

Race, Class, IQ and Economic Success

Their dullness seems to be racial, or at least inherent in the family stocks from which they come. The fact that one meets this type with such extraordinary frequency among Indians, Mexicans, and Negroes suggests quite forcibly that the 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, which cannot be wiped out by any scheme of mental culture - Lewis Terman, 1916

Quite apart from educational status, which is totally unsatisfactory, the Negro soldier is of relatively low grade intelligence. Education alone will not place the Negro on par with his Caucasian competitors - Col. Robert Yerkes, 1921

The fecundity of the family stocks from which our gifted children come appears to be definitely on the wane. This is an example of the differential birth rate which is rapidly becoming evident in the civilized countries. It has been figured out that is the present differential birth rate continues, 1,000 Harvard graduates will at the end of 200 years have but only 50 descendants, while, in the same period 1,000 southern Italians will have multiplied to 200,000 - Louis Terman, 1924.

There are intelligence genes, which are found in populations in different proportions, somewhat like the distribution of blood types. The number of intelligence genes seems lower, overall, in the black population than in the white. - Arthur Jensen, 1969

Nature has color-coded groups of individuals so that statistically reliable predictions of their adaptability to intellectually rewarding and effective lives can be easily made and profitably used by the pragmatic man in the street - William Shockley, 1972

In the recently released film "Gattaca," we are shown a society where "designer" children at birth are "graded" in various ways by a scan of their DNA. How these babies "score" more or less determines what roles society will allow them to fill in the future, e.g. how much, and what kind of education and training they will receive, and what occupations they will enter. In *Gattaca*, science has made it possible to engineer a class of genetically superior human beings. Race and ethnic backgrounds are no longer causes for discrimination. People are judged only by their genes. Those conceived naturally, in the heat of passion, and hence, by a "random recombination of genes," are called "faith children," and are the dregs of this new society. Some times referred to as "gendefectives, they are destined to clean the toilets and polish the marble floors of the genetic upper class. Only those children whose parents selected their traits from a library of genes with the aid of a genetic counselor are provided with opportunity and success. To borrow a line from the movie: "Your genes are your resume."

Historically, it would appear that the notion that “genes are your resume” was a valid proposition. In the quest for wealth and power, at least in the West, those born with dark skins and females seem to have been substantively disadvantaged. Over the years, some have alleged that these superficial characteristics, while of no importance *per se*, were indicative of lower intelligence. Inferior intelligence, it is alleged, not the observable racial or sex characteristics of individuals, was the root of the matter. Similarly, there have been those who considered the status of the lower classes to be the result of a genetic, rather than a social disadvantage.

While knowledge of the human genome is accumulating, it remains quite inadequate for the task of genetic engineering of humans. This is mainly because, for the most part, there is very little understanding of how genes interact to produce human characteristics. Most human genotypic characteristics are not related to a single gene, but to a complex interaction of genes, the understanding of which may be decades or even centuries away. As Bernard Davis, an advocate of the utility of mental testing, has nonetheless opined, “we are unlikely to be able to correlate intelligence with the incredibly complex and subtle circuitry of the brain for a long time to come.” [Davis, *The Public Interest*]. Moreover, genotype, or “biological heredity” defines only a person’s potential. What is actually realized, the phenotype, the outcome of a complex interaction between genes and the environment, or “social heredity,” in which the individual develops. This is most certainly true in the case of intelligence. Not only do we not understand how genes produce intelligence, we don’t even understand how “intelligence” works. Also, and obviously, we have little understanding of how genotype and environment interact to produce the capacity for intelligent behavior.

There are observable behaviors which are, *within the boundaries of specific cultural understandings*, considered “intelligent.” These behaviors are considered desirable for any number of reasons, however, they are not evenly distributed throughout any given population. Some have alleged that the distribution of income and wealth are closely linked to this observed, that is to say, measured patterns of “intelligence.” And, as most societies are riven with conflicts

In Aldous Huxley’s *Brave New World* when we encounter what are called “test tube babies” it appears to be genetic engineering at work to produce a hierarchical society where everyone is programmed to happily accept their place in a caste system. In fact, however, this partnership of authoritarian power and science is actually chemical engineering not genetic engineering. The humans produced in gradations from alpha to epsilon - the alphas are the leaders and the epsilons run the elevators and both groups are content with their “place.” Chemicals are used to damage the brains of each individual in accordance with their planned social prospect. After “birth” each individual is subjected to intense Pavlovian conditioning and also provided with a drug (Soma) to keep them happy should their conditioning fail. Huxley was offering a critique of Fordism, the regimented mass production system. Note for example, the story takes place in 632 A.F. (After Ford). In short, only a brain damaged, intensely programmed and drugged human could ever be content in a Ford Factory or in a society built upon such alienating work.

Although often understood as “genetic engineering,” Huxley was surely imagining damage done to DNA by the chemicals which makes it a matter of “environment” not genes.

Recently, the science of epigenetics has found that environmental factors like “diet, stress, and maternal nutrition can change gene function without altering the DNA sequence in any way” [Sandra Blakeslee, *A Pregnant mothers diet can turn genes around*, *New York Times*, 10/9/03, p. D1]. Perhaps then, other chemical exposures attendant to Fordism will also cause alterations in behavior, including intelligence by turning genes on or off. Again it is a matter of environment.

over the class, race and gender inequalities in income and wealth, just what intelligence is and how “intelligence” is actually produced, defined and measured is a matter of considerable economic, social and political interest.

In the United States, interest in the question of intelligence has waxed and waned over the past 200 years. Interest in the “intelligence” question was high in the three decades before the Civil War as apologists for slavery attempted to justify the exploitation of black slaves on the grounds of their putative inferior racial characteristics, most notably intelligence. Similarly, in the first two decades of the 20th century as Nativists campaigned to stop immigration from Southeastern Europe, it was the intelligence (and the religion) of these immigrants that was called into question. Then, in the late 1960s, reactionary forces opposed to the forced integration of schools, the passage of the Civil Rights Law of 1964 and the Voting Rights Act of 1965, and then programs such as Affirmative Action and forced busing of children once again raised the question of race differences in intelligence. The issue faded for about a decade during the 1980s as the reactionary forces seemed to have gained the upper hand in racial politics, as manifest in the election of Ronald Reagan, who made it clear he would suffer no “race preferences” of any kind. The issue emerged once again, in the 1990s as the nation debated “Welfare Reform.” In their book, *The Bell Curve*, Richard Herrnstein and Charles Murray, once again, used putative differences in intelligence, especially, if not exclusively, those, as William Shockley put it, “signaled by skin color,” to explain poverty, crime, unemployment, and “illegitimacy.”

While the early “pseudo-science” of race which was based on “measuring heads and bodies” is of great interest, it had effectively been discredited by Franz Boas and others by the 1930s. The great race beast rested quietly during the Great Depression and World War II. Surely, racist values and practices persisted, but there did not seem to be a need to raise the standard of the racial inferiority of Afro-Americans to legitimate these practices. Indeed, the revelations of the abuse of race doctrine by the Third Reich so repulsed liberal sentiment in the United States, that for at least two decades, race became a taboo subject; those who ventured into this domain did so at their peril. In any case, by 1938 the Nation was being ruled by a “conservative coalition of southern Democrats and Republicans” [Klinkner, *Unsteady Growth*, p. 134]. Effectively the New Deal was dead and along with it “whatever hope had existed for legislation to help the plight of black Americans. As Gunnar Myrdal, put it, at the end of the depression the “Negroes had relief, but no jobs; and there was no significant improvement in their position on any other front” [quoted in Klinkner, *Unsteady Growth*, p. 135].

During the War, blacks were able to exploit the critical labor shortage produced by the war. Advances also came as a consequence of the awkward position the government found itself in as it claimed to be the leader of the world’s democracies in the fight for freedom while it harbored a disfranchised and brutally exploited people within its own borders. The hypocrisy of fighting an enemy which is condemned for espousing racial hierarchies while at the same time winking at racial discrimination at home was all too evident. The regular lynching of blacks in the American south provided not a little grist for the Axis propaganda mills. As Secretary of State Dean Acheson wrote in 1946:

The existence of discrimination against minority groups in this country has an adverse effect on our relations with other countries. We are reminded over and over by some foreign newspapers and spokesmen, that our treatment of various minorities leaves much

to be desired... Frequently, we find it impossible to formulate a satisfactory answer to our critics in other countries; the gap between the things we stand for in principle and the facts ..may be too wide to be bridged [quoted in Klinkner, *Unsteady Growth*, p. 209].

FDR was more outspoken:

We cannot stand before the world as a champion of oppressed peoples unless we practice as well as preach the principles of democracy for all men [quoted in Klinkner p. 197].

Just two weeks after VJ-Day in 1946, in Liberty, Mississippi, a mob lynched Eugene Bells, a veteran of WWII. Bells was lynched at the instigation of his former white employer who was angered by Bell's refusal to return to his old job. Over the next eight years, eight blacks, not few of which were veterans, would be lynched, and several others attacked or killed because they had in some way offended white sensibilities [Klinkner, p. 203]. There had been some racial progress during the war. In 1941, President Roosevelt, with executive order 8802, demanded the end of racial discrimination by defense contractors and government agencies. He also established the Fair Employment Practices Committee to enforce the order. Between 1942 and 1944 the percentage of black workers in defense industries rose from 3% to 8.3% and the percentage of these workers that were "skilled" increased by 50% (2.6 to 3.6%) [Klinkner p. 191]. Blacks as a percentage of the federal workforce rose from 9.8% to 12% in 1944 [ibid 192]. But, old attitudes persisted, in the South especially, where during the war one man proclaimed, "I'd rather see Hitler and Hirohito win than work next to a nigger" [quoted in Klinkner p. 180]. However, there was some attitudinal change brought about by the war. One southern man reveals that:

I've changed my ideas a lot about colored people since I got into this war, so have a lot of other boys from the South. I've fought with colored men - why shouldn't I eat with them [quoted in Klinkner p. 200].

President Harry Truman was not a race liberal; he shared the same prejudices of other whites in Missouri and he "commonly referred to blacks as "niggers" and "coons." Yet even Truman was "shocked" at the treatment that black Veterans were getting in the South:

My God! I had no idea it was as terrible as that. My stomach was turned over when I learned that Negro soldiers, just back from overseas, were being dumped out of Army trucks in Mississippi and beaten. Whatever my inclinations as a native of Missouri might have been, as President, I know this is bad. I shall fight to end evils like this [quoted in Klinkner p. 207].

On October 29, 1947, a "civil rights" committee appointed by Truman published its report called "*To Secure These Rights*." The report unequivocally condemned Jim Crow segregation and its doctrine of "separate but equal." With language that would resonate from the Supreme Court's Brown decision in 1954, the report claimed that "not even the most mathematically precise equality of segregated institutions can be properly considered equality

under the law [because]..a law which forbids a group of American citizens to associate with other citizens in the ordinary course of daily living creates inequality by imposing caste status on the minority group” [quoted in Klinkner p. 214].

The spirit of racial justice produced by the war, and not a little legal prodding by the NAACP and threats from men like A. Philip Randolph, led also to the end of the “white primary” which had effectively kept blacks out of electoral politics in the South, and the end of “restrictive covenants” which had been used to prevent white owners of property from selling to blacks. As a result of the latter, in Chicago alone, within four years, 21,000 blacks had purchased or rented homes in areas from which they were previously excluded [Klinkner p. 217]. Significant also was the order by Truman, during the Berlin crisis, under a threat from Randolph of black boycott of the draft, to desegregate the armed forces [Klinkner p. 221].

Of course, Truman was rewarded for his race liberalism. Truman surprised everyone by beating Dewey in the 1948 election. The critical margin of victory was the votes of northern blacks [Klinkner p. 223].

Finally, as a sign that the “times were a changin,” baseball was desegregated; Jackie Robinson made his major debut on April 15, 1947. Again, the role of blacks in the war effort was critical in laying the path for this momentous change. As the New York Times wrote, “if we are willing to let Negroes as soldiers fight wars on our team, we should not ask questions about color in the great American game [quoted in Klinkner, p. 228]. Robinson, who had indeed served in the army during the war, became a powerful propaganda symbol in the cold war [Klinkner p. 229].

Thus, under the pressures of WWII and then the cold war, the US government was forced to make concessions to Afro-Americans. Moreover, many Americans began to look at the race question differently given what they observed of Nazi racism and the admirable service of Afro-Americans in WWII and Korea. Also, Afro-Americans used this opportunity to pressure the government. Working through courts, the NAACP, with written amicus briefs from the justice department, successfully challenged and tore down the many of the structures of Jim Crow, most notably the Plessey doctrine of “separate but equal” that had sustained segregated schools and public facilities in the South for half a century. A. Philip Randolph used the opportunity provided by the wartime crisis to force concessions from FDR and from Truman. Finally, the mass action of tens of thousands of black people and a legion of white supporters managed to force the nation to finally grant full civil equality to Afro-Americans. The everyday life of Afro-Americans changed but little, in 1960 only 432 Afro-American children in the south attended integrated schools, but there was hope. Unfortunately, what many people had thought was just the beginning, was actually the end. By 1968, the backlash had set in. The Urban riots that broke out in virtually every major American city in 1965 and 1966 went a long way toward expending the capital that Afro-Americans were getting from their participation in the Viet Nam War.¹ The cry heard most in Washington became one for “law and order.” Whites who opposed to the civil

¹ In 1965, Daniel Patrick Moynihan wrote, “History may record the single most important psychological event in race relations in the 1960s was the appearance of Negro fighting men on the TV screen of the nation” [quoted in Klinkner p. 282].

rights movement swelled the camp of conservative Barry Goldwater; a remarkable event given that he was a Republican. No Republican had ever won a majority of the southern white vote until Goldwater did in 1964 [Klinkner p. 276]. Goldwater was a forceful critic of the Washington bureaucracy, but was not a racist, at least, to his credit, he never played the race card as a matter of principle [Klinkner p. 276]. The Republican Party was not so principled, as we have seen.

