness of realty and thereby decrease public concern over selling." 431 U.S. at 95–96.

394. 495 F. Supp. 926 (N.D. Cal. 1979).

395. *Id.* at 952.

396. *Id.* at 935.

397. *Id.* at 984–85.

398. *Id.* at 989. The court pointed out that: "[t]he rather weak evidence . . . in support of the genetic explanation tends to rest on the disparities in I.Q. scores, which obviously overlooks any possible bias of the tests themselves." *Id.* at 955.

399. Ireland argues that the criticism of Jensen and Schockley is unjustified. Ireland, *The Relevance of Race Research*, 84 ETHICS 140, 144 (1974). The controversy should be cured by having reputable scientists look into the matter. *Id.*

court noted that while state officials "would not rule out the genetic explanation for . . . IQ scores . . . ," the state was "unwilling to admit any reliance on it for policy-making purposes."[400] California's ambivalent treatment of IQ scores, and the *Riles* court's reaction to this treatment, suggest that where the consequences of research rest with the state's use of the results, official abridgment of the research may be unconstitutional.

IV. COMPELLING STATE INTEREST

Americans traditionally regard knowledge, including scientific knowledge, as indispensable for informed political decisionmaking, improvement of the human condition, self-fulfillment, and as an end in itself of great intrinsic worth. Constitutional doctrine and case law, reviewed in the previous section, reflect these values, placing the burden of proof on the party who would discourage or regulate scientific research which might generate such knowledge. Thus, the proponent of regulatory measures aimed at curbing race-IQ research must show that substantial harms are likely to result from the conduct of the research, the knowledge it is likely to produce, the uses to which this knowledge is put, or some combination of these. This section reviews the harms that have been asserted, or might be asserted, to flow from race-IQ research, and assesses the probability that a court will find them plausible and compelling. A final section discusses mechanisms that could accommodate the interest of the scientist in pursuing race-IQ research and the interest of society in averting injury likely to be associated with the research.

A. *Erosion of the Ideal of Equality*

The ideal of equality—that "all men are created equal,"[401] and that each person is an equal moral agent—is deeply rooted in our legal system.[402] This ideal has been imperfectly realized: over a century after the abolition of slavery, minority citizens continue to suffer from discriminatory attitudes and treatment which infect our economic system, our cultural, political, and educational institutions, and the daily interactions of individuals.[403] Moreover, in

400. 495 F. Supp. at 955.

401. The Declaration of Independence para. 2 (U.S. 1776).

402. *E.g.*, U.S. Const. amend. XIII (slavery prohibited); amend. XIV, § 1 ("No state shall deny to any person . . . the equal protection of the law"); amend. XV, § 1 (right to vote not to be abridged by reason of race or color). *See generally* Brest, *The Supreme Court, 1975 Term—Foreword: In Defense of the Antidiscrimination Principle*, 90 HARV. L. REV. 1 (1976).

403. *See* D. BELL, RACE, RACISM AND AMERICAN LAW (1978) (racism is a continuing problem in American life); K. CLARK, DARK GHETTO (1965). *See also* G. ALLPORT, THE NATURE OF PREJUDICE 77-78 (1954). Studies at the time led researchers

the past ten years minorities have become the victims of a discernible increase in racial hostility.[404] One risk associated with race-IQ research that must therefore be faced is the possibility that it will contribute to a further erosion of the ideal of equality. If either the results of the research or its mere conduct could lead to this result, then the research would be "inopportune" in the strongest sense—research that should not be conducted because it threatens a central principle by which our society seeks to order itself.

Contemporary response to Arthur Jensen's 1969 article[405] gives some strength to concern for the erosion of the ideal of equality.[406] In an article entitled "Born Dumb?" *Newsweek* summarized Jensen's views:

> Dr. Jensen's view, put simply, is that most blacks are born with less "intelligence" than most whites. . . . Jensen's theoretical views lead him in his article to develop some quite prac-

---

to estimate that four-fifths of the American population harbored enough antagonism toward minority groups to influence their daily conduct. *Id.* at 197–98 (84% agreement among college students for stereotype of blacks as superstitious). *See generally* REPORT OF THE NATIONAL ADVISORY COMMISSION ON CIVIL DISORDERS (Kerner Commission) 203–82 (N.Y Times ed. 1968).

404. Racial hostility is increasing in many areas of national life, including college campuses, *see, e.g.*, *The Black Mood on Campus*, NEWSWEEK, Nov. 8, 1982, at 107. Students broke into a black dormitory at Cornell and wrote, "The KKK's here to stay" on the wall; at Michigan State, a black professor's car was defaced with spray paint and official reports show a rise in racial incidents in the dormitories; a recent issue of the Dartmouth Review depicted blacks as semiliterate; vandals ransacked Brown University's Third World Center. The director of the Institute for the Study of Educational Policy at Howard University said, "racial stress has picked up considerably." He attributes the tension in part to cut-throat competition for jobs, and in part to the "negative climate" created by the Supreme Court's 1978 *Bakke* decision on affirmative action admission plans: "*Bakke* made it possible to express pent-up hostility without being charged with racism, and young people have picked it up." Fewer black students are applying to college, and of those who do more have decided to opt for black colleges. *Id.* at 108. *See also* Trescott, *Is Social Racism Now Becoming "Acceptable,"* L.A. Times, June 12, 1981, at 2, col. 1 ("Social racism—the veiled insult, contempt masquerading as a joke [and] the direct slur," underground in 1960's and early 1970's, is now being "recycled . . . as a protest against minority gains"); *Racism Flares on Campus*, TIME, Dec. 8, 1980, at 28 (a black dean at Harvard University attributed recent upsurge in racist slurs and acts on college campuses to a change in national mood, which has made such acts "once again . . . respectable").

405. *IQ and Scholastic Achievement*, *supra* note 54.

406. *See* A. CHASE, THE LEGACY OF MALTHUS, THE SOCIAL COSTS OF THE NEW SCIENTIFIC RACISM 469 (1980). Jensen's conversion to the hereditarian school was "treated as the greatest scientific development since the first nuclear device was exploded at Los Alamos in the closing days of World War II"; it rated lead stories in *Newsweek* (circulation 2,150,000), *Life* (7,400,000), *Time* (3,800,000), and *U.S. News & World Report* (1,625,000). *Id. See also* J. BLUM, PSEUDO-SCIENCE AND MENTAL ABILITY 115, 130–31 (1978) (inauguration of Nixon guaranteed that the article would receive widespread publicity; black power movement emphasized educational failure of black children; both factors produced "a social climate conducive to revival of the nature-nurture race issue." *Id.*).

> tical policy recommendations. Since intelligence is fixed at birth anyway, he claims, it is senseless to waste vast sums of money and resources on such remedial programs as Head Start which assume that a child's intellect is malleable and can be improved ("Compensatory education has been tried and it apparently failed," he writes). Instead, programs should concentrate on skills which require a low level of abstract intelligence.[407]

The opposition to and criticism of Jensen's views by many geneticists and educational psychologists[408] received less attention from the popular news media.[409] Thus, the message that many Americans received was simple: well-intentioned social programs cannot overcome the unfortunate fact that blacks were "born dumb."[410]

Advocacy and publication of disparaging views about a social group may, if the victimized group lacks the means to oppose

---

407. *Born Dumb?*, NEWSWEEK, Mar. 31, 1969, at 84.

408. *See* Bridger & Golden, *A Refutation of Jensen's Position on Intelligence, Race, Social Class and Heredity*, MENTAL HYGIENE, Oct. 1969, at 648 ("Jensen does not offer any startling new scientific evidence to support his point of view, but instead dredges up old data and offers the same sterile arguments of the past . . . . Politicians may use Jensen's arguments to reduce the amount of money made available for compensatory education programs. . . ."). *See also* H. EYSENCK & L. KAMIN, THE INTELLIGENCE CONTROVERSY 94 (1981) (quoting American Psychological Association's Cleary Committee Report) (repudiates idea that IQ is innate); poll of American Psychological Association (1970) (*reprinted in* A. CHASE, *supra* note 406, at 43–44 (over two-thirds of members either disagreed or tended to disagree with the Jensen thesis)); Hirsch, *Behavior-Genetic Analysis and Its Biosocial Consequences*, 2 SEMINARS IN PSYCHIATRY 89, 97–98 (1970); Layzer, *Science or Superstition? A Physical Scientist Looks at the IQ Controversy*, in THE IQ CONTROVERSY, *supra* note 30, at 195 (Jensen's hypothesis "of genetic differences in intelligence between ethnic groups is shown to be untestable by existing or foreseeable methods. Hence it should not be regarded as a scientific hypothesis but as a metaphysical speculation"); J. MERCER, LABELLING THE MENTALLY RETARDED 95–123 (1973) (Sociocultural factors cannot be ignored in interpreting the meaning of a standardized intelligence test when evaluating a child from a non-Anglo background because the IQ tests are measuring, to a significant extent, sociocultural characteristics. Mercer retested 268 children who had been placed in classes for the mentally retarded and found that 70% would not have been there had their socioeconomic backgrounds been taken into account.). *Cf.* J. BLUM, *supra* note 406, at 18, 105 (blacks outscored whites on specially designed IQ test); Lewontin, *Race and Intelligence*, in THE IQ CONTROVERSY, *supra* note 30, at 89 ("between two populations, the concept of heretability of their differences is meaningless").

409. *Can Negroes Learn the Way Whites Do?*, U.S. NEWS & WORLD REPORT, Mar. 10, 1969, at 55. *See* Block and Dworkin, *I.Q., Heritability and Inequality*, in THE IQ CONTROVERSY, *supra* note 30, at 513 ("Serious and harmful consequences arise from the predictable distortion and misunderstanding by the mass media of the technical results of such investigation."). *See also* Lewontin, *Race and Intelligence*, in THE IQ CONTROVERSY, *supra* note 30 (summarizes Jensen's position as same as that reported by media); P. GREEN, THE PURSUIT OF INEQUALITY 47 (1981) (criticisms of Jensen and Shockley did not receive same media coverage as presentation of their original views).

410. *See supra* note 407. *See also supra* note 408.

them successfully, permanently damage the chances of the group's members to achieve economic and social equality with the majority population. Such negative images may enable the majority group to construct a stigma-theory, an ideology to explain the stigmatized group's inferiority and the danger it represents.[411] A stigma permits the majority group to treat the victims as less than fully human; if they are treated unequally, they are only getting what they deserve.[412]

In considering challenges to educational "tracking," courts have analyzed the use of intelligence-labelling devises in terms similar to these.[413] In *Hobson v. Hansen*,[414] decided in 1967,

411. E. GOFFMAN, STIGMA: NOTES ON THE MANAGEMENT OF SPOILED IDENTITY 5 (1963). Stigma is the attitude with which "normals" regard those with differentiating characteristics. *See* P. GREEN, *supra* note 409, at 51 ("Banfield's notion that there is a 'culture of poverty' indeed lacks the power of Jensen's genetic theory . . . because it offers no real theory of causation. If there is no structure of white oppression, then black inferiority is the only available alternative. That may explain the greater popularity of Jensen's work. . . ."). *See also* Chomsky, *Comments on Hernnstein's Response*, in THE IQ CONTROVERSY, *supra* note 30, at 322 (There is a need for "some new device . . . to ensure that privilege is not threatened. What could serve better than the theory that the poor and weak must accept and welcome their status which results from the wise decision to reward the talented in a 'hereditary meritocracy.' ").

