

Raymond B. Cattell: Accomplishment and Controversy

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Abstract

Raymond B. Cattell's early history and circumstances of immigration to the United States are covered as well as his early involvement with the eugenics movement. Cattell's major contributions are indicated, including fluid and crystallized intelligence, the 16PF in and of itself and as an illustration of his methodology and scientific philosophy, his "heritability" work, and his "personality of nations" schema. The controversy surrounding the suspension of his American Psychological Association "Gold Medal for Life Achievement in Psychological Science" is surveyed by chronicling the events leading up to it, and by quotations from his own writings that reveal racist implications of his scientific/ideological orientation. Whether Cattell ever should have been considered for the Gold Medal is approached by first considering the value of his contributions. Then there is consideration of whether his eugenic views, which are part and parcel of his scientific position, should have disqualified him. It is concluded that he should not have been considered for a psychology career award, because, regardless of the value of his contributions, his scientific/ideological position is backed by poor science, has dire implications for many people, and, thereby reflects badly on the psychological scientists and professionals whose organization would have honored him.

Raymond B. Cattell was born in Staffordshire, England (1905), the son of middle class parents (Cattell, 1974a). After distinguishing himself in secondary school, he graduated Magna cum Laude in chemistry at the age of nineteen. Almost immediately he decided to apply his scientific background to the pursuit of psychology (Cattell, 1974b). Just before he received his undergraduate degree, he attended a speech by Sir Cyril Burt on the work of Sir Francis Galton, a pioneer in mental testing. This early experience probably initiated Cattell's quest for a graduate degree emphasizing psychological assessment. Despite protests from friends that he would go unemployed--there were only a handful of psychology chairs in all of England--he elected to study with some of the most notable figures in the world of psychological measurement, including Burt. In 1929 he received his Ph.D. in psychology.

Following a series of "fringe jobs" in psychology" (e.g., psychologist in the schools), Cattell spent five years gaining clinical experience (1974b, p. 90; Cattell, 1974a) , after which he was elevated to director of a school psychological service in Leicester, Devonshire, England, his home territory. During this time he became convinced that intelligence is mostly inherited. In 1936 he wrote an article for the Eugenics Review in which he answered "yes" to the question "Is our national intelligence declining?" (Loehlin,1984). In that work he promoted eugenics, the application of genetics to the improvement of human biological and psychological characteristics. His argument began with the assumption that the higher the social class the higher the intelligence. It proceeded with the observations that lower social classes were having more children. The conclusion was that more children among the less intelligent lower classes was driving the average national intelligence down. Out of these efforts and Cattell's book The Fight for our National Intelligence (1937) came the bold prediction that England's intelligence was in for a fall.

Edward L.Thorndike, a participant in America's eugenic movement (Tucker, 1994), had read The Fight for our National Intelligence (1937) and was so impressed that he offered Cattell a position at Columbia University Teachers College. From there he moved to the G. Stanley Hall Professorship at Clark University and then to a lectureship at Harvard. After a time at Duke University, he accepted a Research Professorship at the University of Illinois

where he remained from 1945 to 1973, when he retired to Oahu. He died February 2, 1998.

Contributions

Cattell endorsed the conception of intelligence fostered by Charles Spearman who promoted "g" which supposedly subsumes the so-called primary mental abilities and forms a common core of general intelligence (McGuire & Hirsch, 1977). Cattell assumed that "g" is largely due to the genes (Cattell, 1966). In a paper he said he presented at the American Psychological Association (APA) convention, 1940, he argued that "g" fell into two categories. Fluid general ability (g_f) is "That form of general intelligence which is largely innate and which adapts itself to all kinds of material, regardless of previous experience with it" (Cattell, 1966, p. 369). Whereas he reported that early evidence indicated "g" is 80 percent inherited, he claimed that g_f is nearly 100 percent inherited. By contrast crystallized general ability (g_c) is "A general factor, largely ... abilities learned at school, representing ... applications of [g_f], and amount and intensity of schooling; it appears in vocabulary and numerical ability [tests]" (p. 369). g_c is acquired intelligence that is largely determined by quality of schooling and is little affected by the genes.