In 1966, the Democrats lost 42 seats in the House, three in the senate and eight governorships [Klinkner p. 280]. In 1964 a young candidate for the house, George W. Bush, ran against the Civil Rights Act of 1964 because it was passed to protect only 14% of the people, "I'm worried," he said, "about the other 86%." He also opposed the elimination of the poll tax, one of the most effective ways the recalcitrant south ever found to keep Afro-Americans from voting [quoted in Klinkner p. 284]. Bush, only two years later, would support the open housing bill, to the great distress of his constituents [he was the only southern Republican to vote for it]. Bush simply did not think it fair that a returning Viet Nam veteran could not live where he chose [Klinkner p. 284]. Some three decades later, however, Bush would revert to form. In the 1988 presidential election, Bush crucified Mike Dukakis, with the story of "Willie Horton" - a black man released from prison by the liberal Dukakis only to commit a heinous crime shortly afterwards.

The disenchanted flocked then to George Wallace who made a good showing in some the *northern* democratic presidential primaries. Unlike the more principled Goldwater, however, Wallace appealed to white fears about crime and decadence in integrated neighborhoods. One Wallace supporter complained; "They beat up 83 year old ladies, rape our women folk. They mug people. They don't work. They are on relief. How long can we tolerate this? Did I go to Guadalcanal and come back to something like this?" [quoted in Klinkner p. 275]. The Wallace success sent a clear message to the Democratic party - many members of the party had had enough of civil rights for Afro-Americans. A secret poll of the AFL-CIO membership revealed many had planned to vote for Wallace in 1964 [Klinkner p. 290]. Wallace eventually carried 13.5% of the national vote.

In 1968, the democrats, who, with the exception of 8 years of Eisenhower, had held the White House since 1932, lost it to Nixon. To put it bluntly, Nixon won by pandering to the racist reactionaries in the south. Nixon took a liberal position toward civil rights in the 1960 election. Like many others he viewed it as "a cold war necessity." [Klinkner p. 291]. In 1968, however, Nixon took up the "law& order" standard and indicated he had little sympathy with the Supreme Court's position of integration. Nixon beat Hubert Humphrey, the quintessential race liberal, in part because he was stained by Johnson's war, and because the majority of white Americans simply did not share his liberal position on Civil Rights [Klinkner p. 292].

As President, Nixon zig-zagged between race liberalism to appease our foreign allies and the State Department, and conservative polices such as attacking the "Great Society" welfare programs. Nixon believed, he once told Erlichman, that government programs could do little to help blacks because they were "genetically inferior" [quoted in Klinkner p. 293].

The winds of Jensen were blowing at gale force in the Nixon Whitehouse - Daniel P. Moynihan

Thus, the scene was set for the recrudescence scientific racism. In 1969, the *Harvard Educational Review* published an article by a Berkeley educational psychologist titled, “How much can we boost IQ and Educational Achievement? The Article began with the assertion that “compensatory education has been tried and has apparently failed.” According to the article’s author, Arthur Jensen, however, the fault lies not with the educational establishment, but with the children. Jensen was, of course, referring to the “compensatory education” of black children. Black children have failed to benefit from the best efforts of educators because, Jensen contended, they, black children have a deficiency of intellectual skills, a deficiency they inherited from their parents and their ancestors.

In more technical terms, black children, he alleged, on average score about one standard deviation below white children (85 v 100) and this difference, had persisted despite compensatory education programs. Secondly, and more importantly, Jensen contended that IQ is a highly heritable trait, that is, a person’s cognitive ability is more or less fixed at conception. Little wonder then that educational interventions failed to close the gap.

Jensen based his contention that compensatory education has “apparently failed” on a report published by the U.S. Commission on Civil Rights which concluded that special programs for disadvantaged children did not improve either their IQ or their educational achievements [Jensen, A Reply to Lewontin, p. 95]. The study Jensen references was published in 1967 at which time Headstart Programs had been operating for a very short period. Jensen does concur that Headstart Programs did raise IQ scores by 5 to 10 points, but these gains were gradually lost as children spend more time in school. Apparently, since these gains were not permanent, Jensen did not consider them real. Jensen, quite remarkably, never wonders what aspects of schooling might be responsible for driving down the IQ scores of minority children.

One is perplexed even more when, in the same article, Jensen reports how “small scale experiments in boosting the IQ and educational performance of disadvantaged children have produced significant gains.” [Jensen, 1969, How Much Can...,p. 3]. While a reasonable person might show some optimism here, Jensen, in defiance of the very facts he presents, derides the notion that “by providing culturally disadvantaged children with some of the cultural amenities enjoyed by middle class children for a period of a year or two before they enter school” would allow educators to “go on treating all children very much alike and expect them all to perform as average children” [Jensen, *ibid* p. 95].

Head Start -Compensatory Education?

Jensen’s claim that compensatory education failed is a direct critique of the Head Start Program. It is a classical example of the rhetorical device known as the “straw man” In short, Jensen creates a fictitious program and then finds it faulty while the real program has indeed been an almost unqualified success. Jensen claims that Head Start failed because it did not produce sustained increases in IQ scores. Head Start did produce about a 10 point increase in measured IQ among the participating children, but shortly after the children entered the regular school system the IQ gains faded. Uri Brofenbrenner’s review of a number of early intervention programs found that “early intervention produces substantial gains in IQ as long as the program

lasts, but the effect tends to ‘wash out’ after intervention is terminated” [Uri Brofenbrenner, *Is Early Intervention Effective?* in Ashley Montagu ed, *Race and IQ*, p. 299]. Brofenbrenner’s review also found that IQ scores increased only in the first year of a program. Finally, Brofenbrenner notes that even the measured gains may be “spurious” due to the probable selection biases in program enrollments [p. 289, 297]. Thus, Brofenbrenner concludes, “the hope that group programs begun in the earliest years of life will produce greater and more enduring gains is... disappointed [ibid. P. 300].

It would, thus, appear fair for Jensen to make the claim that compensatory education failed. In terms of the criteria used to evaluate the program it did indeed fail. It is most important to note, however, that the Head Start Program had never defined “producing a permanent increase in IQ scores” as even one of its goals. The evaluation of the program in terms of IQ was the simple and most unfortunate result of the fact that IQ scores were the only data consistently available. As Brofenbrenner complained, “we [had] no systematic information about the effects of intervention programs outside the cognitive realm” [p. 288] In short, the only data available were IQ scores, and school achievement tests [p. 288]. Indeed, Brofenbrenner expressed some surprise that such measures showed any improvement at all given the “limits in their scope” and the “marked middle class and race bias” in their content [p. 288]. Brofenbrenner concludes his review by noting the “narrowness of IQ and related measures as aspects of the total development of the child.” In short, interventions need to address many aspects of child development among which IQ score may be the least important. To address the broader issue of promoting readiness for school and behavioral competence of millions of disadvantaged children, Brofenbrenner advocated “ecological intervention” [p. 316]. Brofenbrenner believed that “the course of development is influenced by a complex interrelationship of the child’s traits, the family, and the community, so intervention must touch all these areas” [Edward Zigler and Sally J. Styfco, *A Head Start in What Pursuit? IQ Versus Social Competence as the Objective of Early Intervention*, in Bernie Develin et al eds. *Intelligence, Genes and Success*, 1997, p.287]. Thus, parents must be trained in parenting so they may become the “primary agent of intervention.” Unlike more paternalistic models that saw parents as “part of the problem,” Brofenbrenner’s approach emphasized that parents had to be “part of the solution” [ibid. P. 291]. Moreover, the ecological approach required that the program include more than mere “compensatory education” - it must address matters such as health, nutrition, adequate housing and economic security. In short, the program should reflect society’s commitment “to make the conditions of life viable and humane for all its families” [p. 317].

Uri Brofenbrenner would play a crucial role in the structuring of the Head Start Program. Not only did he sit on the planning committee, he had convinced Lady Bird Johnson that his “ecological approach” should be an essential feature of the program.

The Head Start Program was based on the “whole child” philosophy that included a number of objectives such as “improving the child’s health;” “helping the emotional and social development by encouraging self-confidence, and self-discipline;” improving the child’s mental processes, particularly conceptual and verbal skills;” establishing expectations of success;” improving family relations;” developing a responsible attitude toward society;’ and to increase the sense of self-worth and dignity” of both the child and the family [Zigler & Styfco, p. 286]. Head Start was a “comprehensive program to met comprehensive goals” [ibid. P. 287]. In short,

Head Start sought to produce a broadly conceived “social competence” that included cognitive skills, but also included “the child’s everyday effectiveness in dealing with his environment and later responsibilities in school and life”[Z&S, p. 300].

IQ while deemed somewhat important in school academics has become “highly suspect” as a predictor of success in other domains of the school experience, and outside the domain of the school. Consider, for example, the “six hour retarded child” who functions quite adequately before and after school, but who is considered defective because of a low IQ while in school. Of course, one must also take note of those high IQ individuals that are incompetents in “social settings” in school, at home and at work [Z&S, p.300].

Social scientists have long recognized the need to expand the domain within which early childhood programs are evaluated. It has proven difficult, however, to conceptualize, and operationalize the criteria, i.e. to develop measures of “social competence” and to gather the relevant data. By the early 1980s such a program was underway, but was defunded by the Reagan Administration. To date (2005) the goal has not been realized and consequently, social competence has not replaced IQ as the *sine qua non* of early childhood interventions.

The focus on IQ scores as opposed to other indicators of “life success” has been most unfortunate since there is considerable evidence that early childhood intervention improves not only performance in school, but performance after school. Zigler & Styfco report that research has found early intervention has reduced the odds that a child will be retained in grade or assigned to special education. They were also more likely to graduate from high school. Outside of school there is evidence that such programs (though not specifically Head Start) reduce the odds of juvenile delinquency, teen pregnancy, being on welfare and increase the odds of being employed [p. 294]. As Elizabeth Schor put it, these programs do not beat the odds of a “rotten outcome” but they can change them [Elizabeth Schor, *Within Our Reach: Breaking the Cycle of Disadvantage*, P. xvii]. One study found \$7.16 in social benefits, mostly in the form of reduced losses from crime, for every dollar spent on early childhood intervention [Zigler & Styfco p. 296]. The net benefits of early childhood intervention are more than mere “rhetoric,” Schor reports, they are “documented facts”- that “early childhood education has a lasting impact on adult life and the benefits to society of reduced costs of remedial education, increased earnings, decreased welfare payments, and less crime is demonstrable in hard economic analysis” [Schor, p. 196]. Finally, the typically conservative Committee on Economic Development, noting the high benefit yield per dollar invested, rated preschool education “an extraordinary economic buy”[quoted in Schor, p. 196].

In *The Bell Curve*, Herrnstein and Murray explained the failure of Head Start to raise permanently IQ scores in terms of the difficulty of “altering the environment for the development of general intellectual ability” [Bell Curve, p. 413]. Brofenbrenner surely concurs as when he insists that “ecological intervention will require major changes in the institutions of society” [Brofenbrenner, p. 316] Ecological intervention, after all requires the provision of “adequate health care, nutrition, housing, employment and opportunity and status for parenthood”[p. 316]. Moreover, Brofenbrenner emphasizes, that unless such an intervention is sustained “what few effects are achieved are likely to disappear once the intervention is discontinued” [p. 316]. In short, what the nation needs is a sustained “war on poverty” that would permanently eradicate this scourge from our community. Again, only with such an effort

can we make the “conditions of life viable and humane for all families”[p. 317].

There are many “risk factors” in the ecological system of a child that tend to increase the odds of delinquency and crime. Low IQ is certainly among them, if not prominently so. Also included would be poor school achievement, gender (males more likely to be delinquents), poor inter-social skills, large family size, low socio-economic status, poorly educated parents and poor parenting skills, poor schools, poor housing, lack of employment opportunities and lack of positive role models [Zigler & Styfco, p. 297]. Because of his hard-core hereditarian view that IQ is the most important, if not the sole gatekeeper at the portal of economic and social success, Jensen (and later Herrnstein & Murray) ignores virtually all other risk factors and incidentally rules out virtually any programmatic aspect of interventions not addressed directly to IQ. And, since the latter are allegedly ineffective at raising IQ, any social spending on childhood intervention programs is deemed wasted. As Herrnstein & Murray put it, the benefits of “run-of-the-mill programs” such as Head Start “hardly justify investing billions of dollars”[Herrnstein & Murray, *The Bell Curve*, p. 405].

The “other” non-IQ benefits of Head Start

Head Start insured that all entering students receive complete medical (especially vision and hearing) and dental checkups, and when necessary, all remediation. It also provided for all immunizations and vaccinations. Indeed, Head Start is the “nation’s largest single provider of health services to poor children” and has been an important provider of services for children with disabilities [Zigler & Styfco, p. 298].

Head Start also enhanced the health of children by providing “regular hot meals and healthy snacks” and by providing nutrition counseling to parents. And Zigler & Styfco write:

In their preconceived dismissal of Head Start, Herrnstein & Murray failed to include the program in their discussion of efforts that they see as holding the most promise for raising intelligence - nutrition and vitamin supplementation. Improved nutrition is in fact thought to be responsible for the Flynn effect, which is the gradual increase in IQ over succeeding generations. Among children at high risk for school failure, substantial increases in IQ have been documented after vitamin supplement regimes. Such findings have been questioned, however, and not all studies have shown cognitive gains as a result of better nutrition. The mixed evidence notwithstanding, no component of Head Start should be evaluated only on the basis of IQ effects. The nutrition component must be appreciated for its salutary effects on children’s health, particularly children who are at risk of inadequate nourishment [p. 298-299].

Head Start has also been a source of income and occupational advancement for parents. “Over 35% of program staff are parents of enrolled children or graduates,” and many have acquired credentials in early childhood education as a result [Zigler & Styfco, p. 299]. Parents

also gain “greater life satisfaction and psychological well-being” from being a part of the “supportive network of the preschool community”[p. 299]. Thus, head start is far more than compensatory education. In most dimensions it has been successful. Moreover, the putative failure to permanently raise IQ scores may reflect the failure of the public school system to sustain the environmental conditions necessary to maintain cognitive skills.

In one sense at least, Jensen and H&M are, of course, correct. It is inane and Utopian to believe that such modest interventions, and those as comprehensive as Head Start, can produce any lasting benefit without continuing programs to assist the schools, communities and families of these children. The act of entering preschool does not change the impoverished and disorganized home and community environments in which the children live. One does not have to get too far into Jonathan Kozol’s book *Savage Inequalities* to realize that two years of “Head Start” is a mere drop in the policy bucket required to cope with this immense problem, the root of which is the race-class hierarchy. Clearly as Charles and Betty Lou Valentine have written, effective [IQ] parity among human groups cannot be expected without radically restructuring the entire hierarchical system of intergroup relations..such a change will require revolutionary change in all major aspects of society, from control over productive resources to ideology and value patterns.” [quoted in Marvin Harris, *Culture, People, Nature*, 2nd ed. P. 513].

