The egalitarian ideal is a society in which every child has an equal chance for success. Not until Professor R. J. Herrnstein’s famous article “I.Q.,” in the September 1971 Atlantic Monthly, were we warned that progress toward the equalization of opportunity is, in fact, progress toward a hereditary “meritocracy.”

The argument goes like this: as environmental influences (education, for instance) become more similar for everyone, they come to matter less than inherited characteristics. And intelligence (with which many other qualities are closely correlated) is largely inherited. The I.Q. test is in fact a powerful predictor of success, in that a high I.Q. is a prerequisite for high-status occupations. Thus, social mobility tends toward social rigidity, with certain able families perpetually at the top, and certain dull ones at the bottom.

Drawing on an enormous body of evidence, this book offers a careful — and fascinating — proof of the argument and points out its many implications for our future. Dispute over Dr. Herrnstein’s data has dwindled since 1971, but orthodoxy dies hard. His introductory chapter (abridged in Commentary, April 1973) is an account of the extraordinary reaction of liberal and radical intellectuals to his conclusions, which challenge the basic assumptions of modern social thinking.
Lucid, elegant and compassionate, *I.Q. in the Meritocracy* closes with a plea for an assessment of human potential uncompromised by ideology. “The false belief in human equality,” Dr. Herrnstein writes, “leads to rigid, inflexible expectations, often doomed to frustration, thence to anger. Ever more shrilly, we call on our educational institutions to make everyone the same, when we should be trying to mold our institutions around the inescapable limitations and varieties of human ability.”

R. J. Herrnstein, Professor of Psychology at Harvard, is at work on a textbook with Professor Roger Brown. Articles by him have appeared in several national periodicals.
I.Q. IN THE MERITOCRACY

by R. J. Herrnstein

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This book grew out of an article entitled "I.Q.," published in the *Atlantic Monthly* magazine in September 1971. I owe the editors, particularly Robert Manning and C. Michael Curtis, a debt of gratitude for their interest in the idea of such an article and then, after I wrote a draft, for their criticism and counsel. Later, when the article had swelled about fivefold, I was fortunate to have Esther S. Yntema, senior editor at the Atlantic Monthly Press, as a faithful and deeply insightful critic. Susan Herrnstein has performed her usual but invaluable service as my most objective reader. I have also been fortunate that the preparation and editing of the manuscript rested in the capable hands of Arlene Andrew and Sara Hill.

in a few cases, for making available unpublished materials. To Roger Brown, who read both original article and book and gave me generously the benefit of his scholarly perspicacity and good sense, I am especially indebted. The undergraduate general education course that we taught together was the occasion, to begin with, for an account of intelligence testing and its social implications, and then it was the setting for much of the peculiar and protracted controversy that followed (recounted here in the preface). I owe him, therefore, not only thanks but apologies. Obviously, none of these people should be held in any way accountable for the use I have made of their help, although they deserve credit where it is due.

The book has a dual goal. First, I hope it conveys a timely collection of facts fairly and reasonably nontechnically. I have tried to restate every statistical conclusion in plain English, for practical decisions in recent years have often been based on too sketchy an understanding of the potentialities and limitations of the kinds of analysis available to social science. Second, I hope the book sheds light on the controversy surrounding I.Q. and social status without again igniting it.

R. J. Herrnstein
The Specter of Meritocracy

The specter of Communism is haunting Europe, said Karl Marx and Friedrich Engels in 1848. They could point to the rise of egalitarianism for proof. From Jefferson’s “self-evident truth” of man’s equality to France’s égalité 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.

Against this background, the main significance of intelligence testing lies in what it says about a society built around human inequalities. The message is so clear that it can be made in the form of a syllogism:

1. If differences in mental abilities are inherited, and
2. If success requires those abilities, and
3. If earnings and prestige depend on success,
4. Then social standing (which reflects earnings and prestige)

will be based to some extent on inherited differences among people.

The syllogism has five corollaries which make it more relevant to the future than to the past or present.

Corollary A: As the environment becomes generally more favorable for the development of intelligence, its heritability will increase, as Chapter 4 showed. Regardless of whether this is done by improving educational methods, diet for pregnant women, or whatever, the more advantageous we make the circumstances of life, the more certainly will intellectual differences be inherited. And the greater the heritability, the greater the force of the syllogism.

The heritability increases because as everyone approaches the optimal environment, only their genes distinguish them. The total amount of intellectual variation would be reduced to the extent that environmental factors had been causing it, but what remains would be stubbornly intractable. As far as we know, this obdurate residue would be substantial: the best current guess for the heritability of the I.Q., an estimate of how much of the total variation in intelligence resides in the genes, hovers around 80 per cent. Hence, getting down to the bare genetic bones would reduce the current variation by only 20 per cent. For abstruse, but straightforward, statistical reasons, the 20 per cent reduction in the variation would change the standard deviation by only about 1½ I.Q. points, from about 15–16, where it is now, to about 13.5–14.3, if the environmental differences were totally wiped out. This means that if 95 per cent of the population now falls between I.Q. 78–132 (which is about right), elimination of all environmental differences would leave a range of 81.4–128.6 for those 95 per cent, which is not much compression.

That little computation makes some assumptions, however, the main one being that the environment optimal for one is the environment optimal for all. By this assumption, giving everyone the best possible surroundings would make environments ex-
tremely alike, not just extremely good. Since the assumption may be somewhat faulty, we ought to consider the consequences of a different one—that different people learn best in radically different environments. In that case, making environments extremely good need not also make them alike. And if it does not make them alike, heritability might not increase even as the overall level of competence rose. With environments tailor-made for individuals, the range of intellectual differences between people might diminish to a far greater extent than the 20 per cent that follows from the first assumption, for each genetic shortcoming would have some chance of environmental compensation. And with the narrower spread of intelligence, its correlation with success may plummet (recall the range effect on correlation). In the syllogism’s terms, the weakening of the second premise diminishes the force of its conclusion.