412. *See supra* note 411. *See also* C. WOODWARD, THE STRANGE CAREER OF JIM CROW 67–69 (3d rev. ed. 1966). A common result of stigma is the reduction of job opportunities, inferior medical care, poorer schools, etc., on the basis of the stigmatizing characteristic. *See generally* K. CLARK, DARK GHETTO: DILEMMAS OF SOCIAL POWER (1965); REPORT OF THE NATIONAL ADVISORY COMMISSION ON CIVIL DISORDERS, *supra* note 403, at 251–65 ("Unemployment, Family Structure and Social Disorganization"); A. CHASE, *supra* note 406, at 1–47 (race-based research has been used to justify lower standards of medical care and forced sterilization for minorities and the poor); Casas, Wampold & Atkinson, *The Categorization of Ethnic Stereotypes by University Counselors*, 3 HISPANIC J. BEHAVIORAL SCI. 75, 81 (1981) ("Results . . . suggest that counselors have a constellation of stereotypes for each ethnic group; the confirmation of one stereotype in this constellation probably will tend to confirm the entire constellation.").

413. IQ testing served as the theoretical basis for the development of educational tracking systems. *See supra* notes 26–30, 39–47, 48–53 and accompanying text. In educational tracking, students are separated into groups according to their performance on IQ or similar tests—a use that many current race-IQ researchers approve. Jensen, for example, contends that some children have only "Level I" brains and are best capable of learning through rote, associational methods. *See IQ and Scholastic Achievement*, *supra* note 54. Jensen contends that intellectual ability is distributed in the population as a function of class and race. The Level I group, which contains mostly blacks, should therefore be taught only basic occupational skills. *Id*. *See generally* P. GREEN, *supra* note 409, at 55.

The suggestion espoused by Jensen also that blacks have only Level I brains and are capable of only "associative" or rote learning originated among supporters of segregation in the late 19th and early 20th centuries. *See* J. VAN EVRIE, THE BRAIN, WHITE SUPREMACY AND NEGRO SUBORDINATION 129 (1868), cited in A. CHASE, *supra* note 406, at 177 ("[T]he negro brain in its totality is ten to fifteen percent less than that of the Caucasian" and "incapable of grasping *ideas, or what we call abstract truth*, as absolutely as the white child.") (emphasis in original). *See also* Bean, *The Negro Brain*, 72 CENTURY ILLUSTRATED MONTHLY MAGAZINE 778, 784 (1906)

Judge Skelly Wright found the Washington, D.C. school district's tracking system discriminatory because it segregated races by tending to place a disproportionate number of black children in the lower tracks with few remedial opportunities.[415] After noting the relatively rigid class and racial separation that resulted,[416] Judge Wright concluded:

> Even in concept the track system is undemocratic and discriminatory. Its creator admits it is designed to prepare some children for white-collar, and other children for blue-collar, jobs. Considering the tests used to determine which children are to receive the blue collar special, and which the white, the danger of children completing their education wearing the wrong collar is far too great for this democracy to tolerate.[417]

The court carefully considered the basis for ability grouping in theory and practice, and found that the tests, which ostensibly measured ability, actually measured and reinforced socio-economic advantage.[418] Furthermore, once a child was placed in a track, a self-fulfilling prophecy occurred: "[T]eachers acting under false assumptions because of low test scores will treat the disadvantaged student in such a way as to make him conform to their low expectations. . . ."[419] The student in turn acts out the system's judgment; "there is strong evidence that performance in fact *declines*."[420]

("Having demonstrated that the negro and the Caucasian are widely different in characteristics, due to [an hereditary] deficiency of grey matter in the negro . . . we are forced to conclude that it is useless to try to elevate the negro by education or otherwise, except in the direction of his natural endowments."). *See also* P. GREEN, *supra* note 409, at 55 (life expectancies of whites and blacks are in same ratio as their IQs; disadvantageous social conditions cause both disparities); Fishman & Wainer, *A History of the Concept of Race*, SCIENCE FOR THE PEOPLE (Mar./Apr. 1982), at 9.

414. 269 F.Supp. 401 (D.D.C. 1967).

415. "[T]here is substantial evidence that tracking tends to thin out the number of Negroes in the higher curriculum levels, thus redistributing the racial balance in integrated schools." 269 F. Supp. 401, 457 (D.D.C. 1967).

416. *Id.* at 458 (separation permanent and complete).

417. *Id.* at 515. *But see* H. EYSENCK & L. KAMIN, *supra* note 408, at 94. The English educational system, based on studies by Cyril Burt, tests school children at age 11 to "stream" them into one of three separate school systems. According to Burt, " 'Intelligence' will enter into everything a child says, thinks and does or attempts . . . . If intelligence is innate, the child's degree of intelligence is permanently limited. No amount of teaching will turn the child who is genuinely defective in general intelligence into a normal pupil." *Id.* (Burt's research has subsequently been accused of falsification. *See supra* note 66).

418. "[T]he disadvantaged child—and particularly the disadvantaged Negro child—tends to be under much greater psychological stress in the testing situation and thus more likely to show the effects in test performance." *Hobson*, 269 F. Supp. at 482.

419. *Id.* at 514.

420. *Id.* at 491. *See id.* at 514 ("Because these tests are standardized primarily on and are relevant to a white middle class group of students, they produce inaccurate and misleading test scores when given to lower class and Negro students."). *See also*

In 1979 the Federal District of Northern California applied strict scrutiny[421] to student ability grouping and became the first court to order a permanent injunction against the use of IQ tests in placing children in educable mentally retarded classes. Judge Peckham found that the IQ tests used to place students in special education classes were biased against blacks[422] and that these placements stigmatized the students[423] and relegated them to an inferior educational setting.[424] The court inferred a segregative intent from the test's discriminatory impact and found that the school board had violated the equal protection clause of the fourteenth amendment.

School tracking causes specific harms (stigmatization and inferior education) and does so to identifiable victims and over a short period of time. The injury flowing from race-IQ research, however, is diffuse and general, and the mechanism by which it occurs—the formation of a stigma picture[425]—is slow and cumulative. It seems probable that race-IQ research will contribute to some extent to a weakening of the ideal of equality; the point of the research, after all, is to find and quantify differences in intellectual capacity among the various population groups. It is uncertain, however, whether a court would view the mitigation of such dangers as a compelling state interest. Unlike Judges Wright's and Peckham's findings with respect to school tracking, some judges may see the harms to the ideal of equality of race-IQ research to be speculative.[426]

B. *Psychological Injury*

Another ground justifying regulation of race-IQ research might be prevention of psychological injury to minority persons. This injury could stem either from the research results, or from the mere fact of the investigation itself. A public accusation that one is less intelligent or worthy than another or even that one's

---

Larry P. v. Riles, 495 F. Supp. 926, 992 (N.D. Cal. 1979) (IQ tests used to rationalize inaction by blaming educational failure on the perceived intellectual inferiority of blacks); J. BLUM, *supra* note 406, at 98-112; P. GREEN, *supra* note 409, at 53–54 (performance of black schoolchildren declines with attendance in school, relative to whites; schools treat black children's education less seriously, tend to "give up" on them).

421. Larry P. v. Riles, 495 F. Supp. at 984. Racial classifications are "suspect," demanding "rigid scrutiny" of their justifications. *See generally* Korematsu v. United States, 323 U.S. 214, 216 (1944).

422. 495 F. Supp. at 956–60, 965.

423. *Id.* at 979, 986.

424. *Id.* at 941–42, 985–87. *Accord* Lora v. Board of Educ., 456 F. Supp. 1211 (E.D.N.Y. 1978), *vacated*, 623 F.2d 248 (2d Cir. 1980).

425. *See supra* text accompanying notes 410–12.

426. *See generally supra* Part IIIc(3)(d) (Proof of harm).

genetic heritage carries a predisposition to low mentality can seriously damage self-respect.[427] When the accusation attributes a permanent and unchangeable inferiority associated with race, the potential for psychological injury is great.[428]

Private law protects against damage to feelings in the torts of outrage and intentional or unintentional infliction of emotional distress. Our public law also recognizes psychological harms as evils. *Brown v. Board of Education*[429] turned in large part on the demonstration that separate but equal schooling would damage the self-regard and future prospects of black schoolchildren.[430] *Hobson v. Hansen*,[431] disapproving the use of IQ tests for educational tracking, mentioned as one ground for disapproval that labeling a child as intellectually inferior caused a sense of worthlessness, fear and despair. The court stated that "evidence of turmoil [could] be found," and cited "the inability of many Negro pre-schoolers and first graders to draw themselves as colored, or other than in animal-like or caricature-like fashion."[432] The court in *Larry P. v. Riles* made similar findings.[433]

In *Loving v. Virginia*, the Supreme Court invalidated antimiscegenation legislation designed "to maintain White Supremacy,"[434] in part because its purpose was stigmatic.[435] The harm which justified the Court's ruling in *Loving* lay not only in the enforced separation of the races but also in allowing "one in-group [to enjoy] full normal communal life and [barring] one out-

427. *See* G. ALLPORT, *supra* note 403, at 152 (discussing psychological effect of social oppression). *See also* M. DEUTSCH, I. KATZ & A. JENSEN, SOCIAL CLASS, RACE AND PSYCHOLOGICAL DEVELOPMENT 175 (1968); Delgado, *supra* note 319, at 136–37.

428. *See* K. CLARK, *supra* note 412, at 63–64. *See also* Michelman, *The Supreme Court, 1968 Term-Foreword: On Protecting the Poor Through the Fourteenth Amendment*, 83 HARV. L. REV. 7, 49 (1969) ("The peculiar evil of a relative deprivation . . . is psychic or moral; it consists of an affront; it is immediately injurious insofar as resented or taken personally, and consequentially injurious insofar as demoralizing.").

429. 347 U.S. 483 (1954).

430. *Id.* at 494.

431. 269 F. Supp. 401 (D.D.C. 1967).

432. *Id.* at 482. *See also* M. DEUTSCH, THE DISADVANTAGED CHILD 106 (1968) (Black children tend "to be more passive, more fearful, and more dysphoric than the white.").

433. 495 F. Supp. 926 (N.D. Cal. 1979). In an earlier proceeding, the court noted that black students scored significantly higher when retested individually by black psychiatrists, with credit given for non-standard answers that revealed an understanding of the question. Larry P. v. Riles, 343 F. Supp. 1306, 1308 (N.D. Cal. 1972). *See also* J. MERCER, *supra* note 408, at 495 (the median score for Chicano children with an IQ of 70 climbed to 83 when given the test in their own language). The Court in *Riles* relied heavily on Mercer's research. 495 F. Supp. at 952, 972–73.

