

SCIENCE FOR THE PEOPLE

10

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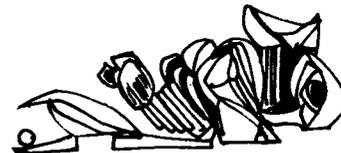
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- p. 36 M.B. Schnapper, *American Labor, A Pictorial History*, Public Affairs Press



EDITORIAL PRACTICE

Each issue of *Science for the People* is prepared by a collective, assembled from volunteers by a committee made up of the collectives of the past calendar year. A collective carries out all editorial, production, and distribution functions for one issue. The following is a distillation of the actual practice of the past collectives. **Due dates:** Articles received by the first week of an odd-numbered month can generally be considered for the magazine to be issued on the 15th of the next month. **Form:** One of the ways you can help is to submit double-spaced typewritten manuscripts with ample margins. If you can send six copies, that helps even more. One of the few founding principles of *SESPA* is that articles must be signed (a pseudonym is acceptable). **Criteria for acceptance:** *SESPA Newsletter*, predecessor to *Science for the People*, was pledged to print everything submitted. It is no longer feasible to continue this policy, although the practice thus far has been to print all articles descriptive of *SESPA/Science for the People* activities. Considerably more discrimination is applied to analytical articles. These are expected to reflect the general political outlook of *Science for the People*. All articles are judged on the basis of length, style, subject and content. **Editorial Procedure:** The content of each issue is determined by unanimous consent of the collective. Where extensive rewriting of an article is required, the preference of the collective is to discuss the changes with the author. If this is not practical, reasons for rejection are sent to the author. An attempt is made to convey suggestions for improvement. If an article is late or excluded for lack of space, or if it has non-unanimous support, it is generally passed on to the next collective. **Editorial statements:** Unsigned articles are statements of the editorial collective. **Opportunities for participation:** Volunteers for editorial collectives should be aware that each issue requires a substantial contribution of time and energy for an eight-week period. Help is always appreciated and provides an opportunity for the helper to learn, and for the collective to get to know a prospective member. There are presently plans to move the magazine production to other cities. This will increase the opportunity for participation. For legal purposes *Science for the People* has become incorporated.

ABOUT THIS ISSUE

When our Editorial Collective was formed it appeared from our backgrounds, the topic of the magazine, and the general good rapport of the group that most of us had come to the group more as "people" than as "scientists." Our expectations were that working for a political magazine might add to our own political awareness, help solidify our political philosophy, and, most importantly, ground it in reality and concrete action. Unfortunately, these expectations have not been fulfilled. The reasons why are hard to define exactly, but we feel that many of them reflect problems within SESPA/SftP which rate serious discussion and consideration.

The first problem we came up against was that of a lack of time — we were two weeks behind the normal schedule before we even began meeting as a collective. The Magazine Support Group, we were told, was in the process of soliciting and preparing articles which would be given to us for final editing. The final copies were not given to us until mid-January, at which time many still needed extensive editing. This is not an indictment of the people in the Support Group, who were also working behind-schedule from the beginning, but because it raised serious problems early in our collective. We were left with a feeling of helplessness, not knowing what the articles were like or even what we were supposed to be doing, since none of us had been on an Editorial Collective before. At this point our initial burst of enthusiasm had begun to wane, and it was becoming harder and harder to come to meetings where we did virtually nothing.

A more important problem was that when we got the "final" articles at last, we found that in large part, when viewed as a whole, they did not reflect our outlook concerning the IQ controversy. (remember we did not solicit them). To us, many of them were merely tangential, in a political sense, to understanding the significance of the issue because no article really showed how people — especially poor and non-white people — can struggle against the class weapon of IQ. The stress of almost every article was on factors of ideology and ideological control.