Another contribution is the well-known 16 PF personality measure, the development of which well illustrates Cattell's scientific methodology. Cattell was an empiricist who began with raw data and, through factor analysis, worked toward theory development. Beginning with the most basic, elemental reflections of personality, trait descriptive words of the English language (Wiggins, 1984), he reduced 4500 trait words from the comprehensive list produced by Allport and Odbert (1936) to 160 synonym groups. These groups were regarded as "surface clusters" and were eventually reduced to 171 terms by eliminating synonyms. The 171 trait elements were intercorrelated resulting in 36 clusters of correlations were isolated, each corresponding to a surface trait. Ten more were later added to make a total of 46 surface traits. This set was the grist for Cattell's factor analytic mill. Eventually 16 primary factors were isolated and the resultant 16 scales were given to some 10,000 subjects. The final outcome was the 16 Personality Factors test or 16 PF, a test of adult personality measured in terms of 16 source traits (Cattell, Eber, & Tatsuoka, 1970).

Cattell conceived of almost everything he studied in terms of how much of its variability is determined by the genes and how much by the environment. Among 16 PF factors some are thought to be controlled more by the genes than by the environment and some are more environmentally controlled (Cattell, Schuerger, & Klein, 1982).

"Heritability" refers to the proportion of the variability in a trait that is accounted for by the genetic variability in a sample of a population. (See McGuire & Hirsch, 1977, for a discussion of the different indexes of heritability.) Heritability has been estimated using various approaches and samples, sometimes rather directly by use of correlations between the I.Q.s of identical twins reared apart. Cattell adopted a seemingly complex method for estimating heritability, one that he regarded as among his major achievements. It is the Multiple Abstract Variance Analysis (MAVA), "A research design for discovering relative proportions of environmental vs. hereditary determination for personality traits (nature-nurture ratio)" (Cattell, 1966, p. 372). MAVA considers not only identical and fraternal twins but also brothers and sisters and unrelated people. In an example study, heritability was estimated using MAVA for the 16 PF factors ego-strength, super-ego strength, and self-sentiment (self-concept maintenance; Cattell, Rao, & Schuerger, 1985). Results indicated that self-sentiment is more genetically determined and super-ego strength more environmentally determined, with ego-strength falling between the two.

Finally, Cattell defined syntality as national personality "equivalent to personality in an individual and capable of (a) predicting many behaviors and (b) by profile similarity measures permitting nations to be classified in a dozen types..." (1985, p. 99). One way to investigate these types was to cluster them into families of nations, with each family having a number of traits in common. The families then could be contrasted on factors such as affluence, Patriarchalism and morale. For example, the American-British-Australian family was quite different on the factors than the China-India-Liberia family.

Controversy Over the American Psychological Association Career Achievement Award

During early August, 1997, the American Psychologist, the flagship journal of American Psychological Association (APA), contained an article about the "Gold Medal for Life Achievement in Psychological Science" that was to be bestowed on Cattell at APA's mid-August

annual convention. At the onset of the convention an article was published in the New York Times citing accusations by Barry Mehler of Ferris State University that Cattell harbored racist views (Hilts, 1997). APA officials responsible for the award suspended the medal presentation and appointed an investigative panel. In January of 1998, Cattell withdraw his name from consideration for the award.