It therefore makes a good deal of difference which assumption is more nearly correct—will environmental amelioration tend more towards uniform or towards specialized treatment? The question obviously calls for speculation, for firm answers are not to be had. The second possibility appeals more, for it promises an end to broad differences in capacity with no unwholesome side effects. It is a fitting long-term goal. In the meantime, however, amelioration demands a certain amount of increasing uniformity. Most of the environmental diversity in the world today cannot be defended on educational grounds. Eliminating large classes in school, poor libraries, shabby physical surroundings, teeming ghettos, undertrained teachers, inadequate diet, and so on, remain laudable goals, but we should recognize that they have the corollary effect of increasing heritability. In the short term, therefore, the syllogism will become more potent as the right environment for intellectual development is made more generally available. The day of specialized environments for each person, improving them all to the point where differences approach insignificance, seems remote.

These days, there is great pressure to reduce individual differences, perhaps even by withholding educational advantages from gifted people and lavishing them on the less well endowed. Educators may not think they are advocating any such selective deprivation, but, in effect, they do so when they assume that an educational system must strive to blot out individual differences at all costs—and that goal has become commonplace. The problem comes from not appreciating the crucial distinction between the reduction of individual differences by tailoring environments for individuals and by selective deprivation. The first must raise the average level of the population, for it optimizes the environment for all; the second may lower it, for it sets equalization as its goal, instead of optimization. Yet both can eliminate at least some of the troublesome spread of ability, so that, lacking the wherewithal for the first, we may be tempted to settle for the second.

It may help to recast the alternatives in medical terms, since the equivalent problems seem to evoke less obscurantism. Doctors blame some of the differences in people’s health on differences in care and some on differences in constitution. In response to social pressure to reduce the differences, the first step would be to improve the care of people who had been suffering some deprivation. To the extent that the existing differences in health had been due to poor facilities or surroundings, this step would make the average person healthier and would reduce the range of differences. At the same time, however, it would increase the heritability of health, for the lingering differences would be relatively more dependent on constitutional factors, and those are to a considerable extent genetic. Thus far, the analogy takes us to the point of this corollary, which is that environmental amelioration increases heritability. Now suppose further that medicine went beyond a general improvement of facilities to individualized preventive medicine. People might be tested at birth, let us say, and their diets, medication, perhaps even place of residence would be designed to offset their constitutional weaknesses. Obviously this is as much a fantasy as the analogous scheme for education, but medical and psychological science may in time deliver the
necessary information. With individualized preventive care, the outcome would be an increase in the health of the average person, a major reduction in overall variation from person to person, and no necessary increase in the heritability, which are the analogues to the benefits of individualized compensatory education. As before, no one could decently object. However, part of the same result could be achieved simply by depriving healthier people of some part of their medical care and diverting it to the unhealthy. This, too, would reduce the differences between people and would not necessarily cause any increase in heritability. However, the health of the average person might well deteriorate. For that reason, and because it would seem both arbitrary and immoral, many people (particularly the healthy ones) would surely object strenuously. In the case of health care, the difference between individualized preventive medicine and selective deprivation is plain.

To return to the issue at hand, there are doubtless many unsatisfactory educational practices in the United States, unequally inflicted on the population. Getting rid of such inequities by correcting the deficiencies has increased heritability as an unwelcome corollary, but can hardly be forsaken on those grounds. In contrast, individualized instruction on a large scale (at present more a goal than an actual option) could raise people’s overall intellectual level, reduce the differences between them, and perhaps avoid any increase in heritability. But this happy alternative tends to be confused with an at best dubious, at worst unsavory, program of compensatory deprivation, which would also reduce individual differences, but do so at the expense of those who are fortunate enough to have been well endowed to begin with. Not only would such selective deprivation be unfair, but it would be a waste our society can ill afford.

Corollary B: All modern political credos preach social mobility. The good society should, we believe, allow people to rise (and, by implication if not by frank admission, fall) according to their own efforts. The social barriers of the past—race, religion, nationality, title, inherited wealth—are under continuous assault, at least in principle. The separation of church and state, the graduated income tax, the confiscatory inheritance tax, the laws against discrimination and segregation, the abolition of legal class and caste systems all manifest a desire to accelerate movement on the social ladder. The standard wisdom of our time avows that people should be free of “unfair” impediments and divested of “unfair” advantages in all their endeavors. But the syllogism becomes more potent in proportion to the opportunities for social mobility, for it is only when people rise and fall by their own merit that they can be sorted out according to inherited differences. Actual social mobility is blocked by innate human differences after the social and legal impediments are removed.

Estimates of upward social mobility during the past fifty years or more have revealed a stubborn tendency to hover around 30 per cent in Asia (Japan), Europe, and America. On the average, something less than one boy in three (the studies have focused on male occupational status) has been able to rise above his father’s occupational status. Downward social mobility has also seemed to be stuck within a range, albeit somewhat broader and lower than for upward. To the surprise of some, and the dismay of many, society continues to recruit its class members preferentially. By some ideal of democracy or simple fairness, the children of all classes should be equally spread over the occupational continuum when they grow up. The fact that they clearly are not has been taken as proof that our society (as well as all others that have been examined) must be favoring some children and holding back others.