434. 388 U.S. 1, 11 (1966). *See also* L. TRIBE, *supra* note 174, at 1021.

435. *See* Black, *The Lawfulness of the Segregation Decisions*, 69 YALE L.J. 421, 425 (1960) (suggesting this interpretation).

group. . . . from this life and forc[ing it] into an inferior life of its own."[436] The suggestion made by some race intelligence proponents that blacks are inferior to whites at birth falls within the Court's definition of stigma in both *Brown* and *Loving*.

Avoidance of stigma and psychological injury resulting from discriminatory treatment on the basis of race is a clearly recognized and compelling state interest.[437] Moreover, research aimed at discovering race-based differences in IQ may well contribute to the weight of psychological injury and the stigma that many minority persons bear. Such individual injury is more concrete and focused than the relatively abstract injury to the ideal of equality discussed earlier. The intelligence and personal worth of every member of the target group is called into question, and each person is forced to deal with this negative attribution as best he or she can. Unless the psychological harm likely to result from race-IQ research can somehow be minimized, prevention of such harm would probably constitute a compelling state interest.

C. *Economic Loss*

The sense of inferiority and hopelessness that can result from being labeled inferior may cause demoralization and "suppress[ion of] aspirations that look unattainable when seen with the restricted vision imposed by a withered self-concept."[438] A recent experiment which put blacks and whites of similar aptitudes and capacities into a competitive situation found that the blacks exhibited defeatism, half-hearted competitiveness, and "high expectations of failure."[439] Also, there is evidence that racial stigmatization affects parenting practices[440] among minority group members and hence reinforces a tradition of failure.[441] One study found that many minority mothers were hypersensitive to questions of race, accepted whiteness as superior, and harbored negative feelings about life's chances.[442] If self-image affects achievement, racial labeling, including that which results from race-IQ studies, may cause economic loss in two ways: the immediate pecuniary loss to the individual victim in the form of dimin-

436. *Id.*

437. *See supra* notes 429–30 and accompanying text.

438. Karst, *Foreword: Equal Citizenship Under the Fourteenth Amendment*, 91 HARV. L. REV. 1, 7 (1977).

439. *See* J. MARTIN & C. FRANKLIN, MINORITY GROUP RELATIONS 43 (1979). *See generally* Delgado, *supra* note 319, at 136–43 (racism instills apathy and defeatism in some of its victims).

440. Delgado, *supra* note 319, at 138–39 nn.27–28 & 32.

441. *See id.*

442. *See* Kiev, *Psychiatric Disorders in Minority Groups*, in PSYCHOLOGY AND RACE 416, 420–24 (P. Watson ed. 1973).

ished life prospects, and the more long-term loss to society resulting from the decreased productivity of a segment of its citizenry.

While economic loss of both types, individual and societal, seems probable, the extent of the loss is difficult to evaluate. Some persons may feel victimized yet be spurred to try even harder to succeed. Others may suffer psychological but no pecuniary injury because they are fortunate enough to find employment in an environment devoid of prejudice. Still, the probable economic effect supplies an additional element of legitimacy to regulatory proposals aimed at averting or minimizing the harms of race-IQ research, if only by adding a quantitative measure of state interest in psychological and emotional welfare.

D. *Inhibition of Reproductive Freedom*

Further harm that may occur from the results, or possibly even the conduct, of race-IQ research is inhibition of reproductive opportunities of the population singled out. The history of race-based intelligence research reveals that on occasion it has provided scientific justification for harsh legislation and social policies aimed at reducing the procreative opportunities of groups considered genetically inferior.

Early interest in IQ testing developed from the eugenics of Francis Galton, who believed that science should give to the more suitable races or strains of blood a better chance of prevailing over the less suitable.[443] Once the IQ test was developed, followers of Galton such as Henry Goddard employed test results to urge reduction of immigration from southern and eastern Europe on the ground that the children of persons from these regions demonstrated an "inability . . . to handle abstractions."[444] Goddard maintained that 83 percent of Jews were feeble-minded, a "hereditary" defect they shared with 87 percent of Russians, 80 percent of Hungarians and 79 percent of Italians.[445] Goddard and his coworker Carl Brigham informed Congress and powerful political supporters of eugenics such as Theodore Roosevelt and Herbert Hoover[446] that American intelligence was declining. Army intelli-

443. *See* F. GALTON, INQUIRIES INTO HUMAN FACULTY AND ITS DEVELOPMENT 24–25 (1883).

444. *See* Goddard, *The Binet Tests in Relation to Immigration*, 18 J. PSYCHO-ASTHENICS 109–10 (Dec. 1913).

445. *See* H. EYSENCK & L. KAMIN, *supra* note 20, at 93; Goddard, *Mental Tests and the Immigrant*, 2 JUVENILE DELINQUENCY AND FAMILY RELATIONS 243–77 (Sept. 1917); Goddard, *supra* note 444, at 109 ("inability of these immigrants to handle abstractions").

446. *See* A. CHASE, *supra* note 406, at 126–27, 277, 326 (Roosevelt believed in white superiority and supported eugenics. Hoover was active on behalf of eugenics

gence tests[447] proved, according to Brigham, that the influx of "intellectually inferior" Alpine and Mediterranean races together with "the presence here of the Negro"[448] would cause a deterioration of American intelligence unless immigration laws were passed. Moreover, tax savings would accrue if the government could reduce the large numbers of "inferior racial stock" that had become wards of the state.[449] Thus, in 1924 Congress passed the Johnson Restriction Act which imposed "national origin quotas" and reduced the influx of Southern and Eastern Europeans to a trickle.[450] President Calvin Coolidge, signing the law, declared that "America must be kept American."[451] Advocates of eugenics also spearheaded the drive for compulsory sterilization.[452] More than thirty American states followed the lead of Indiana in 1907 in passing eugenics sterilization laws.[453] These laws provided for

---

movement and contributed money while serving as Secretary of State.). *See also* Karier, *supra* note 30, at 342–45.

447. *See supra* notes 31–34 and accompanying text.

448. *See* C. BRIGHAM, A STUDY OF AMERICAN INTELLIGENCE 208–10 (1923). The campaign against American blacks and Mexicans continued and even intensified during the period of immigration quotas. *See* L. TERMAN, MEASUREMENT OF INTELLIGENCE 91–92 (1916) (urging that IQs in the 70–80 range were "very, very common among Spanish-Indian and Mexican families. . . and also among negroes"). Terman observed:

> Their dullness seems to be racial, or at least inherent in the family stocks from which they come. . . . [T]he whole question of racial differences in mental traits will have to be taken up anew. . . . The writer predicts that when this is done there will be discovered enormously significant racial differences in general intelligence, differences which cannot be wiped out by any scheme of mental culture.
>
> Children of this group should be segregated in special classes. . . . They cannot master abstractions, but they can often be made efficient workers. . . . There is no possibility at present of convincing society that they should not be allowed to reproduce, although from a eugenic point of view they constitute a grave problem because of their unusually prolific breeding.

See also A. CHASE, *supra* note 406, at 471 ("It is only the catch phrases and the rhetoric, and not the concepts or the conclusions, that have changed between Terman. . . in 1916 and 1922 and Jensen in 1969."); H. EYSENCK & L. KAMIN, *supra* note 20, at 92.

449. *See* H. LAUGHLIN, EUROPE AS AN EMIGRANT-EXPORTING CONTINENT AND THE UNITED STATES AS AN IMMIGRANT-RECEIVING NATION, HOUSE COMM. ON IMMIGRATION AND NATURALIZATION, 68th Congress, 1st Sess. 1311 (1924). *See generally* Karier, *supra* note 30, at 348 (eugenics movement opposed immigration of allegedly inferior stock).

450. *See* A. CHASE, *supra* note 406, at 300. (Between 1900 and 1924 the number of immigrants from central, eastern, and southern European countries was 434,810 a year. Between 1925 and 1939, under the quotas of the Immigration Act, that number was reduced to 24,430 per year, a difference of more than six million.)

451. Karier, *supra* note 30, at 349.

452. A. CHASE, *supra* note 406, at 349–50.

453. *See generally* Karier, *supra* note 30, at 342, 345, 349. (Large corporate foundations financed by Carnegie and Rockefeller provided money in the campaign for eugenics and restrictive quotas. Influential donors and supporters included Alex-

compulsory sterilization of "idiots," "imbeciles," "criminals," "epileptics" and "dissolute and degenerate persons,"[454] on the ground that their undesirable traits were transmitted through the genes.[455] Under California's sterilization law, which permitted the sterilization of persons deemed "morally and sexually" depraved, 6200 sterilizations were performed between 1907 and 1928. Other states passed laws calling for sterilization for chicken theft, car stealing and prostitution.[456] Pro-sterilization sentiment frequently focused on "anti-social whites"[457] and low-income blacks.[458]

Harry Laughlin, drafter of the Model Eugenical Sterilization law,[459] played a critical role in convincing the Supreme Court to uphold the sterilization of Carrie Buck, an eighteen-year old inmate of the Virginia state prison. Laughlin described Buck as a "feeble-minded daughter of a whore," a member of "the shiftless, ignorant, worthless class of anti-social whites" and "a potential parent of socially inadequate offspring."[460] In *Buck v. Bell*,[461] Justice Holmes agreed with Laughlin. Noting that "experience has shown that heredity plays an important part in the transmission of insanity [and] imbecility,"[462] Holmes endorsed eugenic sterilization in the Court's 8-to-1 decision:

> It is better for all the world, if instead of waiting to execute degenerate offspring for crime, or to let them starve for their imbecility, society can prevent those who are manifestly unfit from continuing their kind. The principle that sustains com-

---

ander Graham Bell, Mrs. E.H. Harriman, the presidents of Stanford and Harvard Universities, and Presidents Theodore Roosevelt, Warren Harding and Calvin Coolidge.) *See also* A. CHASE, *supra* note 406, at 140, 164 (role of Immigration Restriction League, American Coalition of Patriotic Societies).

454. H. EYSENCK & L. KAMIN, *supra* note 20, at 93. *See also* A. CHASE, *supra* note 406, at 125–26 (many were sterilized against their will for being adjudged feeble-minded or mentally retarded—defined in most states as having an IQ below 70).

455. H. EYSENCK & L. KAMIN, *supra* note 20, at 93. *See also* Karier, *supra* note 30, at 345. (Eugenics committees on the "Heredity of the Feeble-Minded," "Sterilization" and "Inheritance of Mental Traits," etc., took the lead in identifying those who carried "defective germ plasm" and disseminating propaganda in favor of sterilization laws. For example, Laughlin's "Committee to Study and Report on the Best Practical Means of Cutting Off the Defective Germ-Plasm in the American Population" reported that "society must look upon the germ plasm as belonging to society and not solely to the individual who carries it." Laughlin estimated that 10 per cent of the population carried "bad seed" and called for sterilization as a solution. Socially deviant behavior, from criminality to prostitution, was associated with intelligence and the nature of one's germ plasm.) *See also* A. CHASE, *supra* note 406, at 127.