Particularly two of Mehler's quotes of Cattell were inflammatory. One, from a 1994 newsletter, Beyondist, created for Cattell's movement by the same name, suggested that Cattell thought Hitler to be not so bad after all: "Hitler actually shared many values of the average American. He admired ... family values ... " (Hilts, 1997 p. A10 y). The quotes suggest that Hitler's attempts at eugenics, though misguided in practice, were sound in principle. "It [eugenics] favors preventing the birth of those who would inevitably be miserable and incapable of living a normal, happy life. It encourages the birth of those who look after themselves and others, who invent and enrich the culture,...". The second quote was from Cattell's 1972 book, A New Morality from Science: Beyondism: "At what point voluntary euthanasia or genthanasia by groups becomes appropriate is a difficult question. [] Scrupulous consideration is indicated before allowing a breed of humans--however maladapted--to become extinct." (Hilts, 1997, p. A 10 y, emphasis added; see Cattell, 1972, p. 220 for the bracketed portion omitted from the Times article). And what is "genthanasia"? As opposed to "genocide ... [which is] reserved for literal killing off of all living members of a people ... genthanasia [is reserved for] what has above been called 'phasing out,' in which a moribund culture is ended, by educational and birth control measures, without a single member dying before his time." (Hilts, 1997 p. A 10 y; see Cattell, 1972, p. 221). In a response to Hilts (1997), Cattell denied that he advocated forced birth control--it is to be "voluntary"--but the implications of the two quotes are clear and chilling: certain groups are to be eliminated as unworthy of continued existence.

As Mehler (1997) pointed out, Cattell had attempted to hide the implications of his eugenics program from many psychologists and the public. However, an Associated press article (see below) and a ten page section in William H. Tucker's (1994) book had recently, publicly revealed Cattell's true position. Tucker mined Cattell's early works to find alarmingly racist

statements. For example, in his 1933 book, Cattell assailed race mixing resulting in "hybrids" which suffered from "seriously defective...intellectual and moral development..." (Tucker, 1994, p. 240). Even then Cattell shied away from suggesting that "undesirables" be killed off, opting instead for birth control, regulation by sterilization, "and by life in adapted reserves and asylums, [where] the races which have served their turn [can] be brought to euthanasia." (Tucker, 1997. p. 242). In his Fight for our National Intelligence Cattell (1937) adds that no motorists "would hesitate to run over ... a feeble minded [child] in preference to a healthy, bright child" (Tucker, 1994, p. 243). Tucker (1994) goes on to indicate, through quotes of early Cattell books, that Cattell was anti-Semitic which, not surprisingly, made him sympathetic to Nazis race policies. Again in Fight Cattell praised Hitler's Third Reich "Where eugenic laws are instantly put into operation..." for "being the first to adopt sterilization together with a positive emphasis on racial improvement." (Tucker, 1994. p. 243).

Cattell's attitude towards Jewish people was not unlike that of the Nazis, one of begrudging respect. While the "Slavs" were a mere impediment to be shunted aside, to Hitler and his followers the Jews were the real enemy, evil but cunning, clever, and bent on world conquest. Either they prevailed, or the Nazis would; it was to be a fight to the death (Shirer, 1960). Cattell's (1933) view of the Jews was similar: "An intelligent Jew...may be the same in intellectual capacity as an intelligent Englishman or Norwegian, but his temperament, his way of thinking, his choice of amusement, and of ideals in art and life will be radically different, and in these things the Englishman will be more at one with the less intelligent members of his own race than with his intellectual equal in a race of different temperamental constitution" (p. 65; quoted by Mehler at [http:// www.ferris.edu/isar/Cattell/Epstein.htm](http://www.ferris.edu/isar/Cattell/Epstein.htm); site no longer available). Cattell has never repudiated his early view of the Jewish people.

But maybe Cattell really did change his views, not only of Jewish people, but in other ways. Perhaps the Cattell of the last two decades was different from the early Cattell upon whose writings Tucker focussed (see Hilts, 1997, for Cattell's claim to have changed). To find out, the more recent edition of Cattell's Beyondism: Religion from Science (1987) was examined. Indeed it is a "cleaned up" version of the 1972 book, containing fewer blatantly genocidal and racist