While deliberate and inadvertent favoritism may be causing some of the social immobility, there are other obstacles to the democratic ideal. Occupational success is correlated with I.Q., and fathers’ and sons’ I.Q.’s are also correlated, largely for genetic reasons. Those two facts by themselves impose a brake on the democratic ideal of unhampered intergenerational traffic in social class, as will be spelled out henceforth. This is not to deny the
massive environmental handicaps of, for example, the children of migrant workers or the comparable advantages of young Rockefellers or Rothschilds. But however visible, disturbing, or enviable those extremes, only a small fraction of the population falls unambiguously in either class. For the preponderant remainder, it is not so obvious what controls mobility, or the lack of it.

Both correlations — between I.Q. and the usual occupational scale, and between fathers’ and sons’ I.Q.’s — are intermediate: in the vicinity of .5. Even if there were no environmental favoritism whatsoever, we would need an intermediate amount of mobility to maintain the status quo. The father-son correlation in I.Q. of .5 produces, as a general principle, regression halfway back towards the population average (i.e., 100), for reasons covered in Chapter 2 and exemplified by data in Chapters 3 and 4. A man whose I.Q. of 130 helped land him a high position in industry will therefore have sons whose I.Q.’s center on 115 — and an I.Q. of 115 predicts a job on a lower rung of the social ladder. Hence, right here there may be some downward mobility, as well as an eventual vacancy on the upper rung, perhaps to be filled by someone upwardly mobile. Of course, all this is in terms of an average son, of which any given family may have no instance, for statistical principles apply only in the aggregate.

Suppose there were no mobility at all — the sons staying at the same occupational level as their fathers, who would be at the same level as their fathers, and so on. Because of regression towards the mean, the I.Q. at each occupational level in this rigid caste society would converge on the population average. As those class differences approached the vanishing point, the correlation between I.Q. and occupational success would approach the vanishing point also. One generation of this process is shown in Tables 7A and B, from an English study published in 1961 by Cyril Burt. Table 7A shows the I.Q.’s of a representative sample of 1,000 men from all occupational levels. The six levels differ slightly from the usual socioeconomic index since they are based more on the required intellectual competence in the jobs than on income or
prestige, although all three are highly correlated. Nevertheless, the occupational levels in this table show a somewhat steeper gradient of I.Q. than one usually encounters—covering a span of almost 55 I.Q. points. As is typical of all such tallies, the spread of I.Q. is much broader at the bottom of the ladder than at the top, in keeping with the conclusion that I.Q. is necessary, even if not sufficient, for occupational success.

Table 7B shows the I.Q.’s of the children whose fathers were tallied in the foregoing table. The children from the various classes still differ in average I.Q., but regression towards the mean has taken its predicted toll. Instead of a 55-point spread across the classes, it is now about half that—28 points—which is just what it should be given the father-child correlation of .5 in I.Q. Table 7B shows another feature of regression, the increased variability at every occupational level in the I.Q.’s of the children as compared to their fathers.

Now, what would happen if the children were locked into their fathers’ levels? In one generation, the I.Q. gradient would have been sharply reduced. The next generation would reduce it further, and so on, as long as mobility were prohibited. In just a few generations, there may be no trace of the sizable correlation between I.Q. and occupational level that permeates Table 7A (and the society that it describes). The persistent, perhaps even growing, occupational differences in I.Q. therefore show that there must be at least enough mobility across socioeconomic classes to sustain them.

The children in Table 7B did not stay at their father’s level. They moved up or down, as Burt also showed, depending on whether they were more or less well endowed with intellect than their fathers, and on whether they were motivated towards occupational success. Beyond those two ingredients, other factors like home surroundings and caliber of schooling seemed to make only minor contributions to individual success.

A certain amount of mobility therefore follows naturally from the parent-child regression in I.Q. and from the correlation between I.Q. and status. The question is, how much of American mobility is pure statistical necessity and how much is extra social fluidity. It has, in fact, been estimated that roughly 50 per cent of the mobility from generation to generation can be pinned on the way I.Q. is transmitted from fathers to their children. Since we know that the transmission is mainly (perhaps increasingly, see corollary A) genetic, it follows that mobility itself flows within genetic constraints. Other genetic factors besides I.Q. would also contribute their share to mobility, but not even a guess at their magnitude is possible now.

The 50 per cent estimate should be taken as a stab in the dark rather than as a known quantity. The missing detailed statistical information on I.Q. and occupational status over several generations is hard to come by, and, given the unsettled climate of discussion on the subject, likely to become harder still. Moreover, it would require continual updating, for the patterns of mobility are likely shifting for various reasons. First, the correlation between occupational status and I.Q. may change. If the correlation gets bigger, it would take more mobility in each generation to undo the leveling effect of the regression in I.Q. from father to child. Table 7 presents a concrete case in point. The children clearly are more scattered around the table than their fathers. To produce as high a correlation between I.Q. and status for the children as there was for their fathers calls for a certain amount of mobility.

The higher the correlation that the children are recovering, the greater the amount of mobility called for. With smaller correlations, the required mobility would decrease. In the limiting case, with no correlation between I.Q. and occupation, the leveling effect of regression becomes irrelevant to mobility, for nothing would need to be undone.

Second, the father-child correlation in I.Q. might increase, perhaps because of increased assortative mating for I.Q. (see Chapter 4). The greater the correlation, the less the regression towards the mean. As a result, it would take less mobility to sustain the current distribution of I.Q.’s across occupations. In the limiting case,
with a perfect correlation, there would be no regression, hence no mobility would be called for on this count. A reduced father-child correlation would have the reverse effect, increasing mobility.

Third, the labor market for I.Q. may be changing (which also concerns corollary D). Jobs towards the lower end of the occupational scale may be disappearing and being replaced by jobs towards the upper end. Among its other effects, such a shift increases the amount of upward mobility, since it creates high-level vacancies to be filled by offspring recruited from lower levels. A shift in the other direction, towards the bottom of the scale, also increases mobility, except it would be downward mobility. By all indications, however, changes in the occupational structure favor upward mobility.