As an educational psychologist, Jensen sought defects not in the social order that produced the unspeakable poverty and degradation in our nation’s ghettos, and not in the schools which seem to drive down IQ scores, but rather in the individuals that are broken by it. Jensen’s critique of the educational establishment was only that it failed to “take seriously the problems of individual differences in development rates, patterns of ability and learning styles.” The “prevailing philosophy that all children are basically very much alike” was, Jensen insisted, the root of the problem. All children are not alike, he avers, black children, to put it simply, are dumber than white children and all the cultural enrichment in the world will not change that basic fact. Just like alchemists could not “transmute base metals into gold,” he said, we cannot turn all children into average children [ibid p. 101-102]. And, Jensen goes on, woe to those who do not heed this fact.

Sounding very much like he was writing in 1920 alongside Lothrop Stoddard, Madison Grant and other champions of eugenics who opposed immigration on the ground that it was allowing inferior races to pollute the Anglo-Saxon racial stock, Jensen warned of the dysgenic trends in our urban slums:

At least 16% of black children (as compared with less than 2% of white children) in our nations schools are mentally retarded by the criterion of IQ under 70...The figure is much higher in inner city schools, and these children come from the largest families. Some of the causes [of these high rates of mental retardation] are undoubtedly environmental, nutritional, pre- and perinatal, and cultural... But, I suggest the genetic hypothesis be considered in our efforts to understand these conditions.

Census data show markedly higher birth rates among the poorest

segments of the Negro population than among successful, middle-class Negroes....That is, the educationally and occupationally least able among Negroes have a higher reproductive rate than their white counterparts, and the most able segment of the Negro population has a lower reproductive rate than their white counterpart....The social and educational implications of this trend....are enormous ² [Jensen op. cit. p. 101].

But, one must ask, what is to be done about this “trend?” If IQ is inherited and immune to social intervention, the IQ of these multiplying, retarded masses cannot be raised. One must wonder what sort of interventions Jensen had in mind to curb the excessive population growth in the “inner city?” Jensen’s words are regnant with the rhetoric of the turn-of-the-century eugenics movement. One can only assume, given the company Jensen keeps, he would advocate some sort of eugenics program such as the forced and/or involuntary sterilizations of 27,000 putatively “mentally retarded” women between 1924 and 1972.

In 1893, Martin Boies, in his book, *Prisoners and Paupers*, advocated the imprisonment and castration of both. The argument that both criminality and pauperism were hereditary conditions had been advanced since the middle of the 19th century by people writing in a new field called criminal anthropology [Aptheker, “Sterilization, Experimentation and Imperialism,” *Political Affairs*, p. 43]. While some states had been informally carrying on compulsory sterilizations, it was not until 1907, in Indiana, that the practice was legally sanctioned. By 1932, some twenty-five states, including every southern state, had passed similar laws [Aptheker, p. 42]. By 1958, 61,000 sterilization had been performed with the highest incidence in North Carolina, Georgia and Virginia. The reasons for compulsory sterilizations varied by state but included being “feebleminded³,” or a “moral degenerate” or a “habitual criminal;” all conditions believed to be hereditary [Aptheker, p. 42]. The vast preponderance of sterilizations were of women, and among them, black women were well over-represented [Aptheker p. 42].

The principle of “forced sterilization” was approved by the Supreme Court in the case of

1. The implication of this argument that low IQ people have higher reproductive rates has been shown to be false. It is true that low IQ women have large families, when they manage to have families. It has been shown, however, that low IQ women are far less likely to have families than high IQ women. On balance then, high IQ people reproduce at higher rates than low IQ people [Lewontin, *Further Remarks on Race and the Genetics of Intelligence*, in *The IQ Controversy*, edited by Block and Dworkin, P. 111]

³ Defined as scoring under 70 on an IQ test. In one case, however, a white woman was declared feeble-minded because she did not have the “normal aversion of white women to colored men.”[Aptheker p. 45].

Carrie Buck. Carrie Buck⁴ was an 18 year old white girl ordered to be sterilized under a new Virginia Law passed in 1924. The Supreme Court sustained Virginia's right to force the sterilization. Justice Holmes wrote the decision:

We have seen more than once that the public welfare may call upon the best citizens for their lives. It would be strange if it could not call upon those who already sap the strength of the State for these lesser sacrifices, often felt to be much by those concerned, in order to prevent our being swamped with incompetence. 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 compulsory vaccination is broad enough to cover cutting the Fallopian tubes....Three generations of imbeciles is enough! [quoted in Gould p. 335].

If you have any doubt about the ideological mindset of the Eugenics Movement, the following paragraph from the *Eugenics Review*, published in England in 1936 should provide ample elucidation.

“Present day Germany must be regarded as a vast laboratory which is the scene of a gigantic eugenics experiment. It would be quite wrong and quite unscientific to decry everything which is now going on in that country. There is, in fact, much carried out in Germany which deserves our approbation. The authorities there are in the position of being able to carry out the advice of their scientific advisors. If Dr. Frick, the Minister of State, desires to enforce certain social legislation he only to issue an order and the thing is done. How different from us. Why some of us are not dictators in our own houses. In Germany the most advanced eugenics legislation is carried through without difficulty.”

Holmes was a great admirer of George Morton whose research on human skulls had shown clearly, at least as far as Holmes was concerned, that the Caucasian race was superior to all others. Holmes, moreover, was not unsympathetic to the eugenics cause. Indeed, he gloated over the extermination of Native Americans because they were less aesthetically pleasing than whites. Holmes wrote in this regard:

“...and so the red-crayon sketch is rubbed out, and the canvas is ready for a picture of manhood a little more like God's own image [quoted in Gould p. 32].

⁴ The Supreme Court decision written by Justice Holmes described Carrie Buck as follows: “Carrie Buck is a feeble-minded white woman who was committed to the State Colony above mentioned in due form. She is the daughter of a feeble-minded mother in the same institution, and the mother of an illegitimate feeble-minded child.” Carrie Buck, had a “mental age” of nine years on the Stanford-Binet test. Her mother, tested at age 32, allegedly had a mental age of seven. [Gould p. 335]

Based on the Holmes decision, the State of Virginia sterilized 7,500 people between 1924 and 1972. The procedure was performed primarily upon white men and women who were considered “feeble-minded and anti-social - including unwed mothers, prostitutes, petty criminals and children with disciplinary problems.” Every one close to Carrie Buck insisted she was not mentally retarded. Neither Carrie or her sister Doris who was also sterilized (without being told- they said the operation was an appendectomy) would be considered mentally deficient by today’s standards [Gould p. 335-6].

By the way, The Virginia Sterilization law was the model adopted by Nazi Germany for its Hereditary Health Law. Under Hitler, Germany carried out 250,000 forced sterilizations [Angela Davis, *Women Race & Class* p. 218]. No one really knows how many forced sterilizations have been done in the United States, but the number is considerable and surely exceeds the number done by the Nazis. In 1972, as many as 200,000 sterilizations of poor women were paid for by the U.S. Department of Health, Education and Welfare. Of these women, 435 were black [Davis p. 219]. Many women, of course, having achieved their desired family size, gladly accept sterilization. Of the 20% of black married women that have been surgically sterilized, surely most chose the procedure. Just how many procedures are forced is difficult to tell, but as history has shown, it happens. To see why, let us digress for a moment to examine the history of the birth control movement and its unholy alliance with the eugenics movement. This study is a prime example of how class, gender and race interact.

In the second half of the 19th century, white feminists, mostly from elite backgrounds, began a campaign for “voluntary motherhood.” The women insisted that “women’s new dreams of pursuing careers and other paths of self-development outside of marriage and motherhood could only be realized if they could limit and plan their pregnancies” [Angela Davis, *Women, Race & Class*, p. 208]. In the absence of any effective, legal means of birth control such fertility control required abstinence from sex, and, thus, the denial of husband’s of their marital rights. Thus, as Abolitionist and Feminist, Sarah Grimke, complained, in a patriarchal society the right of a woman to limit her childbearing has “been almost totally denied” [quoted in Angela Davis, p. 207].

By the end of the 19th century the birth rate among native-born white women had fallen dramatically. In light of the rapid shift of population from rural to urban areas, such a decline in fertility should have surprised no one. In rural areas large families are needed to do the work on farms. In urban areas, on the other hand, children become consumption rather than investment, a burden rather than an asset. Whatever the origin of the decline in fertility, it was blamed on, in the words of Theodore Roosevelt, the “willful sterility” of privileged white women [Davis p. 209]. Roosevelt and others blamed women for promoting “race suicide.” Undaunted, birth control feminists continued their campaign, but with a racist twist.

Roosevelt and others were concerned about the declining fertility of native white women primarily because the fertility rates of “Negro” and immigrant women were very high. If such differentials persisted, it would be only a matter of time before the latter groups constituted a majority of the population. In an America where virtually everyone considered Negroes an inferior race, and many considered immigrants either inferior and/or unfit for life in a democracy

such an outcome was intolerable. Historian Rayford Logan referred to this era as the “nadir” of American race relations and surely he was correct. Under such conditions the feminists in the birth control movement were faced with a dilemma. How do they protect their right to control their fertility without at the same time being labeled race traitors? The pro-birth-control feminists solved their problem by becoming advocates of birth control for “black people, immigrants and poor people in general” [Davis p. 209]. White birth control was demanded as a “right” for privileged white women, it was posited to be a moral obligation, or “duty” of the poor [Davis p. 210].

The birth control movement found a natural ally in the Eugenics Movement. Lothrop Stoddard, author of *The Rising Tide of Color Against White World Supremacy* was invited to sit on the board of directors of the American Birth Control League (ABCL). Margaret Sanger, socialist turned eugenicist, now defined the “chief cause of birth control” as “more children from the fit and less from the unfit” [quoted in Davis p. 214]. Just who were the unfit? Sanger seems to have fallen whole-heartedly into the hereditarian camp which deemed virtually all social ills to be the product of hereditary defects. According to Sanger those who ought to be sterilized included, in addition to “mental defectives,” “paupers, unemployables, illiterates, criminals, prostitutes and dope fiends.”

In an article published in the American Birth Control League Journal, Guy Irving Birch saw birth control as device to:

..prevent the American people from being replaced by alien or Negro stock, whether it be by immigration or by overly high birth rates among others in this country [quoted in Davis p. 214].

In 1939, The Birth Control Federation of America, the Successor to the ABCL, expressed exactly the same warning that Jensen would proffer three decades later:

the mass of Negroes, particularly in the South, still breed carelessly and disastrously, with the result that the increase among Negroes, even more than among whites, is from that portion that is least fit, and least able to rear children properly [quoted in Davis p.214-5].

By 1932, at least 26 states had passed compulsory sterilization laws, and thousands of the “unfit” had been sterilized. In North Carolina, 7,686 sterilizations were carried out between 1933 and 1972. About 5,000 of them were black. While Carrie Buck was sterilized because of her alleged “imbecility,” thousands of others were sterilized as a condition for staying on welfare. In Montgomery Alabama, the Relf sisters were sterilized at the ages of 12 and 14 only because the birth control drug (Depo-Provera) they were being administered was suspected to be carcinogenic. Further investigation revealed that 11 other young girls had received the same treatment [Davis p. 216].

Naturally, in some circles, Jensen's "findings" were rather warmly received. William Shockley, a well-known, Nobel Prize winning, physicist, racist and advocate of racial eugenics, circulated reprints of Jensen's article at his own considerable expense. H.J. Eyseneck, a racist, a student of the infamous Sir Cyril Burt, also one of Jensen's mentors, published a book in 1971 titled, *The IQ Argument: Race, Intelligence and Education* which Sandra Scarr called an "uncritical popularization of Jensen's ideas" [Scarr, "Unknowns in the IQ Equation," in Block and Dworkin, *The IQ Controversy*, p. 116]. In the Nixon White House where the Office of Economic Opportunity was being dismantled, according to Daniel P. Moynihan, the "winds of Jensen were blowing at gale force."

The reaction by the left, liberals against Jensen did not mark a proud moment for the progressive movement. Its strident and sometimes violent actions to prevent Jensen from teaching and speaking indicate how little time it takes a persecuted movement to forget what it is like to be denied freedom of speech and conscience. This is not to say, however, that Jensen did not deserve criticism. As Marvin Harris has noted, "psychologists and geneticists who persist in putting forward genetic explanations of poverty and exploitation cannot be regarded merely as disinterested scientific observers. The poor and exploited would be scientifically in error were they to conclude that such scientists were not their political enemies. Continuation of the nature-nurture debate within societies that have conspicuously failed to provide adequate nurturing for so many millions of children is at best a luxury that those children cannot afford." [M Harris, *Culture, People, Nature* p. 513].

Jensen was not the first to make outrageous assertions about the relative intellects of different "racial" groups. The first IQ test administered in the United States was a version of the IQ test produced by Alfred Binet in France, and adapted by H.H. Goddard and, later by Lewis Terman of Stanford University. One of the first applications of the test was on immigrants on Ellis Island in 1913. With the support of the federal immigration authorities, and the U.S. Public Health Service, the Eugenics Record Office⁵ set up a facility on Ellis Island to root out the feeble-minded.

H.H. Goddard, the first to use the Binet scale in the U.S., tested the IQ of 35 Jews, 22 Hungarians, 50 Italians, and 45 Russians and a number of others from other groups. The test was also administered in 1916 to 1,700,000 young men by the U.S. Army by R.M. Yerkes of Harvard University.