456. Karier, *supra* note 30, at 345–46.

457. *See infra* text accompanying notes 459–60.

458. *See infra* text accompanying notes 465–66.

459. A. CHASE, *supra* note 406, at 313–14.

460. *Id.*

461. 274 U.S. 200 (1927).

462. *Id.* at 206.

> pulsory vaccination is broad enough to cover cutting the Fallopian tubes. Three generations of imbeciles are enough.[463]

Carrie Buck was sterilized.

Although more than 63,000 human beings have been sterilized under state laws patterned after Laughlin's model law,[464] many more have been sterilized on the authority of questionable state and federal administrative action. In a 1974 decision, *Relf v. Weinberger*,[465] Judge Gerhard Gesell found that "an estimated 100,000 to 150,000 low-income [mainly black] persons have been sterilized *annually* under federally funded programs."[466] Gesell concluded that "uncontroverted evidence" demonstrated "that an indefinite number of poor people have been improperly coerced into accepting a sterilization operation under the threat that various federally supported welfare benefits would be withdrawn unless they submitted to irreversible sterilization."[467]

Many present-day proponents of race-IQ research share the same assumptions and urge the same solutions as their predecessors. Jensen believes we should study the "danger that current welfare policies, unaided by eugenic foresight, could lead to the genetic enslavement of a substantial segment of our population."[468] According to Shockley, the reason behind this "retrogressive evolution" is that lower IQ mothers have significantly more children than others, and the proportion of "white genes" is being reduced in each generation.[469] His solution to the problem of "genetic enslavement" is a public "sterilization Bonus Plan." This plan would offer a "bonus rate of $1000 for each point below 100 IQ, $30,000 put in trust for a 70 IQ moron of a 20-child potential and, thus, it might return $250,000 to taxpayers in reduced

---

463. *Id.* at 207.

464. Chase, *supra* note 406, at 16; *see also* Karier, *supra* note 30, at 345–46 (between 1907 and 1928 California sterilized 6200 people who were considered racially impure or "morally and sexually depraved"; twenty other states had similar laws).

465. 372 F. Supp. 1196 (D.D.C. 1974).

466. *Id.* at 1199 (emphasis added).

467. *Id. See also* Karier, *supra* note 30, at 365 n.21. State authority is still being used to sterilize people. On Mar. 4, 1971, a bill was introduced into the Illinois Legislature which required mothers who had two or more children while on welfare to be sterilized before they could draw further support. Now the argument is based upon the economic cost to society.

468. *IQ and Scholastic Achievement*, *supra* note 54, at 95.

469. Interview with W. Shockley, Stanford Daily, Dec. 2, 1970, cited in A. CHASE, *supra* note 406, at 483. *See also* P. GREEN, *supra* note 409, at 63 (Jensen distorted the data to reach his conclusion). *See also* L. KAMIN, THE SCIENCE AND POLITICS OF IQ (1974) (describes at length the distortion of data by hereditarians); *IQ and Scholastic Achievement*, *supra* note 54, at 316 (supports the superior gene thesis and suggests that an "admixture of Caucasian genes, even so few as one-eighth, introduce mental structures otherwise lacking that permit the individual to reach higher levels of mental development").

costs of mental retardation care."[470] More recently, Shockley has been active on behalf of the "Nobel Prize sperm bank," a private effort to increase the breeding potential of persons of demonstrated genius.[471]

In 1942, the Supreme Court in *Skinner v. Oklahoma*[472] directly addressed the manner in which invidiously selective government control over reproductive matters might be exercised. In *Skinner*, the Court held invalid a state law requiring the sterilization of anyone convicted three times for felonies, but exempting convictions for white-collar crimes such as violation of tax laws or embezzlement. Recognizing procreation as "fundamental to the very existence and survival of the race," Justice Douglas's opinion for the Court invoked strict scrutiny to strike down the law on equal protection grounds.[473] The Court also attacked the distinctions made by the law among the different offenses: "Sterilization of those who have thrice committed grand larceny, with immunity for those who are embezzlers, is a clear, pointed, unmistakable discrimination. . . . We have not the slightest basis for inferring that. . . [discrimination] has any significance in eugenics, nor that the inheritability of criminal traits follows the neat legal distinctions which the law has marked between those two offenses."[474] The Court then pinpointed the threat to a pluralistic and democratic society posed by eugenics and its advocates: "The power to sterilize, if exercised . . . [i]n evil or reckless hands . . . can cause races or types which are inimical to the dominant group to wither and disappear."[475]

---

470. W. Shockley, Letter to National Academy of Sciences, April 16, 1970, cited in A. CHASE, *supra* note 406, at 482. *See also id.* at 510–13 (National Academy of Sciences refused to heed Shockley's request to sponsor an investigation of Negro intelligence; NAS described Shockley's proposals as "based upon such simplistic notions of race, intelligence and 'human quality' as to be unworthy of serious consideration by a body of scientists"). *See also id.* at 481 (letter from I. Michael Lerner of U.C. Berkeley: "It is basically vicious to evaluate individuals on the basis of the group to which they belong.").

471. Comment, *Eugenic Artificial Insemination: A Cure for Mediocrity?* 94 HARV. L. REV. 1850 (1981) (considering whether a system of artificial insemination that would use sperm of "genetically superior" donors is consistent with the American ethic of equality of opportunity and equality of condition).

Schockley's private plan must be distinguished, of course, from his proposals for governmental action. The private plan can be lauded as a commendable way in which women who are interested in mating with a high-IQ male may do so. It therefore promotes reproductive choice.

472. 316 U.S. 535 (1942).

473. *Id.* at 541–43.

474. *Id.* at 541–42.

475. *Id.* at 541. *See also* L. TRIBE, *supra* note 174, at 1010 (allowing the government to exercise centralized discretionary choice with regard to a fundamental right "will invite prejudiced action, oppressing powerless or despised minorities"). Notably, *Skinner* did *not* overrule Buck v. Bell, 274 U.S. 200 (1974). The *Skinner* Court

Race-IQ research has, without question, been associated with ignoble, even genocidal, ends.[476] Equally clearly, the state has a compelling interest in wishing to avoid any association with such ends, and to do so may refuse to fund the research or permit it to be carried out on state campuses or in state facilities. The race-IQ researcher can counter, of course, that there may, in fact, exist great differences in intellectual potential among the races and that, once known, these differences would justify measures to control the reproduction of races or groups found to be inferior. These differences, if they exist, can only be shown by scientific research aimed at discovering them. *Skinner*, in short, may be wrong.

In deciding how much weight to afford this interest, it is useful to observe that the danger from limiting reproductive freedom is likely to arise, if at all, only if the outcome of the relevant research is applied in a particular way. Unlike the harms considered to this point, genocidal policies seem unlikely to arise merely because race-IQ research is initiated. In addition, it cannot be said that these policies would arise immediately and ineluctably from the new knowledge; society might decide to ignore the results, or to apply only a mild incentive not to reproduce, which the target population could ignore. Because of these uncertainties, the genocidal potential of race-IQ research appears not to give rise to a compelling state interest.

E. *Risk of Violence*

A final justification for regulation of race-IQ research is that the research, or the uses to which it may be put, will lead to violence. Although apparently no writer has tried to justify state control on this ground, the argument can easily be made.[477]

The recent riots in Florida[478] serve as a reminder that group violence is not confined to our past, but is "a recurring. . . feature of American political and social history."[479] For many members

---

found no constitutional defect in sterilization applicable only to "mental defectives" in state institutions: "[I]t was pointed out that 'so far as the operations enable those who otherwise must be kept confined to be returned to the world, and thus open the asylum to others, the equality aimed at will be more nearly reached.' Here there is no such saving feature." Skinner v. Oklahoma, 316 U.S. 535, 542 (1942) (quoting Buck v. Bell, 274 U.S. 200, 208 (1927)).

476. Harry Laughlin's Model Eugenical Sterilization Law, *see supra* notes 459–60 and accompanying text, became law in Nazi Germany in 1933. *See also* A. CHASE, *supra* note 406, at 135.

477. See, e.g., the last paragraph of Justice Marshall's dissent in Mobile v. Bolden, 446 U.S. 55, 141 (1980) (Marshall, J., dissenting) (race discrimination's potential to cause a violent response).

478. *Miami's New Days of Rage*, TIME, Jan. 10, 1983, at 20.

479. NATIONAL COMMISSION ON THE CAUSES AND PREVENTION OF VIOLENCE, TO

of this nation's racial minorities, the living conditions largely responsible for the ghetto uprisings of the 1960's, such as unemployment, consumer exploitation, inferior education, segregated housing, and police violence, remain unchanged today.[480] Their understandable resentment may be exacerbated if it becomes known that social scientists of the majority race are engaged in research aimed at demonstrating the genetic inferiority of minority populations. Individual acts of violence may occur even if the research ultimately demonstrates no difference in IQ among the races, or proves inconclusive.

The danger of violence is increased if the research does purport to find an IQ difference, large or small, between the majority and minority races. Governments may use this result to relieve their budgets of the burden of providing for the poor, or increase efforts to control the reproductive rates of the minority populations. School authorities may gear education of certain racial minorities toward rote memorization and away from the acquisition of conceptual skills. Employers and universities may eliminate or scale down affirmative action programs. Society as a whole may lose respect for minority populations and devote less effort to protecting their rights. The frustrations which breed violence will increase as blacks and other persons of minority race realize that their prospects are not just holding steady, but are actually diminishing.[481]

The prevention of anarchy and violence is, of course, a core purpose of government, and measures designed to reduce the likelihood of civil unrest fall squarely within an area of legitimate state action.[482] The difficulty with using a prevention-of-violence rationale to support limitations on race-IQ research is that it is difficult to determine in advance how much, if any, violence is likely to result if race-IQ research goes forward. The argument for regulation fits generally into the model of violence suggested by the " 'Fire' in a crowded theater" model. As the lives of a group of persons become increasingly threatened, they become more and more desperate to escape. If only a few doors are open,

---

ESTABLISH JUSTICE, TO INSURE DOMESTIC TRANQUILITY 51 (1970). The chart on page XX shows that outbreaks of group violence have peaked every twenty or thirty years.

480. R. FOGELSON, VIOLENCE AS PROTEST: A STUDY OF RIOTS AND GHETTOS 22 (1971).

481. *Cf.* REPORT OF THE NATIONAL ADVISORY COMMISSION ON CIVIL DISORDER, *supra* note 403, at 284 (frustration at denial of equal opportunity one cause of inner-city violence).

482. *See, e.g.*, CAL. PENAL CODE § 404.6 (West 1970) (prohibiting incitement to riot).

eventually their panic turns them against the society that "walls" them in.

The analogy is not perfect, however. As the Kerner Commission found, outbreaks of violence depend on a number of causes and cannot be predicted with any certainty.[483] Many persons internalize hatred or assaults on their integrity, while others erupt at the slightest insult.[484] Thus, one cannot say for certain that violence will result from either the research itself or the uses the state may make of it. Nonetheless, it is likely that inquiry into the possible genetic inferiority of populations will be met with anger, frustration, and demoralization.[485] In considering the social interests in regulating race-IQ research, courts should take the possibility of these destructive effects into account, even if they do not rise to the level of a compelling state interest.