Fourth, population growth itself may be a source of mobility. If any sector of the social scale suddenly changes its fertility, it exerts pressure for mobility out of its level. Thus, overreproduction at the lower end of the scale exerts pressure towards upward mobility. However, if the upper classes continued to breed at their old rate, and no new jobs were being created, any new upward mobility would be balanced by equal downward mobility and new unemployment, perhaps correlated with I.Q. (see corollary C). Overreproduction at the upper end of the scale exerts pressure towards downward mobility, but the upshot may be not much different. Either way, the average I.Q. at each occupational level could remain constant, but with greater mobility up and down. The exact effects of differential reproduction depend upon its precise details — how much, from which levels, and with what changes in the job market — except that it is likely to churn up additional mobility.

The foregoing list of factors affecting mobility is not exhaustive. It does not even handle, for example, obvious complications like family wealth or education in “exclusive” schools. Nevertheless, it shows that a given rate of mobility sustains a status quo, whether or not unfair impediments or advantages contribute also. It also shows how the mobility may rise or fall as a natural outcome of changes that do not seem particularly fair or unfair — increased assortative mating, a large role for intelligence in occupational success, a reduced birth rate within some social class, and so on.

The theme that runs throughout is that mobility flows along the channels cut by the occupational requirements for I.Q. (among other personal traits), which, in turn, flows largely via the germ plasm. Moreover, to restate the point of this corollary, as the contribution of fundamentally irrelevant factors like family connections, inherited wealth, race, and religion diminish, the inherent factors, like occupational demands for inborn capacity, will take on increasing importance.

Corollary C: It was noted earlier that there are many bright but poor people even in affluent America. The social ladder is tapered steeply, with far less room at the top than at the bottom. For reasons discussed later, income (or wealth) redistribution would not be a viable remedy. The best hope for rescuing the people at the bottom is to take the taper out of the ladder, which is to say, to increase the aggregate wealth of society in such a way that there is more room at the top. This is, of course, just what has been happening since the Industrial Revolution. But one rarely noted by-product of poverty is that it may minimize the inherited differences between classes by assuring that some bright people will remain at the bottom of the ladder. As the syllogism implies, when a country gains new wealth, it will tend to be gathered most efficiently by the hands of the natively endowed. New wealth has usually diffused throughout a society, sometimes increasing the earnings of those at the bottom of the ladder by as large a factor as those at the top. However, in addition to that diffuse effect, new wealth also enriches certain individuals — for their business acumen or their cunning or their creativity or, no doubt, sometimes for their obsequiousness or their dumb luck. However, premise 2 asserts that success requires mental capacity, which should be as true of the successes that create the new wealth as it has been of the old. Whenever the new wealth enriches people...
from the lower classes, it will recruit for the upper classes precisely those who have the edge in native ability.

This conclusion does not assume that the virtuous inevitably become the wealthy, or vice versa for that matter. It merely extrapolates the past and present forward. Up till now, the highly gifted have enjoyed an advantage in the creation and gathering of new wealth. The advantage, while neither absolute nor enormous, has been statistically unmistakable. If we suppose that new wealth (not just a redistribution of existing resources) continues to favor the gifted as much as it has in the past, then those from the lower social echelons who have the requisite ability will be favored most. Simple arithmetic tells us that removing the higher I.Q.'s from the lower classes must reduce the average score of those remaining. Whatever else this accomplishes, it will also increase the I.Q. (hence, the genetic) gap between upper and lower classes, making the social ladder even steeper for those left at the bottom.

The inverse of this corollary is also worth noting. Suppose that a society suddenly suffers a loss of wealth. How would the losses be distributed? If we assume that the reduced goods are still subject to premise 2, then the loss will tend to show up as increased numbers of gifted but poor people, as in a major depression. Other things equal, the average score for the lower classes would rise and the I.Q. gap between the classes would therefore diminish.

It is, of course, possible that other things would not be equal. For example, it may be that the I.Q. required for success would rise as wealth shrank. In that case, poverty might not narrow the I.Q. gap between upper and lower classes, for only highly superior people would stay on top, instead of merely the superior ones. However, in the absence of information to the contrary, the safest assumption is the one that assumes least — namely that the psychological requirements for success would remain the same even as wealth contracted, but a smaller fraction of those who could meet the requirements would actually get a chance to do so.

The superficial impressions jibe, for the successful people in poor countries seem to be cut from more or less the same cloth as those in wealthy countries in mental capacity and drive. They do not, at any rate, seem markedly brighter.

The precise size of the I.Q. gap between classes depends on a host of specific details that would be out of place here, even assuming that they are available somewhere. Questions of income distribution, shifting criteria for success, patterns of taxation, the level of wealth taken as the base line, the spread of I.Q. and its correlation with economic success, the very definitions of upper and lower classes, all these elements would enter into any numerical estimate of how changes in wealth might affect the class separation in I.Q. Moreover, the class separation in I.Q. cannot be fully summarized as a single gap between two arbitrary classes. There are actually many levels on the social ladder, not just two, and the spacing of rungs can be varied endlessly by particular circumstances. However, at a qualitative level, the corollary appears unassailable. For any foreseeable society, the lower classes will be a reservoir of human abilities of the type that make for success. This is simply a way of saying that the lower classes span the full range of ability. When new wealth creates more room at the top (as it sometimes does, even if not often enough by some standards), the gifted ones are likely to ascend first.