The issue of whether intelligence is inherited or not is at times raised to the level of "ideological struggle" between bourgeois scientists and social scientists and those who base science on the interests of the working class and oppressed peoples. This approach, when viewed only in these terms, cuts the ideological struggle away from the class struggle taken as a whole — it separates ideology from politics and economics, and worse still, from people. Yet even those articles which do look at the IQ contro-

versy in more political and economic terms end without suggesting concrete action with which to fight and change the existing social structure which uses science, education, IQ tests, etc., to oppress and exploit people. Nowhere do the "experts" writing for this issue, the geneticists, statisticians, historians, economists, social scientists, who do point out the untruths presented by the "enemy", show how to deal with IQ type tests day to day, on the job, or in the classroom, or how to work towards the elimination of their use. Nothing is suggested on how black people can deal with the effects IQ scores may have on their lives. In other words, the members of SESPA/SftP have shown themselves as alienated from the people. They have indicated just who the enemy is, and how and where the enemy acts. But the battle lines have not been drawn, nor have strategies been outlined for present and future battles. After reading the articles, the letters, and other copy submitted, and after looking through back issues, the class base of SESPA is all too obvious. The majority of SESPA members work in white academic circles. Too often they speak as scientists to other scientists, rather than speaking to the working class. SESPA/SftP must come to terms with a fundamental question: how strongly rooted is it in the working class? This will answer the problem of whose battle is really being fought when we are speaking out on the IQ issue and its effect on oppressed and working people.

Perhaps we should have worked harder, rewritten more, talked to the authors, etc. But this leads us to a third and equally serious problem in SftP. We didn't know the authors, the members of the Magazine Support Group, Magazine Coordinating Committee, or even each other, since four out of five of us had never worked with SftP before. Not only did we not know how to proceed editorially, but most of us had at best vague and questionable ties to the organization and the magazine. Several of us were left with the feeling of having done the shit work — editing, typing, etc. — for an organization they had no allegiance to, because the "members" of the organization were too busy (something that led to not a few bad feelings).

In looking back we wonder why (and how) this issue of the magazine was finished. What good is our political analysis and scientific truth without action? What good is a \$50 vocabulary and the big ideas it obscures if nothing is done and no one is moved? In short, we feel that in order to become a more effective organization SftP must ground itself in the reality and concrete action which we ourselves were looking for when we began.

LETTERS

Dear Sir [?]:

Your November issue is a piss-poor second-rate job. Of course the events in Chile rate some space. But your prospective constituents comprise working engineers and scientists here in the United States. Yet you devote zero (ZERO) attention to their problems crying for discussion.

1. The government admitted 11,000 foreign trained engineers into the U.S. in 1972 when hundreds of thousands of native engineers 35 years and over were walking the streets. Of course the foreigners are paid 10%-50% less than Americans.
2. Despite "guidelines" promulgated by engineering societies, conditions of engineering employment are not published. One result is that oil and chemical plants force engineers to be strikebreakers.
3. Discrimination against engineers over 35, stimulated by fraudulent pension schemes, remains unchecked.

If you continue to disregard engineers' problems you will never get their support. Nor do you deserve to.

Sincerely,
Name Withheld

Dear SESPA people,

Thanks for the ten copies, they're going out to the Officers (yes, this now exists, the anti-army officer...) and GPs. We will try, when we have a spare moment (!) to see whether the paper can be ordered by army libraries.. there are quite a few librarians who try to "broaden" choice.

The "volunteer" army has meant less civilian support for rita (resistance inside the armed forces) GPs, but no decrease in militancy or resistance. Of course this takes forms that most civilian "leftists" hardly recognize, but then, how many civilian leftists ever meet a GI anyway? They should do some thinking about Chile, and priorities. Another thing hard to grasp for U.S. centered americans: rita is not (repeat NOT) an american-only phenomena, but has taken place in the last 6-7 years in every "highly capitalized" (a more objective word than "developed") country we know of, and increasingly rapidly. Pity there are no good sociologists in the GI support movement. Incidentally, there is some rita in the Israeli army, we'll hear more about that...tomorrow.