F. *Social Disutility of Race-IQ Research*

A number of the interests discussed so far provide strong arguments against social sponsorship of race-IQ research and, perhaps, even against permitting such research to take place under state auspices. On balance, however, it is uncertain that any single one of these arguments is compelling, or that they are compelling in the aggregate. When courts have been unable to decide whether an individual's first amendment interest outweighs a competing state interest, they have sometimes resolved the issue by examining the social utility of the speech or speech-act in question.[486]

The strongest utility-based argument that an advocate of race-IQ research can make is that knowledge of racial differences is essential in order to develop educational strategies to educate

---

483. REPORT OF THE NATIONAL ADVISORY COMMISSION ON CIVIL DISORDERS, *supra* note 403, at 5.

484. P. GREEN, *supra* note 409, at 53–54.

485. *See generally* Delgado, *supra* note 319.

486. *See supra* notes 182–89 and accompanying text. Although this Article does not endorse "ad hoc balancing" in first amendment cases, the authors recognize that the Court may engage in such nondoctrinal adjudication. *See* Nimmer, *The Right to Speak From Times to Time: First Amendment Theory Applied to Libel and Misapplied to Privacy*, 56 CALIF. L. REV. 935, 942–45 (1968). Ad hoc balancing is susceptible to the charge that it is unprincipled and unpredictable:

> In essence, the balancing doctrine is no doctrine at all but merely a skeleton structure on which to throw any facts, reasons, or speculations that may be considered relevant. Not only are there no comparable units to weigh against each other, but the test is so vague as to yield virtually any result in any case.

Emerson, *First Amendment Doctrine and the Burger Court*, 68 CALIF. L. REV. 422, 440 (1980).

members of racial minorities.[487] Although the knowledge of innate intellectual differences might hurt in the short run, the researcher may argue, it is necessary in the long run to make realistic appraisals of what can and cannot be done.[488] This argument makes it necessary to assess the likelihood that a race-IQ researcher could prove (or disprove) that such racial differences in intelligence exist. A number of formidable hurdles lie in the way of any such demonstration.

Assuming that we do inherit a certain capacity for intelligence, that capacity is not easily measured. Intelligence is an everyday concept which has no agreed-upon scientific definition.[489] Existing psychometric definitions of intelligence lack both the "logical rigor" and "scientific relevance" that are necessary for a research result to have the proper predictive scope and the proper capability of being reproduced in another setting.[490] Jensen attempts to avoid this definitional problem by taking an operationalist stance that IQ is not intelligence, but is simply what the IQ tests measure.[491]

To avoid such circularity, intelligence is most plausibly defined as the ability to adapt and survive in various environments.[492] Adaptability is not easily measured, however, and even less easily analyzed into genetic and acquired components. Richard Lewontin and David Layzer point out that for malleable traits such as intelligence, the environment does not just quantitatively limit or encourage the phenotype of the genetic trait, as it does for height.[493] The environment determines qualitatively, in interaction with one's genes, how that trait will develop. For instance, in environment X, A might outscore B on a mental test, while in environment Y, B might outscore A on the same test.[494] Thus

---

487. *See IQ & Scholastic Achievement*, *supra* note 54, at 1–4, 95 (compensatory education has failed; society must devise new educational strategies).

488. *Id.*

489. Layzer, *Behavioral Science and Society: The Nature-Nurture Controversy as a Paradigm*, in GENETIC DESTINY 59, 73–75 (E. Tobach & H. Proshansky eds. 1976); Scarr-Salapatek, *Race, Social Class and IQ*, in EDUCATING THE DISADVANTAGED 198 (E. Flaman ed. 1973); Garcia, *The Logic and Limits of Mental Testing*, 36 AM. PSYCHOLOGIST 1172 (1981).

490. *Id. See also* P. GREEN, *supra* note 409, at 57 (Jensen's methodology flawed, use of data "meretricious").

491. A. JENSEN, GENETICS AND EDUCATION 75–76 (1972). Block and Dworkin argue that operationalism is a "thoroughly discredited doctrine . . . even among most of its former proponents," *IQ, Heritability and Inequality*, *reprinted in* THE IQ CONTROVERSY, *supra* note 30, at 416. *See* C. HEMPEL, PHILOSOPHY OF NATURAL SCIENCE 88–100 (1966).

492. Layzer, *supra* note 489, at 66–69.

493. Lewontin, *The Analysis of Variance and the Analysis of Causes*, *reprinted in* THE IQ CONTROVERSY, *supra* note 30, at 184–89.

494. *Id.*

even if the environment were completely controlled for a group, the test results of that group could not be used to make any assessment of its genetic superiority over another group. These difficulties are more than methodological; they constitute serious conceptual difficulties with any attempt to test the race-IQ hypothesis. Because they call into question the likelihood of any useful result from race-IQ research, and because that research threatens a number of distinct harms, a court might well tip the balance in favor of regulation or prohibition.

V. LESS RESTRICTIVE ALTERNATIVES TO STATE INTERVENTION INTO RESEARCH

As the analysis of research into the area of racially based intelligence so far has demonstrated, strong state interests are arrayed against equally strong first amendment interests in allowing the research to continue. To assess the constitutionality of any means the state selects to accommodate those interests, it must be determined whether the state's action intrudes upon the first amendment interest more than necessary to avert the evil at which the remedy is aimed. The "least restrictive alternative" requirement insists that even if a governmental interest is substantial and legitimate it shall not be pursued by "means that broadly stifle fundamental personal liberties when the end can be more narrowly achieved."[495]

The least restrictive alternative requirement has been viewed as embracing two concerns.[496] First, the state may not choose a means for protecting its interests which restricts the liberties of persons whose exercise of those fundamental rights does not threaten the state interest.[497] Second, as to persons whose exercise of first amendment rights does threaten the state interest, the state may not choose a particular means of restricting their freedom of action when a less intrusive means of averting the harm is available.[498] For example, a state interest in protecting minorities from

495. Shelton v. Tucker, 364 U.S. 479, 488 (1960). *See also* NAACP v. Alabama, 377 U.S. 288, 307 (1964).

496. *See* Spece, *A Purposive Analysis of Constitutional Standards of Judicial Review and a Practical Assessment of the Constitutionality of Regulating Recombinant DNA Research*, 51 S. CAL. L. REV. 1281, 1340 (1978). *See generally* Note, *The Less Restrictive Alternative in Constitutional Adjudication: An Analysis, a Justification, and Some Criteria*, 27 VAND. L. REV. 971 (1974).

497. Butler v. Michigan, 352 U.S. 380, 383–84 (1957) (state may not restrict the access of adults to pornographic literature as a means of protecting children from the harmful effects of obscenity). *See also* Elfbrandt v. Russell, 384 U.S. 11 (1966).

498. *See, e.g.*, Schneider v. State, 308 U.S. 147, 162 (1939) (a city's legitimate interest in keeping its streets clean did not justify ordinance banning distribution of handbills on public streets when city could satisfy its interest through ordinance punishing littering). *See also* Martin v. Struthers, 319 U.S. 141, 147 (1943).

the harm of stigmatization would not support a broad remedy prohibiting scientists from conducting research that was unlikely to produce the harmful results. It also would not support a restriction on the methodology or choice of research that might produce stigmatizing data where a nonintrusive remedy could be applied to prevent that harm.

Because the state must choose a remedy which narrowly addresses the harm threatening its announced state interests, it is essential that courts and legislatures first identify the concerns that would motivate state intervention into research on racial differences in intelligence. In one setting, the state might be concerned with the quality of the research techniques;[499] in another, with the manner in which the research data are obtained.[500] In still another setting, the state might be concerned about the effects of validly conducted research on persons of minority race.[501] Each of the concerns calls into play different measures of first amendment solicitude and requires a response that accommodates the particular mix of personal and social interests at stake.

Since each situation requires a tailored response, it is impossible to specify a single suitable regulatory mechanism. Nevertheless, it is possible to make certain generalizations. Measures aimed at the time, place, or manner of race-IQ research, designed to avert an evil that arises from the conduct of the research rather than its content or the type of knowledge acquired, will normally be constitutional.[502] The only requirements are that the measures be reasonable and not excessive.[503] Measures aimed at the content of the research, by contrast, will need to be justified by a very strong state interest and be narrowly adapted to promote the specific interest.[504] When the state's regulatory concern is content-

499. *See supra* notes 101–202 and accompanying text. For a discussion of the prevalence of fraud in contemporary science, see Broad & Wade, *Science's Faulty Fraud Detectors*, PSYCHOLOGY TODAY, Nov. 1982, at 51, which notes that scientists rarely bother to replicate the results of scientific experiments. This tendency is especially strong where the fraudulent data are "seductive" in that they fit neatly into the overall theory or where the data are produced by a leading scientist, as in the Cyril Burt Case. *Id.* at 54. It should be noted, however, that the complacency of scientists is probably minimal in scientific controversies with political implications where close attention is paid to the methodologies of the competing theories. *See generally supra* text accompanying notes 114–19.

500. The research might consist of administering IQ tests to school children, for example, thus triggering informed consent requirements. 45 C.F.R. § 46 (1981). *See supra* text accompanying notes 152–58, 304–10.

501. *See supra* Parts IV B, C, D (psychological and pecuniary harm; loss of reproductive freedom).

502. *See supra* note 174 (regulatory measures aimed at noncommunicative impact). *See also supra* notes 357–67 and accompanying text (discussing time, place, and manner restrictions).

503. *See* sources cited *supra* notes 174, 357–67.

504. *See supra* notes 174–77 (restrictions aimed at communicative content).

based the preferred constitutional remedy is "more speech."[505] When the evil it seeks to avert is independent of content, the state may provide for "less speech," or speech conducted in a less troublesome manner.

The following discussion of remedies considers each of the two types of restriction. Part A discusses remedies aimed at regulating the manner in which race-IQ research is conducted. These remedies seek to minimize a harm (such as stigma) that the state believes will arise from the very conduct of the research. Part B discusses the adequacy of "more speech" remedies that might be employed to confine a harm (such as erosion of the ideal of equality) which could follow from knowledge about racial differences that the research might generate if carried out.

A. *Regulation Aimed at Noncommunicative Impact*

A number of regulatory proposals have been, or could be, directed at the noncommunicative impact of race-IQ research. These include self-imposed moratoria; measures aimed at the timing of the research; measures aimed at consent or broadening participation; and measures aimed at ascertaining the risk of harm.

1. *Voluntary moratoria*.[506] If a group of educational psychologists or population geneticists were to conclude that race-IQ research ought not be conducted, and were successful in convincing their colleagues to follow suit, no constitutional problem would arise. Theoretically, a nonscientist aggrieved at the lack of activity in the field of race-IQ research could become a race-IQ researcher and decline to join the moratorium. While the lack of new knowledge generated might seem lamentable to a lay person, it is implausible to argue that a private citizen has a right to have others conduct research if they are unwilling to do so.