Corollary D: Technological advance may change the marketplace for I.Q. Even if every single job lost in automating a factory is replaced by a new job somewhere else in a new technology, it is possible that some of those put out of the old jobs will not have the I.Q. for the new ones. Technological unemployment is not just a matter of "dislocation" or "retraining" if the jobs created are beyond the native capacity of the newly unemployed. It is much easier to replace men's muscles with machines than to replace their intellects. Already the shifts in the labor force across single generations show a trend toward the occupations with higher prestige — managerial, professional, and white-collar — and away from semiskilled and unskilled labor. The proportion of unskilled
and semiskilled laborers in the total work force has, in fact, been
decreasing for at least three generations in America, perhaps
longer. If the I.Q. requirements for given jobs are not changing
and there is no evidence for any obvious trend — then the
labor market must already be shifting towards higher values.

The computer visionaries believe that their machines will soon
be doing our thinking for us too, but in the meantime, backhoes are
putting ditchdiggers out of work. And if some stay out of work,
most likely they will be ones who lack the qualifications for the
new jobs, including some level of I.Q. or its prime correlate,
education.

To be sure, not all automation pushes the labor market the same
way. In some lines of work — the baking industry, for example —
new technology may have a net effect in the opposite direction,
displacing relatively large numbers of skilled bakers and creat-
ing still larger numbers of semiskilled positions — slicing- and
packaging-machine operators, truck drivers, and so on. Perhaps
the same is true of furniture-making, which has little use for
master carpenters anymore. In the long run, however, what counts
is the overall impact on the labor market, which seems to be the
reverse of that on the baking business.

Each occupation requires some minimum mental capacity (see
Chapter 3), a hurdle usually cleared with points to spare in the
past. But if technology is, on balance, shifting those minima up-
ward — as it does, for example, by replacing ditchdiggers with
backhoe operators — there must come a time when people will
be unemployed simply because the job market has shifted too far
up to provide slots for all of them. The time may not be upon us
yet. It would be hard to prove one way or the other, for unemploy-
ment always has multiple causes, some of them readily curable by
familiar economic measures. Nevertheless, sooner or later, if and
when technology has truly replaced the drawers and the hewers
and the other simple vocations, the tendency to be unemployed
may run in the genes of a family about as certainly as the I.Q.
does now.

Corollary E: The syllogism deals manifestly with intelligence.
The invention of the intelligence test made it possible to gather
the data necessary to back up the three premises. However, there
may be other inherited traits that differ among people and con-
tribute to their success in life. Such qualities as temperament,
personality, appearance, perhaps even physical strength or en-
durance, may enter into our strivings for achievement and are to
to varying degrees inherited. The meritocracy concerns not just in-
herited intelligence, but all inherited traits affecting success,
whether or not we know of their importance or have tests to
gauge them.

Schooling, measured simply as years completed or by grades
earned, is the prime competitor to I.Q. as a predictor of success in
our society. Sometimes, people interpret the predictiveness of
schooling as a refutation of the importance of I.Q., hence of in-
heritance. They note that schooling lends itself more readily to
environmental change for social purposes than I.Q., even if not so
readily as was thought at the beginning of the recent surge of
compensatory education. At any rate, schools can be improved in
tangible ways, and since occupational and social success correlate
highly with schooling, such improvements should play handsome
returns all around, this argument holds.

What the foregoing argument overlooks is that, up till now,
schooling has itself been heritable, largely because of its intimate
connection with I.Q. Those with higher intellectual endowments
have tended to persevere in school and have earned better grades
along the way. Later, they go on continuing to win more than
their share of life's other rewards. In other words, we should not
say that schooling, rather than I.Q., leads to success, but that
distinction in school is the common, albeit not infallable, sign in
childhood and youth of high ability.

While not as heritable as I.Q., schooling predicts individual
success better, at least according to studies of young men. And it
undeniably lends itself more to social manipulation than I.Q. The
unique availability of quality, free education was, and is, the road
to success climbed by thousands upon thousands of poor children, to their advantage and our country's. But the conclusion that more schooling is all we need to accelerate the process to any desired degree does not follow from the facts, however much we want to believe it.

To see why, one must ponder further the fact that a particular poor child climbs the educational ladder on his or her way up, while classmates with the same apparent opportunities do not. It is customary these days to blame something in the environment outside school — in the home or on the streets perhaps. No doubt, homes and streets often deserve the blame they get and ways should be sought to improve them, for the potential benefits are great. However, the intimate tie between schooling and I.Q. — as recounted in Chapters 3 and 4 — tells us that school simply cannot teach all children uniformly, at least not school as we have known it. The correlation between I.Q. and school performance means that they covary, and since the I.Q. expresses inborn potential, so does schooling, although to a lesser degree. A school that revealed no innate differences would most likely have ceased teaching much that is generally useful. Education has been a step on the way up while it has taught useful skills and, as a byproduct, has spotted the able, motivated individual who will probably continue his winning ways. If and when it ceases to do either, it will quickly cease predicting success. If schools are to continue being useful, they must retain their power to discriminate (among individuals, that is), however heavy that has come to weigh nowadays.

The syllogism seems to deal with "mental abilities" as if they came in a bunch — inherited as an undifferentiated cluster and then contributing to success according to how large the cluster is. Yet, Chapter 2 showed that the testing of intelligence has uncovered many subabilities, dozens and dozens of them by some reckonings. Is there an inconsistency here? May there not be many different sorts of "success" in our society, tapping many different sorts of abilities? Thus, the verbally endowed would talk to get ahead, while the numerical ones would count, and the mechanical ones would fabricate. If almost everyone did at least something well, could there not be so many independent paths to success of various sorts that the one-dimensional conception of the syllogism would be refuted? The answer is that the paths are, alas, not independent, as Chapter 2 also pointed out. The single Spearmanian factor g accounts for about half the variation among people in mental ability. It may account for an even larger share of the mental abilities that enter into the determination of status. Just two or three additional broad factors — such as the verbal, the numerical, and the mechanical — encompass still more of the relevant mental endowment. While the numerous minor (in the statistical sense) abilities may dictate a person's most favorable occupation, success in society, for most lines of work, does indeed correlate with a small number of traits. This overlooks the uncommon occupations that call on highly special talents or attributes, as in professional sports or music and art or modeling, which may have relatively lesser correlations with the broad factors. For ordinary occupations, as plied by the vast majority of working people, the syllogism applies — all the more so because the patterns of assortative mating tend to enmesh further the very traits that contribute to success. People tend to marry within their class, and by doing so, they pair off corresponding genetic endowments. The more or less unitary social continuum of success feeds back into germ plasm, creating greater uniformity of ability, temperament, and perhaps even such an irrelevancy as appearance, at each status level than there might have been on genetic grounds alone.