Goddard found 83% of the Jews, 80% of the Hungarians, 79% of the Italians, and 87% of the Russians to be feeble-minded, that is, even though they were adults, they had a mental age of under five years [Gould, *Mismeasure of Man*, p. 166]. Immigrants from Poland ranked last; one

⁵ Just about every elite family in the nation was a supporter of the Eugenics Movement. For example, The Eugenic Record Office was established with funds donated by Andrew Carnegie, Mrs. E. H. Harriman, and John D. Rockefeller. Mrs. Harriman considered herself an eugenics expert because she was as horse-woman familiar with "bloodlines" [Aptheker p. 45]. Another Eugenics organization, The Race Betterment Foundation, was established in Battle Creek Michigan, by the Kellogg family. Ford and U.S. Steel and many other corporations also lent support to the movement.

observer quipped “they were almost as dull as the Negroes.” Myrdal notes, however, that “not all groups of Negroes were found to be inferior to all groups of whites. In the Army intelligence noted above, Negroes in the northern states of Ohio, Illinois, New York, and Pennsylvania topped the Whites of Mississippi, Arkansas, Kentucky and Georgia.” (Myrdal p. 148). This difference may be due, in part, to selective migration, better schooling in the north, and the higher socioeconomic status of mulattoes.

Even Goddard, a man who firmly believed in a hereditary mental aristocracy and who had no trouble calling anyone a “moron” (a term he himself coined), was astonished by the results and recognized that they could not be considered “valid” [Gould p. 166]. Nevertheless, Goddard ultimately rejected any suggestion that the testing conditions or “cultural factors” may have had anything to do with the striking results. He finally concluded that the reason for the high percentage of “morons” at Ellis Island was the poor environments from which the immigrants came, rather than “hereditary feeble-mindedness” [Bernard Davis, *Neo-Lysenkism*, IQ and the Press, *The Public Interest*]

The Yerkes test of army recruits provided an even more shocking result. At the time this test was administered it was believed that the average mental age of Americans was 16 years. Yerkes found the average white mental age to be just 13.08 years meaning “everyone from mental age 8 though 12 is a moron.” In short, “we are a nation of nearly half-morons” [Gould p. 197] Yerkes was forced to admit that it would be impossible to keep morons out of the army, because 37% of white recruits and 89% of Negroes [Average mental age 10.41 years] were morons [Gould p. 197]. Yerkes, like Goddard and Terman, took a strict hereditarian view of these test results. He recognized no possibility that cultural biases may have influenced the low scores of army recruits or recent immigrants.⁶

The publication of these test results brought predictable responses. Those in the Eugenics movement called for an end to immigration from Eastern and Southern Europe. Others wondered if democracy could work with such poor raw material and whether attempts to improve the standards of living, health and the education of the moronic masses weren’t purely quixotic. Yerkes himself wrote:

...the average man can manage his affairs with only a moderate degree of prudence, can earn only a modest living, and is vastly better off when following directions than when trying to plan for himself. In other words, [this study] will show that there is a fundamental reason for many of the conditions that we find in human society and further that much of our effort to change conditions is unintelligent because we have not understood the nature of the average man [Yerkes, quoted in Gould p. 223].

⁶ Recent immigrants were expected to answer the following questions: 1/ Crisco is ; a patent medicine, disinfectant, toothpaste, food product. 2/ The number of a Kaffirs legs is; 2,4,6,8. 3/ Christy Mathewson is a; famous writer, artist, baseball player, comedian. How did you do?

Thus, Stephen Gould comments, according to Yerkes “poverty is fundamentally biological in origin, and neither better education, nor better opportunities for employment can alleviate it” [Gould p. 223]. Jensen, then, is really little more than old wine in new bottles.

What Jensen and those who had come before him had wrought of IQ was not what the man who first developed the IQ test had ever intended. Alfred Binet developed the test only as a practical way to find children in need of special education. He never intended it to become the means of labeling children as irretrievably mentally deficient, and he surely never intended his test to be used to legitimize social inequality by sorting everyone in to an IQ hierarchy.

The Origin of the IQ Test

Alfred Binet (1857-1911), the man who pioneered IQ testing, was the director of the psychology laboratory at the Sorbonne. He began his career in the tradition of Paul Broca, that is, attempting to predict intelligence with craniometric methods - measuring heads. Like most psychologists of his time he believed that the correlation of head size and intelligence was “incontestable” [quoted in Gould, p. 146]. After several years of his own research within this paradigm, however, he came to reject the idea that head size (or cranial capacity) was of any use in predicting intelligence:

I was persuaded that I had attacked an intractable problem. The measures required...tiring procedures of all sorts; and they ended with the discouraging conclusion that there was often not a millimeter of difference between the cephalic measures⁷ of intelligent and less intelligent students. The idea of measuring intelligence by measuring heads seemed ridiculous [quoted in Gould, p. 148].

In 1904, Binet began a study the purpose of which was to develop a technique to discriminate between normal students and those who might need special interventions. The basic idea was to give children help before they failed. Eventually, Binet designed a test that included a number of tasks that were graded by age level at which a normal child should do the task. The tasks involved “everyday problems such as counting coins, determining which figure was “prettiest” etc. Nevertheless, it was hoped that the tasks would test “reasoning skills” as such it designed to remove, as best as possible, the effects of acquired knowledge [Gould p. 149]. The IQ was calculated by taking the student’s mental age, the highest age-rated task level reached by the student, and subtracting his chronological age. Later, in 1912, a German psychologist suggested *dividing* mental age by chronological age - thus the term intelligence

⁷Cephalic indexes measure the shape of the head. A round head indicates low intelligence. An oblong (narrow - shape of basketball on the floor if one steps on it) head indicates high intelligence.

quotient [Gould p. 150].

In terms of being useful tools to aid in the detection of learning disabilities the IQ-type test have been a success. Even Stephen J. Gould, perhaps the best known critic of the ideological abuses of the IQ concept has, nonetheless, granted that IQ-type tests were “helpful in the proper diagnosis [of his own] learning disabled son.” [Gould p. 155]. The tests are also useful in helping teachers decide whether a student’s poor performance is the result of learning disability or simply lack of motivation [Davies, Lysenkoism op cit]. Thus, as Gould allows, “the misuse of mental tests is not inherent in the testing process itself. It arises from two fallacies, eagerly embraced by those who wish to use tests for the maintenance of social ranks and distinctions: reification and hereditarianism.” Gould defines reification as the “assumption that test scores represent a single, scalable thing in the head called general intelligence.”

What then is IQ? The testing community has never defined intelligence beyond the simple assertion that intelligence is what IQ tests measure. When a behavior is understood to be explained by some unobservable underlying quality, and that quality is objectified, it is said to have been "reified." IQ or the *g*-factor is assumed to be the force that explains differentials in performance on standardized tests across individuals and the similarities of individual scores across tests. Jensen claims that *g* is more than an artifact (reification) because of its correlation with biological factors such as "evoked electrical potentials of the brain, reaction times to elementary cognitive tasks," ...However, even Jensen admits the causal nature of *g* itself is not yet scientifically established. That goal must await further advances in neuroscience" [*J. Voc Behav* 29(p.301)].

Hereditarianism takes the obvious fact that any human trait is “inherited;” any individual’s genotype is some combination of the genotype of its parents. But, in the “vernacular” of the hereditarian, “inherited” often means “inevitable: they believed that inherited IQ scores marked people and groups for an inevitable station in life” [Gould p. 156-7] But, clearly what an individual ultimately becomes, its phenotype, is a manifestation of the individual’s genotype and its environment, both *in utero* and after birth. The combining of parental genes and the effects of environment can produce an offspring, the phenotype, which shares little of that of the parent’s. Take the obvious case of Gould himself, who, although clearly a genius, had a learning disabled son.

Hereditarian Fallacies

Hereditarianism and its critics differs primarily on the importance of environmental factors in the shaping of an individual’s cognitive ability. Even some politically conservative

people have accepted the idea that cognitive ability is essentially, if not exclusively determined by environment. Thomas Sowell, a conservative African-American economist does not argue with Jensen's assertion that African-Americans, on average, have a lower measured IQ; rather he asks whether this observation reveals anything of social significance. Sowell contends that there is nothing peculiar about the relative IQ scores of Blacks when compared to the experience of other immigrant groups at a similar stage in their history in the U.S.. Recall that Binet intelligence tests administered to immigrants in 1917 found 83% of Jews were "feeble-minded." Now the average IQ of Jews exceeds the national average and while Jews makes up 3% of the population they have won 25% of the Nobel Prizes! Sowell cites upward mobility as the mechanism that raises group IQ scores, but, as there had been very little upward mobility for Blacks and Hispanics until the current generation, one expects the measured IQ gap to persist.

Jensen asserts that Blacks perform worse than other groups in the IQ test because they are weaker in "abstract reasoning" which he asserts is not dependent on cultural variables. However, Sowell and many others have noted that Chinese-Americans initially showed similar results, but more recently have performed better than any other group on tests of abstraction and are prominent among American scientists and mathematicians (See Charles G. Morris, *Psychology: An Introduction* p. I-44 and Thomas Sowell [1977] *New light on IQ*, *New York Times* March 27, p. 56; also see Sowell, "Race and IQ Reconsidered" pp 203-249 in *Essays and Data on American Ethnic Groups*, ed. by T. Sowell 1978).

The second hereditarian fallacy follows from the confusion of "within-group" and "between-group" heredity. Heritability is a population characteristic. It measures the proportional of phenotypic variance that can be explained by genetic factors. The concept,

What is a race? Marvin Harris avers that regarding social inequality, the use of race as an explanatory variable is a "great lie to justify the exploitation of one group by another." Technically a race is a sub-species. In the early days of biology taxonomists had relatively few samples of any species and often found significant differences within species. The varieties were called races. As time passed and the number specimens of each species began to grow the discontinuities began to disappear and it became more difficult to establish sub-species or races. Eventually so many "intermediate forms" were found that the entire species became a single continuum with internal variations but no discrete communities. Humans were divided into races based on observable, if superficial differences. But like other species for human too, subspecies are not discrete, isolatable units with fixed boundaries. They are merely partially differentiated pieces of one continuous unit, the species. "[James King, *The Biology of Race*, 1981 p. 10]. Human "racial" differentiation is, indeed, only skin deep. Any use of racial categories must take justifications from some other source than biology [Lewontin et al, p.127]. The genetic variation between one Spaniard and another, or between one Masai and another, is 85% of all human genetic variation [ibid. 126]. Race is clearly a social as opposed to biological concept.

Jensen's analysis assumes that there is a meaningful, discrete difference between the "black" and "white" gene pool. But, several studies have revealed that many so-called whites have black ancestors and many blacks have white ancestors. Melville Herskovits estimated (based on surveys of "blacks") that 70% of people who are defined to be "black" have some white ancestors. Another 27% had some Native American ancestors (Myrdal 1945, p.133). Indeed, only 22% of Black Americans were of unmixed ancestry. A study published in the *Ohio Journal of Science*, reported that 20% of "whites" have some black ancestors. These studies indicate that racial categories are genetically meaningless.

Take, for example, Lani Guinier, the University of Pennsylvania law professor who was nominated by President Clinton to head the Civil Rights Division of the U.S. Justice Department. She considered herself an African-American. Yet, while her father is an African American, her mother is Jewish. So, as a scientist doing research on race differences in IQ, how does one classify her? Do we label her a light-skinned African - American or a dark-skinned Jew? [Steven Holmes, *New York Times* 10/23/94]

however, is relevant only to the variance of a characteristic within a group. It does not follow from high heritability within a group, that group differences are genetic in origin. Consider the following experiment. Take two hands full of corn. Plant one in an environment that provides all the optimal conditions for plant growth. When the plants are fully grown we will observe normal genetic variations in the plants. In short, as all seeds shared the same environment, all the variation is genetic, hence “heritability” is 100%.

Now, plant the other hand full in an environment that is missing a crucial nutrient, say nitrogen. When the plants are fully developed they will be stunted relative to the first group, but, as all seed shared the same (if deficient) environment, all the variation will still be genetic in origin, i.e. heritability is 100%. If, within either group, some plants were to receive different treatments, some of the observed variation would be “environmental.” Thus, all that “high” heritability means is that most individuals have similar environments so most of the phenotypical variation that exists comes from variations in genotype. Thus, one cannot infer that group differences in IQ are genetic in origin, even if IQ is highly heritable. For example, no one doubts that height is a highly heritable trait. Surely, for the most part, differences in stature among white middle-class males reflect primary genetic differences. Just as surely, the variation in stature of middle-class white males in Colonial times was also primarily genetic. But, the differences in stature between these groups, is virtually all environmental. Contemporary white middle-class males have far better health and eat a much better diet and, hence, are significantly taller and bulkier than their colonial ancestors.

Gender and IQ

When the original Stanford-Binet test was first administered in 1916, women, on average scored about ten points lower than men - a differential that persisted until 1937. After 1937, the test was “standardized” for women as well as men, so now women and men had the same average IQ. This was achieved quite simply by adding questions more favorable to women and deleted some that were more favorable to men. Oddly, since women were still discriminated against in many areas of life, the correlation between IQ and school and occupational success must have surely fallen (i.e. the test did not predict as well). One wonders why a similar accommodation was not made for the poor, or for blacks?

More wine in old bottles or Gattaca is not in the future

In his 1916 book, *The Measurement of Intelligence*, Lewis Terman made the claim that occupational achievement and IQ were highly correlated and causally connected. His evidence consisted of a chart which showed occupations and the average IQ in each. He then advocated that children be tracked into the education and training for which they were suitable as determined by their IQ. A result, over the years millions of poor and black children have been tracked into vocational education. The unfortunate fact is, however, that over the years many have tried to show such an alleged high correlation between occupation and IQ existed and have

failed. Francis Galton (Darwin's cousin), the man who coined the term "eugenics," fervently believed in the biological basis of intelligence. He also believed that anything could be quantified, as Stephen Gould put it, quantification was his God" [Gould p. 76]. In his magnum opus, *Hereditary Genius* (1869), he insisted that the British ruling class was more intelligent than the average Englishman. Later on he made up a test to prove it, but he failed to get a correlation above zero, that is, he was not able to find any task that the upper class was systematically better at than ordinary people. Undaunted, he assumed the problem was in the test, not the hypothesis. Others had similar results. But, the hereditarians, bloodied but never vanquished, pushed on. Just about one century after Galton, Richard Herrnstein would pick up the hereditarian banner.

In September of 1971, Richard Herrnstein wrote the following paragraph:

The specter of Communism was haunting Europe, said Karl Marx and Fredrich Engels in 1848. They could point to the rise of egalitarianism as proof. From Jefferson's "self-evident truth" of man's equality, to France's "*egalité*" and beyond that to the revolutions that swept Europe as Marx and Engels were proclaiming their *Manifesto*, the central political fact of their times, and ours, has been the rejection of aristocracies and privileged classes, of special rights for "special" people. The vision of a classless society was the keystone of the Declaration of Independence as well as the *Communist Manifesto*, however different the plan for achieving it.