Solidarity,
rita f. act

Dear Sir [?],

I must request at this time that you remove my name as a SESPA contact in Vermont. The simple truth is, when I began to attempt to organize my colleagues here for the purpose of "social action" and consciousness of the political nature of scientific activities I found that they were turned off by the clearly Marxist bent of *SftP*. As a matter of fact, so was I. Most of us are aware of the need for scientists to be aware of politics, especially those of us in psychology. But Marxism is something quite different and generally unacceptable. Let me say that I have frequently supported your views and aims as they were reflected in your publications. I have also felt that much of the material published by *SftP* could have stood quite well on its own without most of the largely irrelevant digressions into Marxist theorizing (which have little practical value, and turn off many prospective supporters). I strongly support social change in the direction of democratic socialism in many areas of public concern. And, no doubt, I will continue to do so. Good luck in your own efforts.

Sincerely,
J.A. Mulick

We wonder what J.A. Mulick means by Marxism. For us it is a method of analysis and a framework that has enabled us to better understand the problems we in Science for the People face and the direction our political work must take. This perspective has been indispensable in helping us form a more comprehensive view of scientific and technical work—historically, ideologically, and politically. It has not been "something quite different, and unacceptable." In fact, Science for the People would not exist, but for the revolutionary understanding and historical tradition that Marxism gave birth to.

One of the "irrelevant digressions into Marxist theorizing" that we hope to undertake soon is an analysis of psychology, and especially behaviorism (the dominant orientation in psychology today). The practical value of such an analysis will be to aid in the struggle against the behavior modification technologies increasingly being used as instruments of political control. Hopefully this analysis will encourage psychologists to be more critical of the ideological and practical function of their work.

Dear Comrades,

Although we did not get anything like a SESPA chapter going here, *SftP* is present at many of the radical community's gatherings at S.J.

All of us are involved now in a Chile defense committee and labor support group which evolved as a quite pressing task. Your last issue [Nov., 1973] fit rather well into a Chile and Latin America conference on the first of December.

yours in struggle,
Heinz

continued on page 44

A NEW BATTLE IN AN OLD WAR

In the past five years, there has been a wave of ideological attacks by intellectuals on those who are without power and wealth—specifically blacks, the unemployed, the working class in general. This new wave has emanated from the elite universities and has been designed to prove that the “lower” classes are biologically and genetically less intelligent than their oppressors.

The doctrine of biological inferiority is an extraordinarily useful weapon in the constant struggle of those who have wealth and power against those who do not. For the possessing classes themselves it provides an ideal psychological justification for their position. Especially in countries and in eras where egalitarianism is part of the national myth, those who rule and who pass their ruling position to their children need to resolve the contradiction between the obvious fact of their power and the ideology of equality. What better way than to believe that they are the recipients of a special biological grace? For the government apparatus that serves the possessors, the doctrine of genetic inferiority of the poor provides the perfect justification for the failure of the egalitarian myth. If the poor owe their position in society to the inferiority of their genes, then there is no use in spending money on schools, in enforcing legislation against racism in the work place, in devoting public money and effort to altering the situation of blacks, the unemployed, the welfare recipients. After all, these people have an unchangeable situation, unchangeable because it is in their genes. Finally, and most important, the doctrine of genetic inferiority is designed to convince the oppressed themselves that their oppression is internal, that they are victims of their own biological inadequacies, rather than of the structure of social relations. If people can be convinced that their troubles are the result of unchange-

able biological forces within themselves, they will cease to struggle and will accept their fate. Nothing could be better calculated to assure the peaceful continuity of things as they are.