The syllogism and its corollaries point to a future in which social classes not only continue but become ever more solidly built on inborn differences. As the wealth and complexity of human society grow, there may settle out of the mass of humanity a stratum that is unable to master the common occupations, cannot compete for success and achievement, and is most likely to be born to parents who have similarly failed. In Aldous Huxley's *Brave New*
World, it was malevolent or misguided science that created the "alphas," "gammas," and the other distinct types of people. But nature itself is more likely to do the job or something similar, as the less well-known but far more prescient book by Michael Young, *The Rise of the Meritocracy*, has depicted. Young's social-science-fiction tale of the antimeritocratic upheavals of the early twenty-first century is the perfect setting for his timely neologism, "meritocracy." The troubles he anticipated, and that the syllogism explains, may already be catching the attention of alert social scientists such as Edward Banfield, whose book *The Unheavenly City* describes the increasingly chronic lower class in America's central cities. While Sunday supplements and popular magazines crank out horror stories about genetic engineering, our society may be sorting itself willy-nilly into inherited classes. What troubles most about this prospect is that the growth of an increasingly hereditary meritocracy will arise out of the successful realization of contemporary political and social goals. The more we succeed in achieving relatively unimpeded social mobility, adequate wealth, the end of drudgery, and a uniformly wholesome environment, the more forcefully does the syllogism apply.

Are there alternatives short of turning back to the past, which minimized the syllogism largely by social immobility, poverty, drudgery, and squalor? The first two premises of the syllogism cannot easily be challenged, for they are true to some extent now and are likely to become more so in the foreseeable future. The heritability of intelligence will grow as the conditions of life are made more uniformly wholesome; intelligence will play an increasingly important role in occupational success as the menial jobs are taken over by machines. In time, science may foster a genuine educational technology to compensate for the significant cognitive differences among people, thereby obviating premise 1 on inherited mental capacity. At the moment, however, the prevailing orthodoxy on human equality has slowed, if not stalled, forward progress. Or, we may anticipate a future when technology has advanced so far that the sort of mental capacity measured by I.Q. tests contributes to success no more than the size of one's biceps does now, thus taking the sting out of premise 2 on the correlation between success and intelligence.

In the interim, however, it may seem more plausible to block the third premise by preventing earnings and prestige from depending upon successful achievement. The socialist dictum, "From each according to his ability, to each according to his needs," can be seen as a bald denial of the third premise. It states that whatever a person's achievement, his reward (economic, social, and political) is unaffected by his success. Instead, the dictum implies, people will get what they need however they perform, but only so long as they fulfill their abilities. But life under the dictum has not been notably free of pressure. Those in power soon discover that they must insist on a certain level of performance, for what the dictum neglects is that "ability" is, first of all, widely and inherently variable, and second, that it expresses itself in labor only for some sort of gain. In capitalist countries, the gain is typically in material wealth, but even where the dictum rules (if only in principle), social and political influence, or relief from threat, would be the reward for accomplishment. Human society has yet to find a working alternative to the carrot and the stick. Meanwhile, the third premise assures the formation of a social continuum.

Classlessness is elusive because people vary and because they compete for gain — economic and otherwise. There is a recurrent dream of a human society populated by selfless workers dedicating themselves to "the good of the people," and expecting no special benefits for their best efforts. The dream would be irresistible were it not for its persistent tendency to become a nightmare when acted upon. The record of past efforts at classless states would by itself deter the judicious, for their span is typically distinguished by economic disaster and inhuman cruelty. Mankind stubbornly refuses to organize itself like a beehive, with altruism the apparent central motive. But, then, the altruistic worker bee is a sterile female, a biological nonentity except insofar as she
has evolved over eons to serve the community and its fecund (and rather selfish) queen—not at all like the raw material out of which human societies must be fashioned. The threat of terror or the promise of admiration and gratitude prove to be the main human alternatives to instinctive altruism. Our few tens of thousands of years of social life have only begun to instill in us the altruistic impulses that the social insects have evolved in their tens of millions of years of mutual interdependence, as E. O. Wilson has so vividly described in The Insect Societies.

Mankind, while invincibly and inherently egocentric, can be impelled by more than just the crasser rewards. Society can encourage us to strive for honor, respect, a sense of pride, responsibility, as well as for money. But whatever goals we adopt, the main rewards go to those who somehow earn them, so that the syllogism applies anyway. The tendency to respect, honor, praise, remunerate, and perhaps even envy people who succeed is not only ingrained, but is itself a source of social pressure to contribute to one's limit. It is the form in which the social contract must be drafted for egocentric (although not necessarily egotistical) creatures like us.

It was noted before that the premium given to lawyers, doctors, engineers, and business managers is not accidental, for such jobs are left to incompetents at our collective peril. There are simply fewer potentially competent physicians than barbers. The gradient of occupations is, then, a natural, essentially unconscious, expression of the current social consensus. Whether or not the gradient is right, or good, or permanent, it directs human effort one way or the other, in accordance with prevailing, often shifting, notions of how effort is best invested. And beneath the gradient is a scale of inborn ability, which is what gives the syllogism its unique potency.