2. *Measures aimed at the timing of the research*. A university or other arm of state government could conclude that the knowledge that race-IQ research is being conducted might inflame a tense racial situation and cause an outbreak of violence.[507] If this belief is well founded, and not merely a pretext, it would justify a temporary prohibition of any such research, for the duration of the emergency.

---

505. *See infra* notes 521–27 and accompanying text; L. TRIBE, *supra* note 174, at 602–11.

506. *See supra* Part II A(3) (voluntary moratorium on DNA research).

507. *See* Lee v. Washington, 390 U.S. 333, 334 (1968) (racial segregation of inmates to maintain prison security and discipline constitutional). *See also supra* notes 93–100 and accompanying text; *supra* Part IV E (danger of violence); *supra* Part III C(3)(b) (quality of environment and time, place and manner restrictions).

A number of those who criticize race-IQ research as "inopportune," however, seem to have in mind a much longer delay—perhaps on the order of 100 years.[508] For them, the subject of race-based differences in intelligence should not be pursued because society has not reached the point, morally and socially, where it can absorb the results of the research without pain and shock.[509] Research into such matters may thus justifiably be postponed until we have acquired the ability to assimilate the results without injury.

Our investigation disclosed no case in which a court has approved such an onerous "time" restriction. It would seem that the proponent of such a limitation would bear a heavy burden of proof that it is the only means of avoiding a very severe social harm. Without such a demonstration, the time restriction would be unconstitutional as a total prohibition.[510]

Another type of timing regulation was proposed by Professor Bernard Diamond, who urged that controversial research with ethnic minority populations be halted until social scientists have demonstrated, to the satisfaction of the groups under study, that they are worthy of the group's trust.[511] According to Professor Diamond, the record of majority race social scientists carrying out research in minority communities is a sorry one; thus it is not unreasonable to require a demonstration of good faith on the part of social scientists before permitting race-IQ research to proceed.[512] As a basis for a voluntary moratorium, or other measure of self-restraint by social scientists, Diamond's proposal is certainly unobjectionable. But as a basis for compulsory state interference with scientific research, it is troublesome. How long would such an enforced moratorium last? Who would decide when sufficient trust has been re-established? How would social scientists, short of carrying out additional research with minority populations, show that they could be trusted in the conduct of such research?

3. *Measures aimed at broadening participation*. A number of "manner" restrictions could be devised, aimed at broadening the base of participation in race-IQ research. As each restriction would be directed toward an evil alleged to result not from the

508. *See supra* note 16 (defining and giving examples of inopportune research); *supra* part IV A (research that erodes ideal of equality); *supra* Part III C(3)(b) (ban on "inopportune" research as a "time" restriction).

509. *See* Sinsheimer, *supra* note 16, at 23–27. (Sinsheimer's view of inopportune science).

510. *See supra* notes 357–67 and accompanying text.

511. Diamond, *supra* note 74, at 32. *See also* Holman & Dutton, *A Case for Public Participation in Science Policy Formation and Practice*, 51 S. CAL. L. REV. 1505 (1978).

512. Diamond, *supra* note 74, at 32–33.

content of the research but from its noncommunicative impact, such measures would be constitutional if reasonable and no more intrusive than necessary.[513]

a. *Individual consent requirements*. If the research entails administering IQ tests, or reviewing the confidential records of school children, then a requirement that the researcher obtain the consent of the test-taker or school child is reasonable and constitutionally valid.[514] Indeed, failure to obtain consent might expose the researcher to civil liability for invasion of privacy.[515] Consent requirements have traditionally been imposed in research using human subjects and are a presumptively valid means of protecting the autonomy and privacy of the subjects.[516]

b. *Society-wide consent*. Consent requirements may be conceived more broadly, however, to include an obligation on the part of the researcher to consult all, or at least a relevant portion, of society before commencing work. Several scientific commentators and at least one organization of scientists and lay persons have proposed that the scientific agenda, particularly in areas such as race-IQ research, is so important that society should be given a voice in deciding which portions of the agenda should be encouraged.[517] One writer has observed that certain technological advances have a "reconstitutive" impact, that is, they alter the ways in which we see ourselves as human beings.[518] This change in our self-definition follows immediately upon completion of the research and affects all who learn about it.[519] Because race-IQ research has a potentially large reconstitutive dimension, it could be urged that researchers in this area have an obligation first to

513. *See supra* note 231 and accompanying text.

514. *See supra* notes 151–58 and accompanying text (consent requirements in HEW-sponsored research). *See also supra* notes 304–10 (consent requirements are content-neutral because they apply to all human subject experimentation).

515. *See* Schloendorff v. New York Hosp., 211 N.Y. 125, 129–30, 105 N.E. 92, 93 (1914) (landmark informed consent case holding that "[E]very human being of adult years and sound mind has a right to determine what shall be done with his own body . . . ."); J. KATZ, EXPERIMENTATION WITH HUMAN BEINGS 540–69 (1972) (reasons for informed consent doctrine in medical and psychological treatment and human experimentation; reasons include protection of the subject's decisional autonomy).

516. *See supra* Part II C(2).

517. *See* Culliton, *Science's Restive Public*, 107 DAEDALUS 147 (Spring 1978); 9 HASTINGS CENTER REP. 16–19 (Supp. Apr. 1979); Lappe & Martin, *The Place of the Public in the Conduct of Science*, 51 S. CAL. L. REV. 1535 (1978); Nelkin, *Threats and Promises: Negotiating the Control of Research*, 107 DAEDALUS 191 (Spring 1978). This is the general position of Science for the People, an organization of scientists and lay persons who wish to increase the "public accountability" of science. *See generally Racism in Science*, 14 SCIENCE FOR THE PEOPLE (Mar./April 1982) (symposium issue).

518. Tribe, *Technology Assessment and the Fourth Discontinuity: The Limits of Instrumental Rationality*, 46 S. CAL. L. REV. 617, 641–50 (1973).

519. *Id.* at 640, 649.

ascertain whether or not society wishes to redefine itself in the manner portended. These considerations seem to lead to some form of "town hall" approach; decisions to permit or encourage research would be made through the political process, rather than through the individualized decision-making approach mandated by the first amendment.

Although it is conceivable that a court would uphold such a broad-scale approval requirement as simply an extension of informed consent, this seems unlikely. For the average member of society, detached from the actual conduct of race-IQ research, any "reconstitutive" impact arrives by virtue of the knowledge the research produces, not from the mere conduct of the investigation. A court would most likely see such a requirement as aimed at communicative content and find it unconstitutional unless supported by a state interest of the highest order.

c. *Preliminary ascertainment of risk*. A final "less speech" approach would require the researcher first to investigate, in a pilot study, the extent of harm the research poses to individuals and groups. Once this were ascertained, the researcher could seek approval for a more broad-based study. Some Institutional Review Boards are apparently applying such a two-step approval procedure in connection with research where the degree of risk is initially unknown.[520] A pilot-study requirement is relatively unintrusive, of finite duration, and has a certain common-sense appeal, although it can be argued that it wastes valuable resources. If applied by an institution in the case of race-IQ research, we believe it would be constitutional.

B. *Measures Aimed at the Content of Race-IQ Research*

Under the first amendment, the preferred remedy for communications with a harmful content is the competition of opposing views. "More speech" can expose the fallacies of the harmful speech, educate the listener, and otherwise avert the evils that may follow from the harmful speech.[521] This remedy is constitutionally preferable to state regulation of speech for a number of reasons. Providing more information to the public furthers the first

520. Interview with Brigitta Walton, UCLA Human Subjects Protection Committee (Feb. 11, 1983) (on file at *UCLA Law Review*).

521. Linmark Assocs. v. Willingboro, 431 U.S. 885, 897 (1977); Whitney v. California, 274 U.S. 357, 377 (1927), *overruled*, Brandenburg v. Ohio, 395 U.S. 449 (1969), ("If there be time to expose through discussion the falsehood and fallacies, to avert the evil by the processes of education, the remedy to be applied is more speech, not enforced silence") (Brandeis, J., concurring). *Cf.* Gertz v. Robert Welch, Inc. 418 U.S. 323, 344 (1974) (the ability of public figures and public officials to respond in the public forum to defamatory statements is a factor in according them a lesser degree of legal protection than private individuals).

amendment function of encouraging self-government.[522] By allowing the free exchange of ideas the government refrains from making ultimate judgments, thereby ensuring that the public's ability to make decisions is not undermined by governmental paternalism.[523] Finally, the researcher's constitutional interest in continuing the investigation is left undisturbed. Thus, where the state's concern arises because of the content of a scientist's research, encouraging speech, rather than regulating it, generally will be the preferred remedy.

Whether "more speech" will be the appropriate remedy in any *particular* case is determined by the circumstances under which the speech occurs.[524] Considerations such as the persuasiveness or purpose of the speech usually are not considered relevant to determining whether additional speech is the appropriate remedy. For example, scientists' influence over the lay public because of their training and position should not justify a more intrusive remedy than one which would be permitted in the case of nonscientists. The Court has announced on several occasions that "the concept that government may restrict the speech of some elements of our society in order to enhance the relative voice of others is wholly foreign to the First Amendment. . . ."[525] In *First National Bank of Boston v. Bellotti*,[526] for example, the Court struck down a Massachusetts law preventing corporations from making expenditures for the purpose of influencing referendum elections. The Court held that without a showing by the state that corporations posed an imminent threat of dominating elections, the first amendment interest in allowing the free flow of speech could not support the restriction, even though the corporation might enjoy more wealth and power than the average noncorporate citizen.[527]

Similarly, the state is not justified in regulating a particular course of scientific research because it is conducted for the purpose of affecting society when more research to counter the scientists' conclusions is an available alternative. In *Organization for a Better Austin v. Keefe*,[528] for example, the Supreme Court vacated an injunction restraining an organization from distributing leaflets

522. *See, e.g.*, Virginia State Bd. of Pharmacy v. Virginia Citizens Council, 425 U.S. 748 (1976); New York Times v. Sullivan, 376 U.S. 254, 269–70 (1964). *See also* Meiklejohn, *The First Amendment is an Absolute*, 1961 SUP. CT. REV. 245, 255.

523. First Nat'l Bank v. Bellotti, 435 U.S. 765, 791 n.31 (1978).

524. *See* L. TRIBE, *supra* note 174, at 603–06; cases cited *infra* notes 525–29.

525. First Nat'l Bank v. Bellotti, 435 U.S. 765, 790–91 (1978); Buckley v. Valeo, 424 U.S. 1, 48–49 (1976).

526. 435 U.S. 765 (1978).

527. *Id.* at 788–92.

528. 402 U.S. 415 (1971).

criticizing the respondent for his business practices. The Court observed that "[p]etitioners plainly intended to influence respondent's conduct by their activities."[529] This intent did not, however, remove petitioner's activities from first amendment protection. Scientists may similarly intend to have an effect on public policy with their research, but this intention should not justify state application of a more restrictive remedy than allowing competition with other researchers' ideas.