statements. However, the racist implications of eugenics are still apparent. On pages 189 and 190 he lists and discusses six categories of people, and heavily implies what we can do without three of them, the "mentally deficient", "mentally handicapped" and the "dull normal." Just as earlier, in 1987 he condemns race mixing: "The real source of gain in these instances seems to be more the initial selection for giftedness than the hybridization as such. In the U.S.A, praises are traditionally sung to the Melting Pot, but the first requirement in successful plant hybridization is a rejection of perhaps 90% of the hybrids as unsuccessful.... The appearance of unfortunate combinations goes on naturally, and this ... is very likely partly responsible for the higher crime and insanity rates in the U.S.A. than in parent countries" (p. 202). "The same holds for hybrids of racial groups, so that virtually all studies of intelligence on white-colored crosses show the intelligence on a sufficient sample to fall halfway between the two groups." (p. 203). Elsewhere, he opined, "The condoning--and indeed worship--of [hypocritical humanitarian efforts] ... [that] prolong[s] the duration of genetic and cultural failure and block[s] a seemingly appropriate extinction of chronically misfitting types is contrary to all Beyondist principles." (p. 138). Also, he offered, "'A' is a classics professor--famous for his researches ... 'B' is an ordinary person who does some gardening for me. He has been in jail ... ; he can barely read the newspaper. Yet in democracy as now practiced, the wishes of B in public affairs can completely cancel A's ... contribution ... if [society] ... gives equal voting powers to individuals so disparate." (p. 223; the classics professor may have been Cattell's friend and colleague and alleged Neo-Nazi, Revilo P. Oliver). In the Beyondism of 1987, how would eugenics be carried--out? "... adjusting income tax ... by child allowances, ... would encourage those to have children who have a higher probability of more gifted children." (p. 215). It follows that people expected to "have a [lower] probability of more gifted children" would be encouraged not to have any.

Mehler (1997) adds other indictments of Cattell. He notes that Cattell, in the 1972 version of Beyondism, seriously compared Hitler's deeds to those of the "murderous Hippie cult of California" (Mehler, 1997, p. 157). Mehler also documents Cattell's continual surreptitious association with elements of the radical right. Cattell was constantly and is currently quoted in Neo-Nazi publications.

Jerry Hirsch, University of Illinois professor emeritus, a colleague of Cattell, tried in vain for years to go beyond pointing out the racist implications of Cattell's ideas. Basically, Hirsch has tried to show that Cattell's racist views should be ignored because there is no scientific support for them. He (1997) asserts that Cattell's writings are not to be trusted because, for example, he has even mis-cited his own work when it did not support his position (see p. 220). In a comment appended to Mehler's (1997) article, Hirsch alleged that Cattell habitually avoided standard peer review by self-publishing (in his books) and by publishing in unreviewed write-ups of conference presentations (Hirsch reported that Cattell often was a no show at conferences where he might have been questioned after his scheduled presentation, but he still had a written version of his undelivered talk published along with actual presentations). It is worth adding that Cattell, unlike other famous personologists, rarely published in the most esteemed journals with the most demanding editorial reviews, such as the Journal of Personality and Social Psychology and the Journal of Personality.

Are Cattell's Scientific/Professional Efforts Outstanding?

Even if one accepts that Cattell's career is tainted by racist beliefs, one could still argue that a person's political views are not relevant to her or his consideration for an award based on career long scientific contributions. Did Cattell deserve the APA award based on his professional contributions?

Cattell is often cited as the originator of the valued concepts crystallized and fluid general intelligence. In fact, according Cattell (1984), D. O. Hebb offered the same classification at the same 1940 APA convention. If this were true and if the dichotomization of "g" is a valuable contribution, it might be credited to Hebb as readily as to Cattell. Perhaps to counter this possibility Heather Cattell and John Horn in a web-site tribute to Cattell indicate that it was at the 1942 APA convention that Cattell introduced g_f and g_c (<http://www.cattell.net/devon/rbcbio.htm>). The Psychological Bulletin lists the titles of the papers presented by Hebb and Cattell at the 1940 and 1942 conventions. Cattell's 1940 title was "The Concept of Social Status" and Hebb's paper at the same convention was entitled "Clinical Test of Adult Intelligence". Indeed Hebb's paper, as