Imagine, for example, what would happen if the gradient of gain were inverted by government fiat. Suppose bakers and lumberjacks got the top rewards, while engineers, physicians, lawyers, and business executives got the bottom. This is harder to imagine than one might guess, for it requires inverting the scale of prestige, respect, social standing, and the resulting sense of social utility—as well as the scale of income. Soon thereafter, the scale of I.Q.'s would also invert, with the competition for the newly desirable jobs now including people with the highest I.Q.'s. (For simplicity's sake, only I.Q. is mentioned, but there may be, and no doubt are, other factors that contribute to success, for recall that I.Q. is only necessary not sufficient.) With their competitive advantage, the top I.Q.'s would once again collect at the top of the social ladder. But no government (let alone people themselves) is likely to conduct such an experiment, for it is not a sensible allocation of a scarce resource like high-grade intelligence. Nor could a government long equalize the gains from all occupations. The lure of greater rewards (financial and otherwise) for certain jobs directs the flow of talent as the consensus dictates, like a labor pump. Without the pump, society would annul its influence over the allocation of talent, which it cannot and should not do. This does not mean that the scale of compensation must stretch from opulence to racking poverty to accomplish society's valid purposes. A gentler slope might do; it might even do better. On the other hand, the scale cannot be totally flattened with impunity, however humanitarian the impulse to do so. Someplace between those extremes falls the right balance between the needs of society in general and compassion for those who fare poorly, but where that ideal is, nobody knows. We should manipulate the strength of the pump with care.

Social reformers sometimes argue that society can rely on peoples' inner satisfactions to produce the necessary division of labor. To be sure, work often affords inherent pleasures, above and beyond the rewards that society attaches to it. The musician may play for himself, as well as for his audience. The seaman may sail for the love of the sea, not just for his pay. The carpenter may enjoy the feel of the wood and the mastery he has over it. But musicians or sailors or carpenters do not often escape society's control. The social rewards are built around the inherent qualities
of work, augmenting here, diminishing there. A job judged worthy earns an extra bonus if it is also disagreeable or dangerous — like a fireman rushing through the flames to make a daring rescue or a house painter working from a scaffold high above the ground. But for a job that is a delight in itself — like spending the summer on the beach as a lifeguard — no one expects much pay. Society clearly needs brave firemen and conscientious lifeguards, who, it finds, can be engaged at different rates.

It is as if the work at each level of social status draws something like a fixed total gain — the higher the status, the higher the gain — which is equal to the sum of the social rewards (in their various forms, like money, prestige, and so on) plus (or, if the work is disagreeable, minus) its intrinsic qualities. Obviously, since people differ somewhat in their enjoyment of any given occupation, as well as in their appreciation of the social rewards, the setting of total gain must necessarily be imprecise. If they differed enough — so that one man's meat were truly another man's poison as a general rule — there would be neither competition for the “better” jobs nor any broad agreement about which were better. But the existence of general agreement in society shows that the differences between people are not large enough to wreck the system, although it doubtless gets shaken from time to time when values are shifting, as they seem to be now. In the ideal case, the people most drawn to any job would be those for whom the intrinsic consequences are most positive (or least negative), since simple arithmetic shows they stand to gain most. Among those, the ones who land the job would be the most able among the competitors, producing the familiar correlation between status and ability.

A few people evidently escape the social pulls and pushes, occasionally to society's material benefit, although rarely to their own. We are grateful that Gregor Mendel and Béla Bartók continued with their science and music respectively, in spite of the message of indifference they were apparently getting from their fellowman. But our admiration for, and fascination with, such rare instances should not obscure their rarity. As for the rest of us, we seem to be stuck with the conclusion of the syllogism. The data on I.Q. and social-class differences show that we have been living with a partly inherited stratification of our society for some time. The signs point to more rather than less of it in the future, assuming that we are not plunged back into a state of primeval poverty by some cataclysm or do not turn back to rigidly and arbitrarily privileged classes. Wiping out the trappings of privilege — the differences in inherited wealth, schooling, neighborhood, and so on — would not wipe out the social differences between families, although it would reduce them at first. The remaining family differences would be the genetic ones, which clearly are smaller than the genetic plus environmental distinctions we live with now. However, the increase in mobility that we gain by eliminating arbitrary social barriers is self-limiting, perhaps even self-reversing. Recall that familial regression towards the mean, which is a biological source of social mobility, depends upon the heritability and that improving environment raises the heritability, which reduces the mobility. Moreover, without arbitrary social barriers, assortative mating for inherited attributes like I.Q. would probably rise, further reducing familial regression and blocking mobility still more. The higher the heritability and assortative mating, the closer will human society approach a virtual caste system, with families sustaining their position on the social ladder from generation to generation as parents and children grow more nearly alike in their essential features.

The opportunity for social mobility across classes assures the biological distinctiveness of each class, for the unusual offspring — whether more or less able than his (or her) closest relatives — would quickly rise above his family or sink below it, and take his place, both biologically and socially, with his peers. The traffic is significant these days, for the lower classes produce, in sheer numbers, more people with high I.Q.'s than the upper classes (see Chapter 3) simply because they are so large a proportion of the total population. It is not uncommon now for lower-class families
to have close blood ties reaching into the upper layers of status, and vice versa, somewhat softening the impact of the chasm between the classes. However, if the size of the lower class diminishes, if the heritability rises, and if the gap in ability between top and bottom widens — all of which seem more than likely — the traffic across the most separated classes would subside into a trickle. Further alienation at the bottom and indifference at the top are the obvious hazards; the less obvious ones may be worse.