While the persuasiveness and the purpose of a scientist's research will not affect the appropriateness of "more speech" as a remedy, a restrictive remedy may be sought where discussion would be ineffective in preventing the threat to the state's interest. Speech is effective where there is "time to expose through discussion the falsehood and fallacies, [and] to avert the evil by the processes of education."[530] Consequently, where time allows, the remedy to be applied is "more speech, not enforced silence."[531] Only where there is the threat of an imminent danger and insufficient time for discussion, may the state intrude to prevent the threatened harm.[532] For example, speech has been held to be an ineffective remedy in cases where pressure may be exerted on a party without opportunity to have a competing influence counter the initial pressure,[533] or where the means of communication is such that the access of opposing speech to the medium is inherently restricted.[534] In such circumstances, the opportunity for remedying the harms by further speech is absent and the state may validly use a more intrusive form of control.

Scientific speech does raise concerns about the ability of more speech to remedy the harms produced by new ideas. In the cases where more speech has been viewed by the Court as an effective remedy it has been assumed that competing ideas exist, or are capable of being generated, which can oppose the speech with harmful content.[535] Science, however, may be one area of dispute

529. *Id.* at 419.

530. Whitney v. California, 274 U.S. 357, 377 (1927) (Brandeis, J., concurring).

531. *Id.*

532. Schenck v. United States, 249 U.S. 47, 52 (1919). *Cf.* Brandenburg v. Ohio, 395 U.S. 444, 447 (1969) (state may intervene in speech where "advocacy is directed to inciting or producing imminent lawless action and is likely to incite or produce such action"). *See generally supra* Part III C(3)(a) (standard of review for group libel and group vilification statutes).

533. Ohralik v. Ohio State Bar Ass'n, 436 U.S. 447, 457 (1978).

534. *See* Miami Herald Publishing Co. v. Tornillo, 418 U.S. 241 (1974); Red Lion Broadcasting Co. v. FCC, 395 U.S. 367 (1969).

535. Abrams v. United States, 250 U.S. 616, 630 (1919) ("[T]hat the best test of truth is the power of the thought to get itself accepted in the competition of the market, and that truth is the only ground upon which their wishes safely can be carried out.") (Holmes, J., dissenting). *See* Gertz v. Robert Welch, Inc., 418 U.S. 323, 339–40 (1974) ("However pernicious an opinion may seem, we depend for its correction not

where that assumption is incorrect. To the lay person, the formidable consensus of scientific opinion in most matters may make the idea of dissent seem futile. In large part, of course, this is due to the circumstance that scientific knowledge is not primarily a product of opinion or ideology, but a public explanation, generally accessible, and presumably subject to renewed tests of verification.[536] Once a scientific truth is established, that truth will be accepted by virtually all who accept the authority of science.[537] The constitutional preference for more speech may, therefore, be mistaken in the case of science since science may progress to a point where no speech can effectively compete with a harmful scientific theory once it is accepted as true. Under such conditions a restriction on research may be the only alternative to the ineffective competition of ideas.[538] Whether the Constitution's reliance on speech as a remedy is mistaken will be considered in the following examination of the process by which scientific disputes are resolved.

---

on the conscience of judges and juries but on the competition of other ideas."). *See also* Thornhill v. Alabama, 310 U.S. 88, 104–05 (1940).

The extent to which the first amendment is viewed as promoting self-government will also indicate the importance of the existence of alternative ideas for first amendment analysis. The Court has indicated an acceptance of Professor Meiklejohn's view that the first amendment exists to encourage self-government by precluding government from undermining the public's ability to make ultimate judgments. *First Nat'l Bank*, 435 U.S. at 791 n.31 (referring to Meiklejohn, *supra* note 522, for support). Scientific research may likewise undercut the public's capacity for self-government by restricting the choices available for public consideration and by allowing scientists to make the ultimate judgments. Thus, it has been argued that first amendment considerations might militate in favor of public intervention into research decisions. *See* MacRae, *Science and the Formation of Policy in a Democracy*, 11 MINERVA 228 (Apr. 1973).

536. D. BELL, THE COMING OF POST-INDUSTRIAL SOCIETY 381–83 (1976).

537. *See* T. KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS 159 (1970). *See also* M. POLANYI, SCIENCE, FAITH AND SOCIETY 73 (1946).

538. Ultimately, it is the scientific component of research producing stigmatizing data that must provide a justification for state regulation of the research. The harm which results from the stigmatization of minority groups is, of course, the concern which motivated states to enact "group libel" laws, such as the one which the Supreme Court upheld in Beauharnais v. Illinois, 343 U.S. 250 (1952). *See supra* text accompanying notes 320–67. However, although it has never been explicitly overruled, *Beauharnais* has been criticized and questioned by subsequent decisions. *See* Garrison v. Louisiana, 379 U.S. 64, 82 (1964) (Douglas, J., concurring); Collin v. Smith, 578 F.2d 1197, 1204–05 (7th Cir.), *cert. denied*, 439 U.S. 916 (1978); Anti-Defamation League of B'nai B'rith v. FCC, 403 F.2d 169, 174 n.5 (D.C. Cir. 1968), *cert. denied*, 394 U.S. 930 (1969). Consequently, the continuing vitality of the *Beauharnais* holding is doubtful. Sambo's Restaurants, Inc. v. City of Ann Arbor, 663 F.2d 686, 694 n.7 (6th Cir. 1981). *But see* Note, *Group Vilification Reconsidered*, 89 YALE L.J. 308 (1979). Thus, in the area of group libel the appropriate remedy will be further speech to counter the libel. *See generally* New York Times v. Sullivan, 376 U.S. 254, 288–92 (1964). If an exception is to be made for the case of research which leads to the harms of group stigmatization, that exception must be justified on the basis of some consideration unique to science.

1. *How complex scientific disputes are resolved.* Science owes much of its prestige and authority to the presumed empirical bases that allow it to make scientific truths generally known, verifiable, and therefore trustworthy.[539] In this respect, scientific statements seem to differ from those of politics and religion, whose assertions are statements of value and, consequently, not subject to any objective verification.[540] Despite science's empirical foundation, complex scientific issues are rarely resolved by appeals to testable data. The history of science contains many instances in which theories were accepted despite the existence of contradictory empirical observations,[541] and in which propositions were rejected even though they had an arguable basis in experimental proof.[542] For instance, in the recent controversies over nuclear power and the fluoridation of water supplies, one commentator has noted that various experts chose one side of the controversy over the other when the data were ambiguous, for such reasons as the desire of an expert to aid a friend or oppose an enemy, or simply because the expert was accustomed to one position and did not desire to have it questioned.[543]

The introduction of scientists' values may serve a legitimate

539. D. BELL, *supra* note 536, at 382–83.

540. This assumed dichotomy between scientific facts and societal values underlies several proposals to resolve scientific controversies. *See* Kantrowitz, *The Science Court Experiment*, 13 TRIAL 48 (1977). *See also* Weinberg, *The "Science Court" Controversy: Are Our Courts and Agencies Adequate to Resolve New and Complex Issues?*, 33 RECORD 8, 11 (1978). However, such proposals have been criticized on the ground that the belief that controversies can be separated clearly into political and scientific components is based on an overly simplistic model of the relationship between science and society. *See generally* Weinberg, *Science and Trans-Science*, 10 MINERVA 209–22 (1972); Matheny & Williams, *Scientific Disputes and Adversary Procedures in Policymaking*, 3 LAW & POL'Y Q. 360 (1981); *infra* notes 541–56 and accompanying text (scientific disputes often irreducibly valuative).

541. For example, the periodic system of elements is formally contradicted by the fact that argon, potassium, tellurium and iodine fit into the periodic table only in a sequence of decreasing, instead of increasing, atomic weights. Similarly, the quantum theory of light was first proposed by Einstein, and upheld subsequently for twenty years, in spite of its being in sharp conflict with the evidence of optical diffraction. Neither system has been abandoned despite the observational anomalies. M. POLANYI, *supra* note 537, at 29.

542. A classic instance of this is provided by the "Velikovsky controversy." In his book *Worlds in Collision*, Immanuel Velikovsky purported to explain the descriptions of miraculous celestial occurrences found in the Old Testament of the Bible by actual shifts in the orbits of the planets. As part of this theory, Velikovsky predicted that the surface of Venus would be hot and its clouds heavy with hydrocarbons. The suggestion that planets could actually leave their orbital positions and collide with one another was summarily rejected by the scientific community, and the confirmation of Velikovsky's predictions by Mariner II did not induce scientists to reassess Velikovsky's theory; the empirical corroboration of Velikovsky's predictions was generally viewed as coincidental. Polanyi, *The Growth of Science in Society*, 5 MINERVA 533, 535–36 (Summer 1967).

543. *See* Mazur, *Disputes Between Experts*, 11 MINERVA 243, 243–62 (1973).

and important purpose. Crises in scientific thought generally occur, according to Thomas Kuhn, when the prevailing conceptual structure shared by scientists fails to explain anomalous data.[544] Normally, the shared conceptual structure, or "paradigm," defines the standards by which scientists determine what problems and solutions are legitimately within the scope of their research endeavors.[545] However, when the paradigm fails significantly to explain anomalous data, its scientific legitimacy may be questioned and a new paradigm may emerge which, by reconciling the observed data, becomes accepted by the scientific community as the new paradigm.[546] It was in this way, for example, that the Copernican astronomical system, which placed the sun at the center of the solar system, emerged after a long period of failure by Ptolemy's earth-centered astronomical model accurately to conform to observed data of planetary position.[547]

The acceptance of a new paradigm by the scientific community is usually not immediate.[548] Resistance may come from older scientists who are comfortable with the traditional paradigm, or from those who are not convinced by the evidence advanced in support of the new paradigm.[549] Moreover, when a new paradigm

---

544. T. KUHN, *supra* note 537, at 66–75. Kuhn's model represents the accepted viewpoint of the way in which science progresses. For a discussion of competing models, see Ferguson, *Scientific and Technological Expression: A Problem in First Amendment Theory*, 16 HARV. C.R.-C.L. L. REV. 519, 539 n.99 (1981).

545. T. KUHN, *supra* note 537, at 35–51. Paradigms provide scientists with a means of learning the theory, methods and standards which are employed by scientists practicing in the field. Thus, a shift in a paradigm results in corresponding change in the "criteria determining the legitimacy both of problems and of proposed solution." *Id.* at 109.

546. *Id.* at 152–54.

547. *Id.* at 68.

548. Kuhn writes:

> Copernicanism made few converts for almost a century after Copernicus' death. Newton's work was not generally accepted, particularly on the Continent, for more than half a century after the Principia appeared. Priestley never accepted the oxygen theory, nor Lord Kelvin the electromagnetic theory, and so on.

Id. at 150–51.

549. *Id.* at 152. This polarization can reach the point where reasoned discussion breaks down, to be replaced by advocacy. At that point, notes Michael Polanyi:

> The less two propositions have fundamentally in common the more the argument between them will lose its discursive character and become an attempt at mutually converting each other from one set of grounds to another, in which the contestants will have to rely on the general impression of rationality and spiritual worth which they can make on one another. They will try to expose the general poverty of their opponent's position and to stimulate interest for their own richer perspective; trusting that once an opponent has caught a glimpse of these, he cannot fail but to sense a new mental satisfaction, which will attract him further and finally draw him over to its grounds.