But, Herrenstein insists, not only have the egalitarian goals of Jefferson and Marx not been realized, they never will. Indeed, the future holds more inequality not less. This pessimistic forecast is based on logic of a syllogism and five corollaries.

HERRENSTEIN'S SYLLOGISM:

1. if differences in mental abilities (IQ) are inherited, and
2. if success requires these abilities, and
3. if earnings and prestige depend on success,
4. then social standing will be based to some extent on inherited differences among people.

COROLLARIES:

1. As environments are equalized, IQ heritability⁸ will increase and the syllogism will become more important.
2. Fair opportunity to all leaves social mobility limited by only innate differences.
3. As wealth grows the bright among the poor will rise to the upper classes increasing the IQ gap between the upper and lower classes.
4. Technological unemployment will not be cured by retraining if jobs created by new technologies are beyond the native capacities of the newly unemployed. Unemployment may be as genetic as bad teeth.
5. Other traits besides intelligence are inherited and contribute to success (temperament, personality, appearance, and strength).

Conclusion:

In the future we will have a "meritocracy" built on inborn differences. The closer we get to our contemporary political and social goal of equal opportunity the closer we will get to the "meritocracy." At present, he avers, the upper class scores about 30 IQ points above the lower class and this gap will only widen as equal opportunity lowers social barriers to the upward mobility of the high IQ, lower-class people. The French Revolution dislodged a decadent, ascriptive aristocracy, but, Herrnstein warns, future revolutions will not be able to overthrow the "natural aristocracy" of the "cognitive elite."

⁸ Heritability is a population characteristic. It measures the proportional of phenotypic variance that can be explained by genetic factors. The concept is relevant only to variance of a characteristic within a group. It does not follow that high heritability means group differences are genetic in origin. Consider the following experiment. Take two hand fulls of corn. Plant one in an environment that provides all the optimal conditions for plant growth. When the plants are fully grown we will observe normal genetic variations in the plants. In short, all the variation is genetic so "heritability" is 100%. Now, plant the other handful in an environment that is missing a crucial nutrient, say nitrogen. When the plants are fully developed they will be stunted relative to the first group, but all the variation will still be genetic in origin, i.e. heritability is 100%. Within either group heritability would fall if some plants received different treatments. The resultant variation would be "environmental." Thus, all high heritability means is that most individuals have similar environments so all the phenotypical variation that exists comes from variations in genotype. Thus, one cannot infer that group differences in IQ are genetic in origin, even if IQ is highly heritable.

Assumptions:

1. IQ tests are reliable and objective measures of intelligence.
2. Eighty percent of the variance in IQ scores is explained by genetic factors. [Some two decades later in *The Bell Curve* the range is reported as 40-80 p.23]

According to Jane Mercer, the IQ test is not an objective measure of intelligence, it is rather a “medical label for cultural differences.” The test, she claims does not measure intelligence, whatever it may be, but rather it measures familiarity with “Anglo middle-class culture.” In her study of 812 people labeled “mentally retarded” in Riverside California, she found blacks and Chicanos dramatically over-represented. Relative to population proportions there were 300% more Chicanos, 50% more blacks, and 60% fewer Anglos in the retarded group. In the school-age population the over-representation was 450% for Chicanos and 200% for blacks [Jane Mercer, IQ, the Lethal Label, *Psychology Today*, September 1972]. The reason for this is simple, these minorities populations do not have the cultural characteristics need to succeed in Euro-American schools.

Critics of IQ tests claim that, despite prodigious efforts to produce culture free tests, they can never be culture free. “It is a contradiction in terms to suppose that any “encultured” human being can be approached in such a way as to cancel out the effects of enculturation. Intelligence tests depend on vocabulary, and moral and aesthetic standards each of which is culture-bound [Harris p. 511]. For example, consider the allegedly culture free “draw a man test.” In this test children are scored on how well they depict the parts of the human body. Hopi children and middle-class white suburban children score equally well on this test - about 124. Bedouin Arab children, on the other hand score only 52. The differential in the scores reflects not basic intelligence, but, rather to differences in contact with pictorial art. The Moslem religion considers pictorial art to be graven images. There is no reason to suppose that Bedouin children raised in a U.S. suburb would not score at the same level as white suburban children [Harris p. 513]. Actually, the history of the draw-a-man test is quite revealing of how subtle biases shape the thinking of mental testers.

The test described above was administered by Florence Goodenough. In a 1926 paper she reported that earlier research by others had shown that low IQ scores were significantly related to the use of a foreign language by the children’s parents. Rather than suspecting a linguistic bias on the test, however, she judged this observation to be the consequence of low parental IQ as manifest in their inability to learn a new language [Michel Shiff & Richard Lewontin: *Education and Class: The Irrelevance of IQ Genetic Studies*, 1986 p.21]. In her research she used the draw-a-man test and found that Indian, African-American, and South European immigrant children scored below American children [ibid. P21]. Eventually,

IQ tests include vocabulary items: see how many you can define.

- 1/ chitlins
- 2/ wolf tickets
- 3/ high yellow
- 4/ a process
- 5/ handkerchief head
- 6/ playin’ the dozens
- 7/ home boy
- 8/ hoe cakes
- 9/ mack man
- 10/ zoot suit
- 11/ a tonk
- 12/ o’fay
- 13/ peckerwood

Goodenough retracted these results on the grounds that the test was culturally biased. She wrote that “the search for a culture- free test, whether of intelligence, artistic ability, personal-social characteristics, or any other trait is illusory.” Moreover, she contended that “the naive assumption that the mere freedom from verbal requirements renders a test equally suitable for all groups is no longer tenable.” Unfortunately, this salutary result was the outcome of prejudice. Goodenough came to believe in “cultural bias” only because some Indian boys (Hopi) scored higher on this test than whites. Being unable to accept that Hopi boys were smarter than white boys she was forced to blame the test! [Ibid. P. 22].

It is somewhat ironic that intelligence tests were once seen as “liberating and democratizing.” It was accepted without question that the test could see through the veneer of wealth and privilege, and that talent was not restricted to any family, race or class. It followed that properly framed ability tests could advance the American dream of giving each citizen the opportunity of expressing his talent to the fullest” [The Economist, 12/24/1983, p. 80] Thomas Sowell, a well-known Afro-American economist claims it was an IQ test that allowed teachers to identify his talent and open the doors of opportunity for him. In the 1970s, however, IQ tests came to be perceived, at least by minorities, not as a useful progressive tool for identifying talent, but rather as a weapon for discriminating against them.

Presuming that the IQ test was culturally biased, in 1979 and 1980, groups in San Francisco and Chicago took legal action to prevent the use of IQ tests in the allocation of children into “special education” tracks for the “educationally mentally retarded.”⁹ In California, the parents of 8 black children brought suit claiming that IQ tests were used to misplace their children in EMR classes. The suit was brought with the support of the Bay Area Association of Black Psychologists, the Urban League and the NAACP.

In both cases, it was claimed that as a consequence of the “racial and cultural bias” of IQ tests, disproportionately large numbers of Afro-American children were put into EMR classes. The proportion of Afro-American children in EMR classes was about twice that of their proportion in the school population [Rogers Elliot, *Litigating*.. p. 1]. To the uninitiated, the placement of students into “special classes” would appear salutary. But, in fact, as Sandra Scarr bluntly puts it, “special education, even with smaller classes and better trained teachers does not work to bring such children up to par in reading and math achievement as children in regular classrooms.” [Scarr, *Litigating*, p. vi]. The reason for this, according to the expert testimony given in the Larry P case in San Francisco, is that what happens in an EMR class is not compensatory education.” In EMR classes the presumption is “limited intellectual capacity” with no expectation that the student will ever catch-up”[Elliot p. 20].

In both cases, the courts had to decide basically on a single issue: Was the relatively poor performance of Afro-American children the result of cultural and racial bias in the IQ tests

⁹In 1970, in *Diana v. State Board of Education*, Judge Peckham, the same judge assigned the Larry P. case in San Francisco in 1979, found IQ test to be culturally biased against Hispanic students. In this case, the compelling evidence was the greatly improved IQ test performance of these students when tested in Spanish [Elliot p. 11]. When retested 8 of the 9 plaintiff children exceeded the EMR threshold.

themselves, or the genetic inferiority of Afro-American cognitive ability, or was the score differential the consequence of differences in SES (socio-economic status). In San Francisco, the judge found the tests to be culturally biased and prohibited their further use. In the Chicago case, however, many Afro-American experts testified that the IQ test was not racially biased and was useful as a means of identifying students needing special education. In the Chicago case, the school system introduced research that showed no Afro-American IQ deficit when students were matched for SES.¹⁰ Indeed, districts where the large community of middle-class Afro-Americans¹¹ were concentrated showed no racial differentials in IQ scores or EMR placements [Elliot p. 198]. Finally, it seemed preposterous to argue, and similarly difficult to prove, that the Afro-American psychologists who did the EMR assignments “would be using a test that harmed black children” [Elliot p. 159]. The Judge ruled the IQ tests were not racially biased.

In Chicago, the proposition that the IQ deficit was genetic was never introduced by the defense. In San Francisco the state did introduce this defense, but then retreated to an “agnostic” position [Elliot p. 195].

The Judge in the Chicago case seemed skeptical of the test bias theory and predisposed toward a cultural or class deficit view. Given the high rates of out of wedlock births to black mothers, who are “far younger” than “average white mothers” and the “disruptive factors that intervene between” mothers and children,” it does not “take a superhuman feat of cognition to see a relationship between” these factors and “poor performance on an IQ test” [Elliot, p. 67].

The point here is that in neither case was it held that Afro-American children were inherently mentally deficient as had been asserted for example, by Arthur Jensen, in his infamous 1969 article in the *Harvard*

Educational Review, titled “How Much Can we Boost IQ and Educational Achievement?” Similar assertions of Afro-American intellectual inferiority, based on IQ tests were made in 1971 by Richard Herrnstein. The liberal reaction to such assertions was quick and intense and hostile. Ever since the Holocaust, liberals had been wary of theories that postulated a racial hierarchy.

The Scarr-Weinberg results showed that 130 black children, adopted at an average age of 18 months into middle-class white homes in Minnesota, averaged 106 in IQ when tested at some point between early childhood and adolescence, only 5 points below the mean of white children who had been adopted at 19 months. Of the subsets who had been adopted early (at less than a year old), the figures were 110 and 117, respectively. This study therefore supplements the cross-race data the famous showing by Skodak and Skeels (1945, 1949) that children of low IQ mothers, adopted into middle-class homes, showed much higher IQs that would have been expected if had they remained with their true mothers. But the Scarr-Weinberg study, too, is vulnerable to criticism. Over half of these mixed-race children had white mothers, and the IQ of these mixed-race children was 109, 12 points higher than that of the children of two black parents. Furthermore, many of the white mothers were students and so may not only have been genetically superior but may have attracted black fathers who were also more than usually intelligent - from Rogers Elliot, *Litigating Intelligence*. p. 53]

¹⁰In the San Francisco case, expert testimony indicated an Afro-American IQ deficit even when students were matched for SES.[Elliot p.198].

¹¹The Chicago Board of Education, the defendant in this case, was heavily staffed with Afro-American professionals [Elliot p. 26]..

Both the theoretical and the empirical bases of this hypothesis were attacked and seemingly routed. It became more or less liberal dogma that the nevertheless persistent IQ gap was the result of differences in “SES” and cultural differences that did not constitute deficits, but did diminish the performance of Afro-American children in “Anglo-centric” schools. In Arthur Jensen’s words, “research into the possible genetic influence [became] academically and socially taboo”[Jensen, Psychology Today 1973].

Arthur Jensen resented being labeled a “racist.” To him “racism meant the denial of equal opportunity in education and employment on the basis of color.” He could not comprehend why the “scientific theory that there are genetically conditioned mental or behavioral differences between races” should be labeled racist any more than the recognition of physical differences [between the] races [ibid.]. Surely, Jensen is being disingenuous here. The mere suggestion that there was scientific evidence of the racial inferiority of blacks would surely provide propaganda for those who oppose any legislation or program that might promote the social and political equality of blacks (or anyone else). Jensen confuses “racist ideology” with discriminatory practice. Surely, the former makes the latter a great deal more likely.

Liberals contended that Jensen’s assertions were both theoretically and empirically invalid and that his raising the issue merely gave some legitimacy to “the denial of equal opportunity” to Afro- Americans. For most scholars the issue is not either heredity or environment, but the relative importance of each. Liberals recognize heredity may play a role in shaping intelligence, but surely not enough of a role as to preclude the possibility of efficacious interventions to raise the scores and ability of “deficient” individuals. In Jensen’s view, however, any money spent on attempting to raise Afro-American IQ scores was wasted.

According to Jensen, blacks were not deficient in all aspects of intelligence. Blacks scored as well as whites on tests that required imitative or rote learning (Level I intelligence), but far below than in tests of abstract reasoning (Level II intelligence). Ironically, Jensen had to develop this distinction to reconcile teacher observations that many “disadvantaged children...seem much brighter than their IQ would lead one to expect” [Jensen 1969 p.111] The teachers noted, for example, that disadvantaged children seem to master social relationships of a very complex nature, learn all the playground games and the names of 20-30 children very quickly. Jensen’s response is simply to define these abilities as a lower form of intelligence.