the title implies, dealt with intelligence. In fact, as the July 1940 issue of Psychological Bulletin reveals, the abstract of Hebb's paper focussed on two measures of two kinds of intelligence. Again as the title implies, the abstract of Cattell's paper confirms that it had nothing to do with intelligence. The July 1942 issue of Psychological Bulletin containing the abstracts of the 1942 APA Convention papers shows that neither Hebb nor Cattell reported on two varieties of intelligence (Cattell's paper was on attitude fluctuation; Tables of Contents reveal that Hebb and Cattell delivered only one paper each at the two conventions). However, in 1942 Hebb published a paper in the Proceedings of the American Philosophical Society that very clearly dealt with two kinds of intelligence, one fitting the fluid mold and the other identical to "crystallized" intelligence. In his 1984 paper, Cattell indicated that any question of plagiarism resulting from the supposed near identity of the putative 1940 papers on two kinds of intelligences was settled by E. G. Boring who, according to Cattell, declared that he and Hebb had arrived at the same ideas through independent routes. However, the written record indicates that it is Hebb, not Cattell, who should be credited with conceiving of the two kinds of intelligence.

{But even if it were Cattell's contribution, is it a valuable one? First, the whole notion of "g" has been questioned (McGuire & Hirsch, 1977, Schonemann, 1989; 1992). Second, is g_f anything more than another name for "g"? g_f is the "inherited" part of "g" and clearly the most important part. g_c is merely "A general factor, largely...abilities learned at school, representing...applications of [g_f]..." (Cattell, 1966, p. 369, emphasis added). g_c depends on g_f which is the "real" basis of individual differences in intelligence.}

[Genetic determinism, Cattell and others' belief that the genes absolutely shape intelligence, was severely undermined when James Flynn (e.g., 2000) showed that scores on the most popular measure of g, IQ, have been increasing rapidly worldwide. Rapid change in IQ cannot be "genetically determined" because genetic change takes many, many generations (Cavalli-Sforza, 2000). Thus, environmental factors must account for the rapid increase in IQ. To add insult to injury, the part of "g" that Cattell declared to be almost entirely "inherited," g^f , is changing more rapidly than g^c , which is not supposed to be "inherited."

Daley, Whaley, Sigman, Espinosa, and Heumann (2003) showed that g^c , and especially g^f , can change over a short period of time. These researchers also produced evidence to suggest that environmental enrichment may be behind these increases. Participants were children and their families tested in 1984 compared with children and their families tested in 1998, both from the Embu tribe of Kenya, Africa. Over the 14-year period, scores on the Raven Colored Progressive Matrices, perhaps the most respected measure of g^f , increased 26.3 IQ points on one index and 11.2 IQ points on another index. These were greater gains than found for industrialized nations. There was also a small but significant increase in Verbal Meaning scores (g^c) over the 14 year period. Change in several factors for the Embu participants over the 14-year period might explain the increase in intelligence: improved nutrition, increased environmental complexity (e.g., increased availability of TV and print material), decreased family size (more money for each child), increased education and literacy of mothers, and increased pre-school attendance. Evidence indicated that health status and birth order played no role in the increases. Apparently environmental enrichment—fueled by a shift in values toward emphasis on schooling, education, and literacy—accounted for gains. Once again, the gains were mostly in terms of g^f . which Cattell and others who promote “g” thought would be most resistant to change because they thought it to be “inherited.”

Jaeggi, Buschkuhl, Jonides, and Perrig, (2009) put another nail in the coffin holding the belief that g^f is so profoundly genetically determined that it is impervious to change produced by environmental factors. Over a maximum of 19 days, training on a complex working memory task improved g^f for both participants who were initially high in g^f and for those who were not.]

The 16 PF is certainly a useful personality assessment instrument, but how much is it revered by users of personality assessment instruments? According to Watkins, Campbell, Nieberding, and Hallmark (1995) of available personality tests, the 16 PF was ranked 25th out of 38 instruments in frequency of use by clinicians. But perhaps the 16 PF is primarily a research instrument. If so, it should be frequently cited in the research literature. Yearbooks produced by the Buros Institute of Mental Measurement, Lincoln NE, (Mental Measurement and Tests in Print) indicate that from 1985 to 1995 the 16 PF was ranked no higher than 13th (The Twelfth Mental Measurement Yearbook, 1995) and as low as the 20th most cited among 50 tests (Tests in Print

IV, Vol. 1, 1994; it was not mentioned in the Thirteenth Mental Measurement Yearbook, 1998).