M. POLANYI, *supra* note 537, at 66–67. A controversy which begins as a technical dispute (like the race-IQ debate) can thus take on the aspects of a religious or political

is proposed, it is usually a crude explanation of the observable data and so is easily rejected by those who favor the older paradigm.[550] Additionally, even in the area of crisis, the relative problem-solving ability of the new paradigm may be little better than that of the traditional paradigm.[551] Thus, scientific controversy may reach a point where scientists choose among equally plausible competing explanations. In resolving the choice between equally plausible paradigms, the personal values of the individual scientist play an important role. Individual scientists may choose one paradigm over another because of aesthetic or moral appeal, and despite the existence of opposing technical arguments.[552]

When it is seen that the development of a new scientific view or theory contains much scope for valuation, argument, and conversion, the case for a "more speech" approach strengthens.[553] Scientific disputes over complex issues such as race-IQ connections resemble ordinary disputes over politics, economics, and social theory, where a marketplace-of-ideas model is applied.[554] There seems little danger that a small group of scientists will suc-

---

conflict. *Id.* *See also* T. KUHN, *supra* note 537, at 158–59; Polanyi, *supra* note 542, at 540.

550. T. KUHN, *supra* note 537, at 155–56.

551. Additionally, Kuhn notes, outside the area of crisis the new paradigm may not be able to replace the older theory. *See id.* at 156–58.

552. *Id.* at 158. Kuhn observes:

> Individual scientists embrace a new paradigm for all sorts of reasons and usually for several at once. Some of these reasons—for example, the sun worship that helped make Kepler a Copernican—lie outside the apparent sphere of science entirely. Others must depend upon idiosyncracies of autobiography and personality. Even the nationality or the prior reputation of the innovator and his teachers can sometimes play a significant role.

Id. at 152–53 (footnotes omitted).

553. This is not to say that a theory that certain minority groups are intellectually inferior to others will not eventually be accepted by the scientific community and ultimately the public. The first amendment does not presume that wisdom will always prevail, only that people will have a choice in determining what point of view will inform government. *See* Meiklejohn, *supra* note 522, at 263. *See also* Gitlow v. New York, 268 U.S. 652, 673 (1925) (Holmes, J., dissenting) ("If in the long run the beliefs expressed in proletarian dictatorship are destined to be accepted by the dominant forces of the community, the only meaning of free speech is that they should be given their chance and have their way."). *But see* A. BICKEL, THE MORALITY OF CONSENT 72 (1975). As the examination of the process by which scientific controversies are resolved has demonstrated, such a choice is available as long as scientists legitimately consider values which they share with the broader society before accepting the validity of a new paradigm. Thus, during the long period of a scientific controversy theories may effectively compete for allegiance in the same manner, and subject to the same values, as political speech.

554. The resemblance of scientific controversies to political disputes has inspired Kuhn to compare the resolution of scientific controversies to "revolutions." As Kuhn observes, once a scientific community is split into competing camps over the disagreement of competing paradigms, the choice "can never be unequivocally settled by logic and experiment alone." T. KUHN, *supra* note 537, at 93–94.

ceed in capturing the notion of innate racial differences in intelligence and in forcing their views on the rest of the scientific community. The current controversy that rages in scientific circles over race-IQ research is evidence that this is, in fact, not occurring. Since the danger of establishing a harmful, stigmatizing view, resistant to subsequent change, seems remote, the state's interest may best be served by encouraging, rather than restricting, speech.

2. *"More science" remedies for content-based harms*. Since the scientific process is amenable to a "more science" approach to content-based harms, this is the constitutionally preferred remedy. But a possible difficulty for this approach is that encouragement of more science may do little to avert misunderstanding on the part of the lay public. While scientists resolve scientific disputes generally after a long period of crisis, the lay public is usually not apprised of the details of the debate, and so may be susceptible to the view that a theory has been accepted as truth by the scientific community when in actuality the scientific community is still undecided.[555] Lay persons may, for example, read exaggerated reports of disputed scientific findings in the popular press and accept those results as conclusive.[556] In order to prevent the stigmatization of minority groups during a period when the appropriate scientific authorities are undecided, a state may properly act to encourage communication between scientists and the public.[557]

---

555. For example, the public was willing to accept Velikovsky's controversial theory despite the vehement opposition of the scientific community. Polanyi, *supra* note 542, at 534–35; *see also* Weinberg, *Science and Trans-Science*, 10 MINERVA 209, 221–22 (1972). Additionally, the popular derivation of "Social Darwinism" from Charles Darwin's theory of evolution was based in large part on a mistaken interpretation of that scientific theory. *See* Flew, *From Is to Ought*, in THE SOCIOBIOLOGY DEBATE 142, 145–46 (A. Caplan ed. 1978).

556. *See* Weinberg, *A Useful Institution of the Republic of Science*, 10 MINERVA 439–40 (1972). *See also* Mazur, *supra* note 543, at 259.

557. A final scenario containing elements of both content-based and impact-based analysis, seems possible, but will be explored only superficially here since no reported decision seems to have considered it. Consider the following:

Suppose it appeared that race-IQ research presented certain content-based harms (stigma, erosion of the ideal of equality) and that "more research" might moderate those harms. According to conventional analysis, the preferred constitutional remedy would be more speech, and no restriction on the research would be permissible. But suppose that further research itself created a danger of additional harms of some sort, arising either from the conduct of the additional research or the knowledge it is likely to discover.

Should a court in this hypothetical situation conclude that the "more speech" remedy is inapt? Or should it find that the further harm should be countered by further speech? Race-IQ research seems to present this type of tangle and makes obvious the risk of an infinite regress in such a situation. Jeffry Blum has pointed out that:

> Debating the importance of genetic and environmental causes of racial

The government could encourage scientists to establish public-information committees whose purpose would be to inform the citizenry of the status of the debate about controversial matters.[558] These committees would operate like the "referees" who exercise a similar function in the publication of scientific papers in professional journals.[559] There is, of course, the possibility that any such committee might inject its own biases and thus undermine its dialectic-facilitating function.[560] Some of these dangers could be avoided by providing for representation of opposing points of view on such groups, which would thus function in some ways like the proposed "science court."[561] The committees could be estab-

---

> IQ score differences has the side effect of propagating the belief that blacks are indeed less intelligent that whites. Regardless of the debate's outcome or lack of outcome, the importance of blacks' lower IQ scores is highlighted and exaggerated in the public's mind.

J. BLUM, *supra* note 406, at 131; Chomsky, *The Fallacy of Richard Herrnstein's IQ*, in THE IQ CONTROVERSY, *supra* note 30, at 294–95 (posing case of psychologist in Hitler's Germany who proposes to study possibility that Jews have genetically determined tendency to usury. "[E]ven opening this question . . . would provide ammunition for Goebbels and Rosenberg and their henchmen . . . . Of course scientific curiosity should be encouraged . . . but it is not an absolute value.").

The decade since the publication of Jensen's article provides some evidence that free and open discussion of race-IQ theories does not "clear the air" and promote a fuller, freer debate on public issues. The debate remains polarized; in the meantime, programs such as affirmative action in education and employment, school lunches for the indigent, and medical insurance have been cut back or eliminated—changes that impact heavily and disproportionately on minority populations. *See* The Urban Institute, THE REAGAN EXPERIMENT (1982) (summarizing social changes that occurred during first two years of Reagan's administration). The promotion of race-IQ theories may well have contributed to a climate in which neglect of the legitimate needs of minority persons is possible. If so, it will be scant comfort to the victims of such a climate that the correct version of the facts may emerge in the distant future. *See* Block & Dworkin, *IQ, Heritability, and Inequality*, in THE IQ CONTROVERSY, *supra* note 30, at 514; Scarr-Salapatek, *The Unknown of the IQ Equation*, in THE IQ CONTROVERSY, *supra* note 30, at 128 (promulgation of race-IQ theories as harmful as shouting "Fire" in a crowded theater).

If blacks and other minority groups some day obtain sufficient influence among mental testers to defend their own interests, or if they develop adequate numbers of minority social scientists capable of challenging the methodology and assumptions of current race-IQ researchers, then the scenario referred to above presumably would not arise. *Cf.* Lewontin, *Race and Intelligence*, in THE IQ CONTROVERSY, *supra* note 30, at 78–92.

558. Mazur, *supra* note 543, at 261; T. KUHN, *supra* note 537.

559. D. BELL, *supra* note 536; Mazur, *supra* note 543; M. POLANYI, *supra* note 537, at 47; Weinberg, *supra* note 556.

560. D. BELL, *supra* note 536, at 401–02; Doty, *Can Investigations Improve Scientific Advice? The Case of the ABM*, 10 MINERVA 280, 293–94 (1972). The possibility that such a bias might go undetected is strengthened by the policy of high-level scientific advisory committees to screen out potentially dissenting members so that the appearance of objectivity of the group will not be undercut.

561. *See* Kantrowitz, *The Science Court Experiment*, 13 TRIAL 48, 49 (1977). *See also* Matheny & Williams, *Scientific Disputes and Adversary Procedures in Policy Making*, 3 LAW & POL'Y Q. 341, 360–61 (1981).

lished by Congress, or by individual research institutions. Because such an approach can effectively counter the danger of the public's premature acceptance of a scientific theory, "more speech" would seem an adequate remedy for harms associated with the content of race-IQ research.

CONCLUSION

The debate about race-IQ research places in tension two deeply held values, equality and freedom of inquiry. The former is essential to our self-image as a people concerned with the dignity and worth of all persons; the latter, to our most vital mechanisms of self-government. Opponents of race-IQ research argue that it is so harmful that society should not permit it—perhaps should forbid it entirely. Its supporters urge that the research go unregulated, at least until a high probability of grave harm is convincingly shown. The outcome of the debate will convey an important statement about the way we, as a society, choose to lead our lives together.

This Article surveyed the arguments for protecting race-IQ research, as well as those that support regulation. Powerful cases can be made for each. We concluded that regulation of genuinely scientific race-IQ research would be constitutional if narrowly aimed at those specific social harms that may arise immediately and demonstrably from the very act of research: stigma, psychological injury, and the risk of violence. How compelling these interests may be is far from certain, however; in a close case a court might resolve the doubt by assessing the social utility or disutility of the science in question.

Much more problematic are prohibitions aimed at abating the evils—erosion of the ideal of equality; pressures to limit the reproductive rate of minority groups—that result from the content of the research or the knowledge it may bring to light. Our survey of arguments for intervention and review of the applicable case law cast doubt on the ability of society to regulate race-IQ research for these reasons. With respect to these content-based concerns, "more science" may be the only remedy, just as "more speech" is the constitutionally preferred remedy in situations where a responsive communication may cancel the evil of an offending message.

In any event, casting the debate in these terms seems a fruitful way to begin.