In any group of individuals there will be variance in IQ scores because measured IQ is a function of both inherited genes and the environment in which one is raised. In environments where there are abundant resources, at both the family and community level, to support learning and intellectual development, whatever genetic potential one has (genotype) will more likely become manifest (phenotype), than when they are not. Thus, Sandra Scarr-Salapatek theorized that “genetic differences show up more in persons who mature in favorable surroundings, but remain hidden or unused in individuals from adverse or suppressive environments. If she is correct one would observe a relatively smaller variation in IQ across individuals in groups that face austere and uncongenial learning environments. This is precisely what Scarr-Salapatek found in her study of 1,521 pairs of twins; test scores varied more widely among the more advantaged (class) groups, presumably because the more intellectually able in these groups had the opportunity to better reach their potential than those who were less advantaged. She also found that the range of variation between lower and middle-class blacks was considerably

smaller than for whites (5.3 v 16.1) suggesting that the middle-class black environment is somewhat “more adverse and suppressive” than that faced by middle-class whites. It follows then that even when the standard measures of “class” are used to adjust the data, the gap in scores is mitigated, but remains. It would appear that the factors that make the middle-class black environment more “adverse and suppressive” are not captured by the standard measures.¹²

Because of the measurement issues presented sorting out the effects of genotype from those of environment is a very difficult empirical problem. Genotype (IQ potential) is unobservable and thus impossible to measure. “Environment” while observable is difficult to quantify. Traditionally, environment has been proxied by measures of parental income, occupational status, education, whether home is owned or not, number of books and usually denoted “SES” (socio-economic status). It would appear that using the more obvious measures of SES (income and parents education and occupation) fails to adequately represent the social conditions under which Afro-Americans live. The deficiencies of any statistical attempt to compare the socioeconomic status of Afro-Americans and Euro-Americans was eloquently argued by W.F. Bodmer and L.L. Cavalli-Sforza:

It is difficult to see, however, how the status of blacks and whites can be compared..Black schools are well known to be generally less adequate than white schools, so that an equal number of years of schooling certainly do not mean equal educational attainment. Wide variation in the level of occupation must exist within each occupational class (note: “managers” includes one who runs a convenience store and one who runs Microsoft). No amount of money can buy a black person’s way into a privileged upper-class white community, or buy off more than 200 years of accumulated racial prejudice on the part of whites. .. It is impossible to accept the idea that matching for status provides and adequate, or even substantial, control over most important environmental differences between blacks and whites [Quoted in T. Dobzhansky, *Differences are not Deficits*, Psychology Today].

Attempts have been made to broaden the concept of SES. In some studies measures of “home atmosphere” have supplemented the SES variables. These measures include “the responsiveness and involvement of the mother as caretaker, the intellectual aspirations and expectations of the parents, the provision of appropriate play materials, the avoidance of punishment, the language model of the home, the number and variety of cultural and recreational activities, academic guidance and support, crowdedness of the home and so on.”[Elliot p. 46].

¹²Later on in our discussion of the *Bell Curve* we will see how much more IQ variance can be explained with a data base that allows a richer representation of the Afro-American middle-class environment.

One scholar found that children in minority families that had good scores on these variables had average IQs (100). Those that did not, scored in the 83-84 range [Elliot p. 47]. It seems clear that SES does not “tell the whole story.” The socialization processes that go on in the home are very important. One 1977 study found that these “process variables” are substantially better predictors of IQ than SES [Elliot p. 48]. One reason why the average Afro-American IQ score is below that of Euro-Americans is the lower scores that middle-class Afro-American families have on these process variables. While Afro-American middle-class families may have SES scores similar to those of the Euro-American middle-class, *their scores on the process variables are closer to those the Euro-American working class* [Elliot p. 48]. One particularly important observed difference between the working-class and middle-class socialization processes is in the realm of caretaker behavior - “how does the mother interact with the child and how does this foster cognitive development?”

British studies found that the “language codes” used by mothers varied across the classes. The “elaborated code” used by the middle-class, “stresses precision and analysis in language” while the “restricted code employs simpler phrases and more gestures in a more characteristically expressive function.” Similar studies in the U.S. found that “middle-class mothers (regardless of ethnicity or race) when helping their children in dealing with a problem, tended to offer support, suggestion, and general instruction; the lower class mothers used more specific instruction, more commands, more negative comment, and less complex speech. Middle-class mothers tried to get their children to attend to basic features of the task, offered search strategies, and elicited responses from their children; lower-class mothers exhibited fewer or none of these behaviors” [Elliot p. 50]. It has also been observed that working-class infants “lived in more noise: more TV, more people, fewer toys and objects to play with, and more restrictions. Their mothers were less responsive and entertaining, showed less interaction in general and less face-to-face proximity in

Twin Studies

Arthur Jensen and other hereditarians base their proposition that IQ is for the most part an inherited trait on four studies of identical twins raised in separate environments.

Although genotype is unobservable, nature has provided us with a natural experiment that might help us separate the effects of genotype and environment. Identical twins have exactly the same genes. If genotype is an important determinant of IQ, the IQ score of twins, raised in the same environment, or very different environments should be similar (they will not be identical because the tests just are not that perfect). To the extent that environment plays a role, identical twins which are raised in very different should have very different scores. Some famous (and some infamous) twin studies have reported that twins raised in very different environments have, nevertheless, very similar IQ scores. Jensen reported an IQ correlation of twins reared in the same home as .87 compared to .75 for twins reared separately. This latter figure was the main basis for his assertion that IQ is about 80% inherited. However, upon closer examination by scholars, it was found that the allegedly “very different environments” were not very different at all. In many cases, twins were raised by close family members, or in the same orphanage, but in different cottages [L. Kamin, *The Science and Politics of IQ*, 1974 p. 50]. The IQ correlations of twins raised by family members were much higher than those of twins reared by non-family members [.83 v. .51]. After a careful review of these studies, Leon Kamin showed they replete with “arithmetical inconsistencies” and evidence of “unconscious experimenter bias.” Shortly after the 1974 publication of Leon Kamin’s book, *The Science and Politics of IQ*, which declared the twin studies of Sir Cyril Burt “not worthy of our current scientific attention,” it was revealed that Burt’s work was completely fraudulent. Burt, was so convinced of the truth of the hereditarian position that he fudged the data. Based primarily on the work of Burt, Arthur Jensen claimed that “inheritability” of IQ was very high and therefore, compensatory education to raise the IQ of Afro-American children were doomed to failure.

particular, and most importantly, showed less vocalization of all sorts”[Elliot p. 50]. These findings “show significant social class differences in stimulation, especially language stimulation, for cognitive development”[Elliot p. 50]. In short, while in the middle-class “nearly every adult can and does teach. It is a normal part of the adult role performed almost without awareness, particularly in adult’s relations to children, in the lower- class, “deliberate teaching is not a normal or necessary part of the adult role. Among disorganized and dispossessed minority groups the culture appears to center around attitudes, interests, a style of life, and a scattering of unorganized beliefs and superstitions so unformalized that they may be transmitted without explanation, argument or detailed exposition. Thus, the lower-class minority child, “spends his early childhood in an environment where teaching does not take place and where the language with which teaching is carried out is not used; therefore, he may not even learn how to be taught, and when exposed to teaching, he may behave much as if he were mentally retarded or devoid of language altogether.” These children, then, arrive at school “with a developed set of modes of interaction that may make teaching them unusually difficult” and one might add, with little likelihood of scoring well on an IQ test [Elliot p. 51].

In an often cited study published in 1976 Scarr and Weinberg observed that the average IQ of transracially adopted black children was above that of black children in the same population, but reared by their biological parents. In another study it was shown that black children adopted by white families scored one standard deviation above black children adopted by black families [Elsie Moore, “Family Socialization and the IQ Performance of Traditionally and Transracially Adopted Children,” *Developmental Psychology*, 22(3) 1986 p. 319]. In other words, black children adopted by white families scored better on IQ tests than black children reared in black homes. Some have interpreted this result as indicative of a “deficit” in the black home environment, that is, “the black home environment fails to provide the stimulation and experiences necessary for optimal cognitive development”. Others have seen this observation as indicative of a “difference” rather than a deficit. In this view, “children from different ethnic groups vary in their learning experiences, learning styles, language, learning attitudes, and achievement orientations” as a result of the “different” socialization they receive. Unfortunately, “traditional intelligence tests assay children’s familiarity with and conformity to a single cultural tradition - that of middle-class Anglo Americans” [Moore op. cit, p317]. Consequently, children from different cultural backgrounds are disadvantaged because they are “not given credit for knowledge and behavioral styles derived from their particular experiences.” [Moore p. 317]. It follows then, that the “average lower performance of black children on such measures is an artifact of the test content and the test procedures [Moore p.317]. Whatever interpretation one attaches to this observation of lower IQ scores, the fact is, whether fair or not, children who score poorly on IQ tests are disadvantaged in the world. First, IQ scores predict school achievement and educational attainment. Second, the same factors that lead to low IQ scores probably result in lower test scores of all kinds, including SATs and the General Aptitude Test Battery used, fairly or not, by many employers. In the real world then, a “difference” is a “deficit.”

In all of the studies the central provider of socialization is the mother. In a study of “family ecology variables” and their effect on children’s IQ Helen L. Bee et al. [“Prediction of IQ and Language Skill...” in *Child Development* [1982, 53 pp. 1134-1156], the researchers found

that “mother-infant interaction” and “general environmental quality” were the best predictors of children’s IQ. These researchers stressed, however, that the quality of mother-infant interaction depends to a great extent on the availability of adequate social support. Women who experience “high levels of disorganization” in their lives are not going to make very effective use of information about optimal child rearing techniques. Young, poor women, who are the heads of households that may contain several children must surely be lacking in social supports as they confront the “disorganization” in their lives. Granted, ethnicity may play a role in child-rearing, but class factors are surely as, or more significant.

Unfortunately, factors other than cognitive ability and cultural background can hamper the achievement of poor and black children. Teacher expectations, based on negative stereotypes, may reduce the achievement of poor and black children.

Pygmalion in the Classroom - The Rosenthal effect

*Entering the first-grade classroom is a big step for a child. It can be a glowing or a devastating experience. The teacher smiles at the children, looking at them to see what the year will bring. The well-groomed white boys and girls will probably do well. The black and brown-skinned ones are lower-class and will have problems unless they are exceptionally clean. All the white who do not look tidy who do not look tidy and who need handkerchiefs will have trouble. If the teacher sees a preponderance of lower-class children, regardless of color, she knows her work will be difficult and unsatisfying. The teacher wants her children to learn, all of them, but she knows that lower-class children do not do well in school, just as she knows middle-class children do do well. All this she knows as she smiles at her class for the first time, welcoming them to the adventure of the first grade, measuring them for success or failure against the yardstick of middle-classness. The children smile back at her, unaware as yet that the first measurements have been taken....Many times that first year the children will be examined for what they are, for what they bring with them when they come to school. [Robert Rosenthal and Lenore Jacobson (1968), *Pygmalion in the Classroom: Teacher Expectation and Pupil's Intellectual Development*, p. 47]*

In one of the most well-known books in educational psychology, William Rosenthal notes how “our prediction or prophecy may in itself be a factor in determining the behavior of other people” [vii]. In particular, he warns, teachers expectations of a student’s performance potential may become self-realizing. Rosenthal set up an experiment to test this hypothesis:

20% of the children in a certain elementary school were reported to their teachers as showing unusual potential for intellectual growth. The names of these 20% of the children were drawn by means of a table of random numbers, i.e. they were drawn out of a hat. Eight months later these unusual or magic children showed significantly greater gains in IQ than did the remaining children who had not been singled out for the teacher’s attention. The change in the teachers expectations regarding the intellectual performance of these allegedly “special”

children had led to an actual change in the intellectual performance of these randomly selected children [vii-viii]

The children in Rosenthal's experiment were boys and girls in the first six grades and included a minority group - Mexicans. In the year of the experiment, the control group children, averaged over all six grades, gained about 8 IQ points. The "treatment group," those designated as especially talented, gained about 12 IQ points. The first graders in the "treatment group" gained a remarkable 27.4 IQ points.

There was also a very interesting gender result. The girls in the "treatment group" tended to "bloom more in the reasoning sphere of intellectual functioning and the boys bloomed more in the verbal sphere" [Rosenthal p. 81]. This result suggests that gender expectations have contributed to the gender gap in tests of mathematics which has favored boys and verbal functioning which usually favor girls.

Finally, Rosenthal observed the greatest IQ gains in the "favored" Mexican children were among those who looked most Mexican. Mexican children who looked less Mexican had smaller gains. Rosenthal reasoned that the Mexican looking children are usually presumed to be the slowest, so they received the biggest boost from being designated bright [p. 82].

Another version of this phenomenon is observed in the process of IQ testing itself. IQ score is malleable depending on the testing conditions and the expectations of the testers. When examiners behaved more warmly toward eight-grade subjects, the IQ scores obtained were over 6 points higher than when they behaved more coolly toward their adolescent children [p. 33] In the case of nursery school children "treated warmly" the IQ increase was a full 10 points compared to those "indifferently treated" [p. 33] Even Arthur Jensen observed that when he took a little time to make a child comfortable his IQ score increased by eight points.

In another experiment, one IQ examiner was told a child was of "above average intelligence" and another was told the child was "below average." Typically, the score of the child when considered "above average" was about 7.5 points higher than when they were considered "below average." [P. 34].

Thus, it would appear that IQ is to a significant extent, "socially produced," that is, there is ample opportunity for cultural "noise," that is unrelated to actual ability, to enter the process in which IQ is produced. If teachers of Afro-American or lower-class children harbor pejorative stereotypes about their academic potential, then the poor performance of these children is almost inevitable. The same might occur in the administration of the test itself.

Altogether, if we take the current conventional wisdom that IQ is about 50-60% inherited, we are left with about 40% of the variance in IQ scores which is determined by environment. Clearly the cultural environment is an important determinant of IQ scores, but the "environment" works on IQ scores in other ways - ways that are more physical than social. There can be no arguing with the notion that lower class children, black and white are exposed to environmental hazards at greater rates than middle-class white children. As they hamper proper brain development, and produce behaviors that interfere with classroom learning, these hazards obviously inhibit achievement in school.

Low Birth Weight

It is well known that the incidence of low birth weight babies [<2500 grams] is far higher among African-American women than among other ethnic groups. Indeed, complications arising from low birth weight is the primary reasons why the infant and neonatal mortality rates are higher among Afro-Americans than other ethnic groups. Moreover, according to Sandra Scarr, “there is little question that low birth weights..can have permanent deleterious effects on later intellectual performance” [Scarr, *Social Biology*, 29 (3-4) p. 230]. Low birth weight can be the consequence of a number of factors most notably “poor inter-uterine nourishment.” Scarr’s highly cited study was of 25 pairs of identical female twins representative of the social class, religious, and ethnic make-up of the Boston area [p. 231]. The use of twins allowed Scarr to control for “environmental” factors, other than those that might cause low birth weight, that influence IQ scores. Scarr found that children who at birth weighed more than 3,000 grams had a performance IQ of 104.2. Babies between 2,500 and 2,990 had an IQ average of 101.2. Between 2,000 and 2,490 grams the average IQ fell to 93. Finally, at birth weights below 2,000 grams the average IQ was 87.