Apparently, the 16 PF is not in the top tier of most used and cited tests.

Also, the bottom-up orientation that is the starting point for Cattell's methodology, and is clearly illustrated in his 16PF work, has been criticized as so strictly empirical that it excludes the guidance only initial use of theory can provide (Bandura, 1999; Eysenck, 1984, 1997). Finally, very few personality psychologists believe that Cattell's 16 intercorrelated primary factors appropriately and adequately account for personality (Goldberg, 1981; 1993).

Heritability estimates have come under fire for a number of reasons. (McGuire & Hirsch, 1977; Hirsch, 1975; Weizmann, Wiener, Wiesenthal, & Ziegler, 1990; Yee, Fairchild, Weizmann, & Wyatt, 1993). Any such estimate is good only for the population used, at the time it is used and does not generalize to other populations or to another sample taken from the same population at another time. Further, these measures apply to populations, not to individuals from the populations: it is "an average statistic and population measure, [and] provides no information about how a given individual might have developed under...[different] conditions ..." (Hirsch, 1975). Just as a specimen of a tree-species develops differently on the top of a mountain than down in a valley, a given individual might have turned out differently if reared under different conditions than those that actually existed for her or him. It is important to note that, because heritability is a population statistic, it is interpretable for the single population contributing data to the estimate. For example, heritability estimates made using "whites" are meaningless when applied to "blacks."

Further, the heritability index was originally developed to estimate how successful animal breeders would be in their efforts to breed for certain desirable traits (McGuire & Hirsch, 1977; Hirsch, 1997; Weizmann, Wiener, Wiesenthal, & Ziegler, 1990). It was never intended to be used as a means to partition the variance in a trait into that accounted for by the genes and that accounted for by the environment. In fact, the very act of dividing up variation in a trait into genetic and environmental categories, whether intelligence or personality is considered, is suspect from a genetic point of view (Ramey & Ramey, 1998). Consider an analogy. The question "In computing the area of a rectangle, which is more important, its length or its height?"

makes no sense. Likewise, asking "Which is more important, heredity or environment?" may be meaningless (Hirsch, 1975). Every genetic disposition unfolds in an environment; likewise, one could argue that no environmental influence exerts itself apart from potential genetic input (Niesser et al, 1996). Separating the genetic contribution to a trait from that of the environment in which it is expressed may be seen as artificial. Thus, it seems clear that Cattell's heritability work is at best controversial and should be viewed with considerable caution.

Cattell et al (1985) acknowledged that heritability estimates vary markedly depending on the method of estimation used. In fact, even when two or more studies involve the same methods, results can vary. That results of Cattell et al (1985) were not in line with those of a highly similar study reported by Cattell, Schuerger, and Klein (1982) is a case in point. Further, Cattell's attempts at linking the genes to psychological traits have come under fire for technical shortcomings (see Hirsch appended to Mehler, 1997). Even given that heritability indexes, whether Cattell's or those of other researchers, have been overly maligned, if some of the criticisms lodged against them are valid, they should give way to biological methods (Brunner et al., 1993; Vande Woude et al., 1990).

Cattell's "personality of nations" (syntality) is problematic by its very nature. If it is difficult to pin a personality, complete with various traits, on a single, unique, human individual (Bandura, 1999; Mischel & Shoda, 1995), how much harder is it to specify the personality of an entire nation? Further, the existence of the "syntality" is one of the links between Cattell's research/theorizing and his political point of view. In Cattell's thinking, individual people are stereotyped as possessing certain traits that, by virtue of being "inherited," are as immutable as a mountain. Nations are apparently cast in the same way. Just as people might be seen as possessing certain undesirable and unchangeable traits that provide a reason for the termination of their progeny, some nations might be classified as permanently possessing certain undesirable traits that might suggest their continuation is not desirable. The titles of his Beyondism books that emphasize an intimate connection between "science," "morality" and religion are more evidence that Cattell's research/theory and his political program were inextricably linked.