If all this is a fair picture of the future, then we should be preparing ourselves for it instead of railing against its dawning signs. Greater wealth, health, freedom, fairness and educational opportunity are not going to give us automatically the egalitarian society of our philosophical heritage. They will instead give us a society sharply graduated, with ever greater innate separation between the top and the bottom and ever more uniformity within families as far as inherited abilities are concerned. Naturally, we find this vista appalling, for we have been raised to think of social equality as our goal. The vista reminds us of the world we had hoped to leave behind — aristocracies, privileged classes, unfair advantages and disadvantages of birth. But it is different, for the privileged classes of the past, based on religion, title, property, race, even physiognomy, were probably not much superior biologically to the downtrodden, which is why revolutions had a fair chance of success. By removing arbitrary barriers between classes, society achieves the laudable goal of allowing people of different races, religions, and ethnic backgrounds to earn any level of status, but, simultaneously, it fosters biological barriers to mobility. When people can freely take their natural level in society, the upper classes will, virtually by definition, have greater capacity than the lower.

The measurement of intelligence is one of the yardsticks by which we may assess the growing meritocracy, but other tests of human potential and performance should supplement the I.Q. in describing a person's talents, interests, skills, and shortcomings. The biological stratification of society looms whether we have tests to gauge it or not, but with them a more humane and tolerant grasp of human differences is possible. At the moment, that seems our best hope, for the information could help us in our search for effective compensatory education. Unfortunately, the odds are against that worthy cause as long as the egalitarian orthodoxy can portray the quest for understanding as apostasy.

Notes to Chapter Five

Deliberate, selective deprivation of resources as a solution to educational diversity may seem like a farfetched danger, but an article in the New York Times on Sunday, 19 November 1972, shows it may not be. Under the title "Trying to Equalize Schools" (Section E, page 7), Gene I. Maeroff describes a proposal made by the New York State Board of Regents which "recommended that citizens in wealthy school districts be prohibited from raising their school expenditures above a certain level — even if the taxpayers in those districts are willing to shoulder the burden." It may be that such compensatory deprivation would be used simply to equalize school expenditures per pupil across school districts varying in wealth. However, if the Board of Regents hopes to equalize school performances by equalizing expenditures, would it be willing to recommend the next step if the first step fails to reach that goal? The article does not say whether the Board of Regents would favor pushing per capita expenditures in wealthy districts below the level in the poorer ones.

The idea that mobility in an open-class society may have limitations imposed by inherited intellectual differences between the classes turned up recently in B. K. Eckland's "Social Class Structure and the Genetic Basis of Intelligence" (in Intelligence: Genetic and Environmental Influences, edited by R. Canero. New York: Grune & Stratton, 1971). It is, however, by no means a new idea. C. A. Anderson, J. C. Brown, and M. J. Bowman, "Intelligence and Occupational Mobility" (Journal of Political Economy 60 [1952]: 218-239), made an attempt to estimate what part of the intergenerational traffic can be attributed to the father-child correlation in I.Q. A similar task is addressed in C. Burt's "Intelligence and Social Mobility" (British Journal of Statistical Psychology 14 [1961]: 3-24). In addition, R. B. Cattell devotes a chapter to "intelligence and society" in his Abilities: Their Structure, Growth and Action (Boston: Houghton Mifflin, 1971), covering substantially more ground than the limitations on mobility. A comparably broad, much earlier discussion of inheritance and society, without any emphasis on intelligence, can be found in R. A. Fisher's The Genetical Theory


...importations from the blue-collar level. The evidence for the foregoing seems to be dropping noticeably as their ranks are enlarged with recent importations from the blue-collar level. The evidence for the foregoing can be found in a chapter by R. S. Weiss, E. Harwood, and D. Riesman, “Work and Automation: Problems and Prospects” (in Contemporary Social Problems, 3rd ed., edited by R. K. Merton and R. Nisbet. New York: Harcourt Brace Jovanovich, 1971); and in J. T. Dunlop, ed., Automation and Technological Change (Englewood Cliffs, N. J.: Prentice Hall, 1962), particularly the chapter by E. Clague and L. Greenberg, “Employment.” A useful case study from the steel industry can be found in C. R. Walker’s Toward the Automatic Factory: A Case Study of Men and Machines (New Haven, Conn.: Yale, 1957). It may be that the skill or ability required at any given occupational level is not tending either up or down — as concluded in H. A. Simon’s The Shape of Automation: For Men and Management (New York: Harper & Row, 1965) — but the sheer numbers towards the upper end of the occupational ladder are sharply increasing. The well-advertised danger of an undereducated labor force is another way of saying that the labor market has shifted towards high I.Q.’s.

The creation in modern societies of a managerial or power elite has been noted to the point of tedium. A useful, by no means tedious, account can be found in D. Bell’s The Post-Industrial Society: The Evolution of an Idea” (Survey, no. 2 [79], 1971). That this modern development cuts across capitalist and socialist countries is suggested by a comparison between J. Burnham, The Managerial Revolution (New York: John Day, 1941), and M. Djilas, The New Class: An Analysis of the Communist System (New York: Praeger, 1957). A discussion of both sorts of economy and their possible future development is contained in the remarkable book by J. A. Schumpeter, Capitalism, Socialism, and Democracy (New York: Harper, 1942), which recognizes the tendency for human talent to flow towards the greater challenges, consequently, the greater rewards. The thirty years since the book’s publication have fulfilled an impressive fraction of Schumpeter’s prognostications, particularly as regards the evolution of capitalist societies.

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The future was also the concern in M. Young’s The Rise of the Insect Societies (Cambridge: Harvard University Press, 1971).