Scarr notes that “behavior is a function of the whole organism in its environment.” While it is surely true that “very bright children are born at every birth weight ..more fully developed newborns are better able to take advantage of the environment than poorly nourished infants, hence “one can wonder how much brighter many children would be if their prenatal conditions had given them a better head start [p.235-236].

The incidence of low birth weight is far higher among Afro-Americans than in other ethnic groups. This result is primarily the consequence of shorter gestation periods, that is, black women tend to have a higher rate of premature births. It is unknown why this is so. The incidence of LBR among Afro-American is about 13%, according to the CDC, compared with only 6.5% among whites and Hispanics. The incidence of very low birth weight (<1500 grams) is nearly three times higher among Afro-Americans than among other groups (3.0% v. 1.1%). Afro-American women also deliver premature babies at a rate 70% higher than for other groups. These numbers have shown no improvement since at least 1981.

Lead Poisoning

Over the past 20 years, childhood lead poisoning has declined dramatically in the United States due to limits on lead in gasoline, paint, food cans, and other consumer products. However, lead poisoning is still an important health problem, affecting an estimated 890,000 preschoolers. That means that about 4.4% of children aged 1 to 5 have too much lead in their bodies. (source: Centers for Disease Control and Prevention)

While lead poisoning crosses all socioeconomic, geographic, and racial boundaries, the burden of this disease falls disproportionately on low-income families and families of color. In the U.S., children from poor families are eight times more likely to be poisoned than those from higher income families. African-American children are five times more likely to be poisoned than white children. *Nationwide, about 22% of African-American children living in older housing are lead poisoned — a staggering statistic. In some communities, the poisoning rate is much higher.*

Lead affects practically all systems within the body. Lead is most harmful to children under age six because lead is easily absorbed into their growing bodies, and interferes with the

developing brain and other organs and systems. Pregnant women and women of child-bearing age are also at increased risk, because lead ingested by the mother can cross the placenta and affect the unborn fetus. At very high levels of lead exposure, which are now very rare in the U.S., lead poisoning can cause mental retardation, coma, convulsions, and even death. More commonly in the U.S., children are poisoned through chronic, low-level exposure. Low-level lead exposure can cause reduced IQ and attention span, hyperactivity, impaired growth, reading and learning disabilities, hearing loss, insomnia, and a range of other health, intellectual, and behavioral effects. At these low, but still dangerous levels, lead poisoning may not present identifiable symptoms and a blood test is the only way to know if a child is poisoned.

Given the disproportionate incidence of these health problems, one should not be too surprised to observe some differences in IQ score by class and race. Epidemiological studies have found the clear pattern of loss of IQ points as the level of lead in the child's body increases. More over these children have been shown to suffer more of hyperactivity, attention deficit disorder and several other learning handicaps.

The Flynn Effect

James R. Flynn is a professor of political science at the University of Ontario in New Zealand. Flynn moved to New Zealand when he found it difficult, due to his civil rights activism, to find work in the United States. Flynn had been active in the Civil Rights Movement in the 1950s, and at one time was chair of a CORE chapter in Kentucky. In New Zealand, Flynn continued to "fight racism from afar." Flynn came to believe that "in order to argue effectively with racist ideas, I had to look at the race IQ debate, the claims that blacks, on average, are genetically inferior" [quoted in *Scientific American* [1/1/99, p. 38]. Undeterred by the fact that he had not training in psychometrics, Flynn plunged into the IQ debate. His first finding was that due to a mis-analysis of the data on military intelligence tests, psychometricians had failed to observe a closing of the racial IQ gap - a finding that supported his contention that the putative gap was environmental rather than genetic in origin. Flynn also realized, however, that the military intelligence test had a "high educational loading," that is education tended to raise scores on these tests, so they were not true intelligence or aptitude tests [Scientific American, p. 38].

Delving further into IQ tests, Flynn discovered that two prominent tests, the Stanford Binet and the Wechsler had old and new versions, and that on occasion both versions were administered to the same groups. Now if intelligence is truly genetic, scores on the old and new versions should be the same as only about 25 years separated them. In fact, Flynn observed that children did much better on the earlier versions than they did on the later versions. This was true in every case where both tests were administered. Flynn concluded, in 1984, that Americans had gained about 13.8 IQ points, nearly a full standard deviation, over the past 46 years. Around the world, Flynn observed the same result - IQs are rising from five to 25 points per generation [SA, p. 38]. There can be no other reason for this observation than some kind of environmental factor that has changed over time in so as to increase "intelligence." In other words, IQ, in addition to having a high educational loading has a substantial environmental loading as well.

Critics, especially Jensen, contended that the tests were apparently more "educationally loaded than previously thought," but Flynn showed the same results applied to the Raven

Progressive Matrices test which has no education loading whatsoever. The test use only patterns, no words or mathematics are included so it is considered to be neither culturally or educationally loaded.

The leading environmental contender for the explanation of this observation is improved nutrition and health. The particular explanation for the higher scores on the highly spatial-visual Raven Matrices test is the \rising use of computer and video games. But, there has been no resolution to the mystery as yet. In any case, to the extent that African- Americans have been historically less well-nourished and probably have not gained in the nutritional sphere as much as have others one should not be surprised at a gap in IQ test scores.

So “how much can we boost IQ?” - a great deal more than Jensen’s reductionist, determinist, racist argument would allow. Yes, despite Jensen’s disclaimer that he is not a racist, he fits the classic definition - a racist is one who purports to explain any social observation in terms of race differences. Racism is more than prejudice and discrimination, it is a paradigm; a mode of inquiry that seeks the explanation of social hierarchy in terms of “natural,” that is, biological hierarchies.

Collor aries contd’

3. Societies can function only with material incentives.
4. Intellectual resources are scarce and must be used efficiently producing the greatest value of output. IQ is closely related to productivity and earnings.
5. People are paid according to their social productivity. It follows that those who earn more contribute more to society.

Is IQ closely related to productivity and earnings? Do high IQ people contribute more to society?

In 1979 Christopher Jencks et all published a massive study titled, *Who Gets Ahead?*. It was the most through analysis of the data then available of the relationship between “cognitive ability” and earnings. The study concluded that the overall effect of “test scores” on earnings with all background controlled appears to be “substantively important” [Jencks p. 119]. The path through which ability effects income includes both educational and occupational attainment. In other words, higher ability produces a higher

Traditionally economic models presumed that wages varied according to productivity differentials inherent in individuals. Education and training produced higher wages because they made individuals more productive. In “screening” models, the productivity is not in the individual when hired, but is acquired through informal on the job training. In short, productivity is in the job, not the person. Employers use educational credentials as an information device to gauge the ability of an employee to learn.

Potential employees compete to signal their learning ability by acquiring more education. But, more education increases their chances of getting a job only if they get more relative to others. If all potential employees get more education, national productivity is not increased, but a great deal of resources have been wasted. It is clear that when an employer, for reasons of affirmative action, accepts a “less qualified person,” there is no necessary loss of productivity as the productivity is in the job. Productivity is lost only when people are hired that cannot learn the job.

level of educational attainment which in turn raises income. For men with similar levels of education, test score differences accounts for only small differences in earnings; a 15 point test score difference produces a less than 5% earnings advantage [Jencks p. 120]. For men in the same occupation and 15 point advantage in test scores led to an 11% earnings advantage [Jencks p. 120]. Thus, even without more schooling and high occupational aspirations men with high test scores are “somewhat more valuable to employers who hire, fire and pay them [Jencks p. 120]. The reasons for this are varied. While such men may be more “productive” on the job there is no direct evidence of this, and there is a considerable literature in economics that would suggest that they are not. It may be that men with higher ability may be more effective at job search. A more likely reason is that employers use educational credentials as a screening device in order to minimize training and job turnover costs. Those with higher levels of educational credentials are offered the training slots that lead to the higher paying (more productive) jobs.

Thus, it is probably true that those who earn more produce more for society. But, it is generally only because they have been given the opportunity to learn a productive job. While we are on the subject of “social productivity” earnings let us ponder, for a moment, the high earnings of the executives of the tobacco company’s who sat before the U.S. Congress and lied about the addictive nature of nicotine. Or, the well-paid, cognitive elite that designed the advertising programs that lured the young into nicotine addiction. Let us think of the high-priced legal talents that protect polluters and lobby Congress for tax breaks for large corporations. As Herrnstein and Murray point out in the *Bell Curve*, “a first-rate lawyer can make a difference worth tens of millions of dollars in getting a favorable decision from a government agency or slipping through a tax loophole” [H&M p. 99].

The Jencks group concluded that while there is an substantive effect of test scores on earnings that is independent of education, “these effects of test scores are not very large relative to the overall earnings gap between the rich and poor.” The gap between the best paid and the worst paid fifths of the population is about 500%. When controlled for family background, test scores account for about only 15% of this 500% [Jencks p. 121]. “Our findings, “ Jencks reports, “do not characterize the United States as a “meritocracy” at least when merit is measured in terms of general cognitive skills” [Jencks p. 121].

As a general rule, studies of the relationship of IQ with any social indicator show that measured IQ, at best can explain 10-20% of the observed variance in these outcomes. Even allowing that 50% of measured IQ is due to heredity, at best genetic factors can account for 5-10% in the variation in social outcomes [Howard Gardner, *Cracking Open the IQ Box*, American Prospect, 1995 p. 5/13].

Richard Lewontin, a geneticist at Harvard and avid foe of hereditarianism, has noted that a child in the top 10% of IQ rankings is twice as likely as a child in the lowest IQ group to fall into the top 10% of income, and that a child whose parental income is in top 10% is 25 time more likely to be in the top 10% of income than a child with poor parents, thus he quips , it is better to inherit SES than IQ points [Lewontin et al., *Not in Our Genes* p. 94.]. To this point, anthropologist Marvin Harris has quipped, “I for one refuse to admit that a typical member of the top .1% of wealthy adults is four times smarter than I am” [Marvin Harris, *Culture, People and Nature*, second edition, p.511].

Employment Testing

Although the Civil Rights Act of 1964 explicitly allows the use of general ability tests by employers, employers ceased using them after the *Griggs v. Duke Power Case* (1971). In this case the Supreme Court ruled that general ability tests and, indeed any job qualification had to be “job related.” Duke Power company had adopted hiring criteria, including an aptitude test, that were shown to unrelated to the ability to do the jobs in question. The test score criteria (and the high school diploma requirement) were shown to have a “disparate racial impact” on the employment of blacks in the contested jobs. The court interpreted this “disparate impact” as a violation of the “equal employment opportunity” requirement of the Title VII of the 1964 Civil Rights Act. Justice Berger wrote, that “a test that is “neutral on its face” cannot be maintained if “they operate to freeze the status quo of prior discriminatory hiring practices” [quoted in Thernstrom & Thernstrom, *America in Black and White*, p. 430]. Berger contended that such tests constituted a “headwind” that slowed black advancement and penalized them for the inferior education they had been given by the state [Ibid p. 430]. If employers were to continue to use such tests they would have to provide “validation” of the test; that is, they would have to show that the test predicted job performance relatively well and thus proved to be a “business necessity.” Since any company may have hundreds of jobs such validation would prove very expensive. Moreover, it remains disputable that such tests reliably explain job performance. Moreover, the tests were not allowed to have an adverse racial impact.

In 1981, however, the US Department of Labor, encouraged State Employment Services to use its General Aptitude Test Battery (GATB) to rank applicants for all jobs, but mostly blue collar jobs. The use of such a general test would greatly facilitate the ranking of the over 20 million people who were applying for jobs through state employment agencies around the nation, but how could such a general test be “validated” for so many specific jobs? According to the Labor Department, recent psychological research had shown that the GATB could easily be generalized to many different jobs, that is, it could be a useful predictor of job performance in many different contexts [John Blits & Linda Gottfredson, “Employment Testing and Job Performance,” *The Public Interest*, XX(xx) p. 19]. Psychological research had also shown that general ability tests were not racially biased, “that is, they did not underpredict the job performance of blacks” [ibid p. 19].

While, it may be true that the test did not under-predict black performance, blacks on average did, to no one’s surprise, score lower on the test. The average black score was 227.6 compared to 305 for whites. The average white score of 305 was at the 84th percentile of the black score distribution. Clearly, the use of this test would have an “adverse impact” on the employment of blacks [ibid p.20] and surely run afoul of the Griggs decision.

The Labor Department solved the adverse impact problem by “race-norming the tests. Instead of reporting a “raw score” the Department reported a percentile rank for each applicant. What potential employers did not know, however, was that each applicant was ranked within his/her racial group. Thus, a black applicant who scored 276 and a white applicant who scored 305 would appear to have the same score [Thernstrom and Thernstrom p. 439]. This practice, controversial from the beginning, was approved by the National Academy of Sciences (NAS) in

1986, persisted throughout the 1980s even as the Reagan Administration objected.

The NAS found two problems with the GATB. First, the GATB had only a .3 correlation with job performance. Supporters of the test, such as Linda Gottfredson, contend that this correlation insures that the test makes a substantive contribution to productivity; that is, “employers can realize 30% of the gains in workforce productivity that a perfect test would yield.” [John Blits & Linda Gottfredson, op cit. p.21]. The NAS panel was not impressed with this correlation. This was especially true of the statistically cognizant who understood that a .3 correlation means that the test result “explains” only 9% (.3 squared) of the variance in job performance.

Secondly, the NAS was disturbed by the tendency of the test to commit “type II” error, that is, in statistical jargon, the likelihood that the test will reject a true hypothesis. In this context, this error would produce a “false negative,” that is it will indicate a person is not qualified when in fact he is. Because blacks typically have lower scores they are far more likely to be a “false negative.” For the same reasons, whites were far more likely to be a “false positive.” So as far as the NAS was concerned, “the disproportionate impact of selection error provides scientific grounds for the adjustment of minority scores” [quoted in John Blits & Linda Gottfredson, op cit. p.21].

Race-norming became a hot issue in 1991 in the context of the 1991 Civil Rights Act. In a compromise needed to get the 1991 CRA passed the Democrats allowed the banning of the practice of “cooking the books” as Henry Hyde called race-norming [Thernstrom and Thernstrom p. 439]. Ironically, employers now driven by the “desire to look like America” went on making employment decisions based on race [Thernstrom and Thernstrom p. 439].