Finally, is sheer productivity a mark of excellence? Apparently, producing many written

works contributes greatly to being called "outstanding" (American Psychologist, 1997). Cattell literally wrote hundreds of papers and dozens of books. However, the papers tended not to be in mainstream journals that are read by many psychologists. Further, one does not have to read very much of any of Cattell's books to become convinced that few people have read them (Mehler, 1997). They are very difficult to read and it is still more difficult to glean substantive information from them. In fact, the likelihood that Cattell's numerous publications were read by many people is so low it seems reasonable to suggest that his supporters have adopted the very practice many of them have condemned in university administrators: counting publications rather than assessing their contribution to the literature.

The Award Selection Calculus: Only Professional Contributions Considered? or Contributions and Political/Social Views Both Considered?

There will be those who will argue that the thesis presented here--Cattell's achievements are not outstanding--is incorrect. Given Cattell's professional contributions are outstanding, but his political/social views encourage behavior that is harmful to many people, should Cattell have been selected to receive one of psychology's most prestigious awards? Apparently some think that political views ought not to be considered when an organization evaluates nominees for an award (see the comment attributed to several APA Award winners on p. 9 of The National Psychologist, Jan./Feb., 1998). They worry that considering political/views views will, in effect, discourage research on unpopular topics.

Two counters to this argument are offered. First, while a scientific organization should not act to discourage controversial research, it may, on the other hand, decide not to encourage controversial research and theory that is backed by poor science and has the potential to damage many people. As Tucker's (1994) thoroughly documented book attests, eugenics--the glue that binds Cattell's science to his ideology--is not just backed by appallingly deficient science, it originated in nonscientific, self-serving biases that were supported by ludicrous lines of "reasoning." Second, one trivial (and indirect) but clear analogy and one that is closer to home are offered to show that an organization has good reason to consider nominees' views and behaviors when it decides who will win its awards. If

only professional contributions are relevant when deciding on who gets a group's awards, Pete Rose would be in the Baseball Hall of Fame, despite having bet on baseball games. Also, psychologist E. R. Jaensch, whose views were very similar to Cattell's¹, might have been considered by psychological organizations for a medal based on his seminal eidetic imagery work, despite the fact that he was a Nazi sympathizer. Award winners views and behaviors reflect back onto the organizations that honor them. If those organizations value their reputations, it behooves them to consider more than the professional/scientific qualifications of award nominees.

Should APA Have Known About Cattell's Racist Ideology/Science? Did They Know and Not Care?

Joseph Matarazzo of the American Psychological Foundation (APF) that bestowed the award has asserted that none of the seven former APA presidents who selected Cattell knew anything about the racist ideology that Cattell mixed with his "science" (Saeman, 1997). While the daunting task of sifting through Cattell's publications may have been too much for these individuals, the demands of scholarship and the fact that Cattell's fascist/racist views were mentioned in at least two nominating letters (Hunt, 1998) should have dictated that they delve further into the matter; at least they should have carefully examined Cattell's vita. Had they done so, the intriguing titles including "Beyondism" would have aroused their curiosity. Simply scanning the indexes of Cattell's two Beyondist books would have led them to the racist implications of his science/ideology.

Further, on December 15, 1993, the Associated Press disseminated an article about Cattell across the U.S. (Associated Press, 1993). In it Congresswoman Rep. Cardiss Collins D Ill., charged that Beyondist followers of Cattell were on an NCAA funded committee, putting them in a position to influence NCAA athletic scholarship decisions. The article includes some quotes from Cattell's Beyondist writings about eugenics. I saw this article and discussed it in Allen (1997). People outside of psychology saw the article. How did the APA /American Psychological Foundation (APF) selection committee miss it?

A more serious concern is that they were aware of Cattell's eugenics point of view, but, as Tucker points out (Saeman, 1997), did not care about its racist implications. Perhaps racist

implications of a psychologist's science and ideology, which Tucker asserts "are of a piece" in Cattell's case (p. 2), were not even seriously considered. Maybe APA/APF opted for consideration of only professional contributions, even though those contributions were closely linked to political/social views that would reflect badly on their organization and that represented potential harm to many people.

Who Should Feel Comfortable with Eugenics?