The cognitive elite?

In the *Bell Curve* it is asserted that there exist certain “high IQ professions” which include accountants, architects, chemists, college teachers, dentists, engineers, lawyers and physicians, computer scientists, mathematicians, natural scientists and social scientists.” The mean IQ of people entering these fields is about 120, give or take a few points” [p.55]. Only about 10% of Americans have an IQ that is 120 or higher so the people in these occupations constitute a “cognitive elite.” Aside from noting that some professions may have slightly higher averages [e.g. physicians mean IQ is 125] than others no data is presented on the IQ of each profession. HM seem content to assert that 120 is a “good ballpark figure” for all, even though there are between group differences. Moreover, it is noted that “within each profession the range of scores may be large” and indeed fully 50% will be below the mean. In the earlier 1971 paper Herrnstein presented the following data on IQ by profession:

<i>Rank</i>	<i>Occupation</i>	<i>Ave.IQ</i>
1	Accountant	128.1
10	Draftsman	122.0

20	Clerk-typist	116.8
40	Sales clerk	109.2
65	Baker	97.2
74	Teamster	89.7

Public Relations, the 4th ranked occupation, had an IQ range of 100-149 (only about 3% of individuals have IQ's over 130, about 10% are above 120). Herrnstein infers 100 as the minimum IQ for the PR occupation, which means that ½ the population has sufficient intelligence for this profession.

In the *Bell Curve*, the "high IQ occupations" have a cut off of 120 which the authors imply is a minimum, which in turn suggests that only about the top 10% of the IQ distribution is qualified. But, actually, 120 is the average IQ in this group not the lower limit. Clearly about half the people in these occupations have modest IQs. HM recognize this on p.60 when they note that only 50% of the people working in high-IQ professions had an IQ greater than 120. Even using their own numbers the "cognitive sorting" of people has been less than efficient as about half of the "cognitive elite" have not found their highest and best use in a high IQ profession. Obviously IQ is not the gatekeeper Herrnstein's syllogism predicts it to be. The reason for this is, HM insist, that since 1971 the "Congress and the Supreme Court have effectively forbidden employers from hiring based on intelligence tests." They claim this costs the economy anywhere between 13 and 80 billion per year in lost efficiency.[p. 64]. In fact, the law does prohibit the use of any test that would have a "disparate racial impact" on employment decisions unless it can be shown that the test serves an essential business need, that is, the test is an important predictor of job performance. In fact, HM to the contrary, there is little evidence, that anything by weak correlations exist between IQ and job performance. In short, IQ is *not* "importantly related to job performance."

The median weekly 1990 wages of the "high IQ occupations" range from \$600 for accountants to \$1100 for Lawyers. In between we get "Social Scientists" \$625, Mathematicians & Computer Scientists \$675, Engineers and Architects \$800 and Physicians \$875. Why is it that accountants which rank number 1 in IQ have the lowest wages? Perhaps this explains why the actual data on IQ by occupation was not presented in the Bell Curve.

Some might argue that mulattoes have higher scores than southern white trash (remember the best southerners were not likely to be drafted) because of their endowment of white aristocratic blood. Indeed, this raises the issue of the genetic purity of the races.

Asian IQ Superiority? - The importance of culture revisited

Asians attain higher scores on all standardized tests. Some have alleged this is because Asians are more intelligent than Euro-Americans. It is probably true that Asian immigrants have above average IQ scores. This is because Asians tested in Asia score at about 107 on average and the migration process usually selects the “best and the brightest” from the middle classes.” However, Asian born in the United States, as a group, tend to score at the Euro-American average on IQ tests. Yet, Asian Americans, particularly Chinese and Japanese Americans, have achieved a level of socio-economic status far beyond that which the average IQ of these groups would have predicted. Chinese Americans, born between 1945 and 1949 had measured group IQ of 98.5. However, their achievements in education, occupation and income match those of whites with IQs some 21 points higher [Flynn 1991 p. 1] Chinese Americans had three to five times their proportionate share of college faculty, architects, scientists, school teachers, engineers and physicians. They lagged behind whites “only where political connections count, lawyers and judges” [Flynn 1991 p. 12] Japanese Americans “over-achieve” by about 10 points. Japanese Americans mimicked the Chinese success and were especially successful in producing writers and artists [Flynn 1991 p. 1]. Asian adults hold disproportionately more college degrees and Asian High school students are “much over-represented” among winners of National Merit Scholarships and many other academic honors [Flynn, 1991 p. 13]. The Juilliard School of Music has imposed a 25% quota on Asian enrollments [Flynn 1991 p. 13].

The reason for this success, the data reveal, is not above average IQ, but that Asians tend to have lower IQ thresholds [the minimum IQ for entering a profession] and those above the threshold for high-status occupations enter them at much higher rates compared to whites. The spectacular performance of Asians seriously undermines the notion that IQ and economic success are closely or even significantly related.

They are some who argue that Asians are more intelligent than whites. Richard Lynn and Phillippe Rushton are notable examples. These men have also promulgated the notion that Africans have lower IQs than whites. For example, Lynn measured the IQ of the Japanese [in Japan] at about 106. Flynn has disputed this measurement for a number of technical reasons and believes the actual number to be closer to 101-103. Flynn concedes that the Japanese seems to score very well on tests emphasizing visuo-spatial abilities [Flynn p. 5]. But, whatever the actual Japanese IQ might be, it is irrelevant to America. Flynn shows that when reared in America, Japanese and Chinese have about an average group IQ. Flynn concludes that the “brute facts would indicate that non-IQ factors have a potent role in group achievement”[1991 p. 15].

In their book, *The Learning Gap: Why our schools Are Failing and What We Can Learn from Chinese and Japanese Education*, Harold Stevenson and James Stigler, demonstrate just how powerful culture is in driving academic performance. The book begins by demonstrating that at an early age there is virtually no IQ difference among Japanese, Chinese and American students. Over time, however, a gap between the East Asians and the Americans on reading and mathematics performance at first opens then widens until by middle school “there is virtually no overlap” in the performance distributions. Clearly, “genetics, heredity and measured intelligence play no role here.” [Howard Gardner, *Cracking Open the IQ Box*, American Prospect, Winter

1995 p. 9/13]. The etiology of this “learning gap” is the result of many factors, all of which come under the heading of what is known as “social capital” - a commitment on the part of the student, his family, and the community to achieve:

East Asian students learn more and score better on just about every kind of measure because they attend school for more days, work harder in school and at home after school, and have better prepared teachers and more deeply engaged parents who encourage and coach them each day and night. Put succinctly, Americans believe that if they do not do well, it is because they lack talent and ability; Asians believe it is because they do not work hard enough. As Japanese aphorism has it, “Fail with five hours sleep, pass with four.”[Gardner, p.9/13].

Achievement in school is an important part of the building of human capital. “Family background” has been shown by empirical work to be an important determinant of educational attainment. In this regard, family background has three components: financial capital, human capital, and social capital. Everything else equal, one expects more educational attainment in families where parents have the financial means to pay for it. One also expects that parental education will affect the “cognitive environment” confronted in the home by the child. Children of well-educated parents tend to acquire more education than children with less-educated parents, part, because the values of the home emphasize education, and the home environment provides the means for cultural enrichment.

In one public school district in the United States, text books are purchased by the children’s families. School authorities were puzzled to discover that a number of Asian immigrant families purchased two copies of each textbook needed by the child. Investigation revealed that the family purchased the second copy for the mother to study in order to help her child do well in school. Here is a case in which the human [and financial] capital of the parents...is low, but the social capital in the family available for the child’s education is extremely high [James Coleman 1988 p. S110]

The social capital of the household inheres in the relationships between parent(s) and children. The social capital of the household is great when both parents are present and significant attention is given to the child. When one, or both, parents is absent, or little attention is paid to the child, there exists a “structural deficiency in family social capital” which works to the detriment of educational achievement.

Unfortunately, for many reasons, American family structure is changing in ways that reduce the social capital available to children. Parents, compelled by economic pressures, are often not present. If they should be they often have little time for the child. The decline of extended families has also reduced the social capital available to children. James Coleman writes:

The most prominent element of structural deficiency in modern families is the single-parent family. However, the nuclear family itself, in which one or both parents work outside the home, can be seen as structurally deficient, lacking the social capital that comes with the presence of parents during the day, or with grandparents or aunts and uncles in or near the household...Even if adults are physically present, there is a lack of social capital if there are not strong relations between children and parents. The lack of strong relations can result from the child's embeddedness in a youth community, from the parents embeddedness in relationships with other adults that do not cross generations, or from other sources [Coleman 1988 p. S111].

Of course, among most poor Euro-American families the "structural deficiency in family social capital" is a fact of life. Uneducated themselves and struggling for survival on a daily basis, and often trapped in a malaise of drugs, alcohol and "disorganization," such parents do not provide their children with the social capital they need to acquire a good education.

The upshot is that even should parents have high levels of both financial and human capital, children may derive little profit from them in the absence of social capital. There is much ado in the US about the failure of our schools, perhaps, more focus should be placed on the failure of our homes and the deteriorating social capital within them. Most notable here, of course, is the fact that social capital is most lacking in the disorganized, female households of the poor, and especially the Afro-American population in which 50% of Afro-American children are raised.

Finally, cultural attitudes regarding the etiology of success, goes a great distance in explaining the achievement gap between Asian-Americans and Euro-Americans. After generations of being bombarded with elitist propaganda, Americans have come to believe that success rests on "natural" talent. Asians, on the other hand, see success to be the outcome of hard work. Americans believing "talent will win in the end" then are passive and fatalistic while Asians adopt a pro-active, "hard work will pay-off" philosophy.

Race and Science

Eugene Genovese said Hitler and his abuse of the race concept, not the research of Franz Boas, put an end to legitimacy of race-thinking in the USA. In short, "race" thinking was discarded for political reasons rather than as a consequence of a reasoned, empirical scientific disputation. Carelton Coon discovered this the "hard way."

Coon, in a book and race origins, published in the early 1960s, claimed that the

racess had differentiated, in Africa, before they evolved into *homo sapiens*. The races that migrated out of Africa to Asia and Europe, he claimed were the first to evolve into *Homo Sapiens*. Coon absolutely refused to draw any conclusion about the relative intelligence of the races **now**, simply asserting there was not enough information to do so. Unfortunately a quack, racist by the name of Putnam, published a book in 1965, asserting that Blacks were less intelligent because they were the last to evolve into *homo sapiens* and used Coon's work to support his argument [p. 206]. Coon was accused, by men like Ashley Montagu and Theodore Dobzhansky of doing irresponsible research that provided "grist for racist mills." [Shipman 207] Sidney Mintz, a social anthropologist, called Coon " a racist of the worst sort, but extremely clever. He has left the dirty work to others." Clearly, even if Coon did not assert blacks were less intelligent he obviously considered it an open question which could be answered either way depending on the results of future research. One can legitimately ask, however, "why did Coon pursue this line of research?" Was racial differentiation a matter of inherent scientific interest or was race a matter of interest only for purely political reasons? Noam Chomsky, a world class Linguist and left social activist, speaking in the context of the putative race-IQ correlation, asserts that in a nonracist society, this correlation would be of no greater significance than a correlation between height and IQ. This is because "height" is devoid of social and political importance:

We do not insist on assigning each adult to a category "below six feet in height" or "above six feet in height" when we ask what sort of education he should receive or where he should live or what work he should do.

It follows that if race were not so used there would be as little interest in race correlations as in height correlations. Hence, Chomsky follows Montagu, Mintz and Dobzhansky in making race a taboo subject even when real scientific issues are involved:

Turning to the question of race and intelligence, we are granting too much to the contemporary investigator of this question when we see him faced with a conflict of values: scientific curiosity versus social consequences. Given the virtual certainty that even undertaking of the inquiry will reinforce some of the most despicable features of our society, the presumed moral dilemma depends critically on the scientific issue that he is choosing to investigate. *Even if the scientific significance were immense, we should certainly question the seriousness of the dilemma, given the likely social consequences* [emphasis added]. But if the scientific interest is slight, then the dilemma vanishes.

In a recent conservative contribution to the debate, Paleoanthropologist, Pat Shipman posits that the race question is relevant and important only because it does not seem to

go away and scientific study of the question is better than deliberate ignorance. Writing about anthropology in the 1960s in the context of the excoriation, by liberal anthropologists, of Carleton Coon she contends:

Race was simply too volatile a subject, political exigencies too compelling, for a disinterested treatment. Race became the dirtiest word in the lexicon and the entire next generation of anthropologists were frightened away from dealing objectively with a real and urgent issue...Race and human variability simply disappeared from the curricula of most colleges and universities in the English speaking world.[219]

Shipman contends that, "ignorance is never a solution" we need to educate the next generation about what race is, and isn't...[p. 263]

In the Soviet Union, between 1935 and 1965, the study of genetics was prohibited. Supported by the power of a totalitarian state, Trofim Lysenko instituted this ban because the basic Darwinian idea of genetic inheritance conflicted with the official Soviet dogma of Lamarckism. Lamarck, you will recall saw evolution in terms of the passing down of over the generations "acquired traits." Lamarckian evolution thus allowed a certain plasticity to the human constitution which allowed in turn for the rapid changes under the guidance of the Soviet State. In short, there was nothing "fixed" in humans that might prevent them from being transformed into true "socialist men." Darwinian genetics, on the other hand, with its emphasis of slow evolution over the eons, posited a biological "fixity" to the human constitution that was not ideologically acceptable to the Marxist regime. Unfortunately, regarding the question of the biological aspects of observable group differences in economic, social, and political status, a neo-Lysenkoism seems to pervade the ranks of left-progressive intellectuals. A ban, or even a subtle, or not so subtle taboo on such "research," does not befit a democratic society. What is needed instead, is a confrontation of such research not only with criticism, but with better science.

The monster cannot be outrun. To date, we have feared to wrestle it openly; we have turned our heads and shielded our eyes from the horror of the problem... We have fought each other-called each other names, accused each other of sinister intent, promulgated bitter insinuations-instead of fighting ignorance. In so-doing we have given the hate-mongers time to feed the monster. It has swelled on a diet of racial divisiveness, lies, half-truths until it is strong enough to destroy us all.[261]