Aside from questions of validity, eugenics applied to entire groups may seem an attractive point of view, if one regards one's own group as being among those whose survival and prosperity would be promoted. However, this comfortable feeling is likely to be replaced with anxiety when those among the chosen reflect on the assumptions behind eugenics. The eugenic view is remarkably pessimistic about humanity and finds most humans unacceptable (Mehler, 1997). Most traditional eugenicists, to this day, naively believe that both "good" and "bad" traits are "inherited" and each is controlled by a single gene, which means to them that these traits will inevitably be expressed regardless of "environment" or any other factor (Tucker, 1994). But while certain groups may be viewed as having a highly disproportionate share of "desirable" traits, individuals within those groups will invariably have "undesirable" traits that may mark them as expendable (subject to sterilization or annihilation). Again, as Tucker (1994) documents, even the early leaders of the eugenics movement had "disabilities" that would make them suspect in the eyes of their fellows. People displaying alcoholism, various diseases, promiscuity, and even homelessness have been targets for eugenic measures. Consistent with this position, Shirer (1960) Toland (1976) Trevor-Roper (1978) and Speer (1970) write that the Nazi elite had a tendency to point out the questionable traits of each other: Goering's addiction, Goebbel's shortened leg, Himmler's low social status (a former chicken farmer), Heydrich's alleged "racial impurity," even Hitler's neuroticism (his never fully explained intestinal ailments and his "paralyzed" arm) and alleged "racial impurity." Their squabbles form a model for what would happen in a society founded on eugenics. The Nazis would have cannibalized one another, each finding the other, and people like them, unacceptable on "genetic" grounds. They would have, as would any eugenic society, eventually whittled down humanity until only a small portion of it was

deemed worthy of continued survival. It might start with elimination of the "mentally deficient" and "physically deformed" as it did in Nazi Germany. But eventually a eugenic society would promote euthanasia or sterilization of those with "inherited physical diseases," "borderline intelligence," "criminal mentality," and perhaps even blindness, deafness, epilepsy, psychotic disorders, and learning disabilities. There is always another trait the leaders of a eugenic society would see in others, but not in themselves, that would be a basis for expanding euthanasia, sterilization, forced birth control or other eugenic practices.

Conclusion

A debate about whether Cattell's scientific accomplishments qualified him for a psychological career award may develop. However, there seems to be little basis for a debate concerning whether Cattell's controversial and scientifically vacuous views on race and eugenics were part and parcel of his professional life. Certainly a scientific organization should not discourage controversial professional efforts. Nevertheless, it is in its own best interest, and that of its society, to disassociate itself from points of view that have a weak scientific base, but have strong potential for damage to many people (Hirsch, 1997).

Footnote

¹Jaensch held to beliefs that were remarkably similar to those of modern eugenicists. He, like contemporary eugenicists, including Cattell, was obsessed with "race mixing." A few examples from Der Gegentypus (1938) illustrate the point. "In the findings that follow, a relationship is delineated which illuminates the issue that the movement in the direction of the racial problem examines in depth. Research on the Gegen Type [countertype] has shown that a primary source, in common with disease, lies in unhygienic relationships between races." (p. 13). "Our most fully developed, indeed classical, cases of the Degenerate Type have been of such individuals showing in their family tree an extreme and heterogeneous mixture." (p. 22). "The Degenerate Type, in his purest, classic forms, originates through heterogeneous race- and blood mixing." (p. 150-151). "As if by instinct, the movement proceeds with the battle of origins. It defends itself against extreme and heterogeneous racial mixing that thereby dams one of the main channels through which the Degenerate Type and his unhealthy cultural system arise. This and nothing else is the ultimate goal, for which we in Germany promote racial hygiene." [p. 466]. He, like Cattell and other modern eugenicists, assured us that the call for "racial purity" is a declaration of what is best for all humans: "The struggle in race relationships is thus somewhat similar to that against the unknown origins of cancer, motivated, not by hate, but rather from a great love of society and of mankind." Adolf Hitler and Alfred Rosenberg are among the "sources" he quoted in making his case for eugenics.

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