The notion of inherited superiority of the rulers over the ruled is not a new one. Indeed, it was one of the two pillars of justification for the inherited aristocracy of pre-industrial times, the other pillar being the grace of God. The superior blood of aristocrats was over and over again offered as the justification for their ruling position. Nor is the role of university intellectuals in providing a pseudo-scientific basis for the doctrine a new one. As Gar Allen's article (see p. 32) shows, geneticists and psychologists in elite universities have been among the leading proponents of racism and biological determinism since genetics and psychology first became academic disciplines at the beginning of the 20th century. Only the rise of Nazism temporarily forced geneticists and psychologists to abandon blatant racism and appear in a more liberal guise. But Nazism has been forgotten and once again the battle to prove the genetic inferiority of oppressed people has broken out.

But why now? Have some new scientific facts come to light about the inheritance of intelligence and ability, facts that have forced scientists, despite their misgivings, to re-examine the role of genes in determining social position? The answer is clearly “no.” The opening gun in the new campaign, the paper by Arthur Jensen in the *Harvard Educational Review* [1], was nothing but a rehash of the old results of psychologists and geneticists. The article by Richard Herrnstein in the *Atlantic Monthly* and his recent book [2], are merely Jensen's hash warmed over. Indeed, because of the confusion and contradictions spread by Jensen, Herrnstein and

others like them, we probably know *less* about the genetics of ability than before. There are no new facts worth speaking about, only the same old pseudo-scientific assertions about the genetic inferiority of blacks and the unemployed, with some new statistical manipulations to make them appear objective.

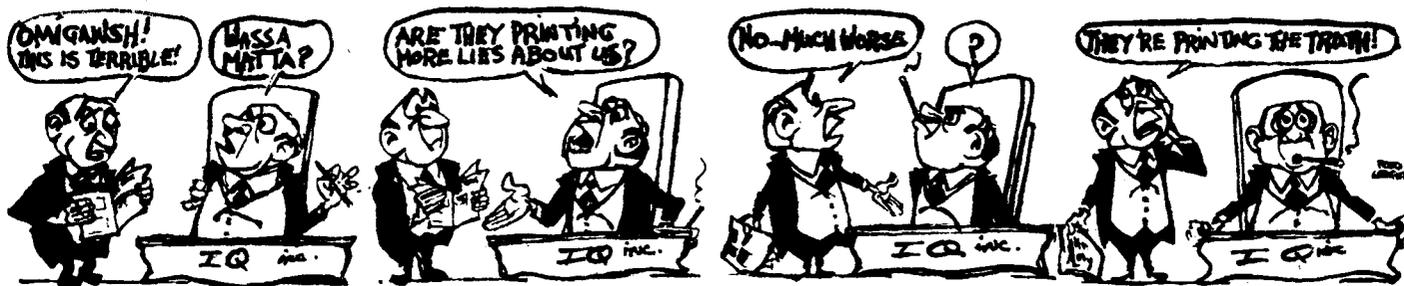
It is not in the development of science that we must search for the source of the new outbreak of a scientific racism. It is rather, in the social and political conditions of the last half-dozen years. When there is a sudden increase in the intensity of ideological attacks on blacks and the working class, we can be sure that these attacks are a response to some threat to those who rule, a threat that must be met by renewed pressure. There are, in fact, new and unprecedented pressures on both the scientific elite, who are the producers of the new academic racism, and on those who use these weapons: state and local governments, apologists for commercial and property interests, and those who control, own, and operate the American industrial enterprise. While different, these pressures are related and are manifestations of a general inability of American institutions to assert their authority and work their will.

University professors, who are the producers of the ideological weapons, have been faced over the last ten years with a serious threat to their authority in their own institutions. Having won the battle with administration and trustees, and having secured, at least in elite institutions, much of the control over the conditions of their work, they have suddenly been faced with a direct threat to their control and authority by students and by community groups outside the universities demanding a share in the decision making and control of educational institutions. The Columbia uprising, the repeated occupation of buildings by black students or dissenting white students, the successful pressures for open enrollment, or, at the very least, for an increase in black student enrollments, the open challenges to classroom authority when teachers engage in their usual obfuscations and half-truths, the demands for courses whose content and approach relates to the world as it really is, all have created panic or near panic among faculty members whose entrenched authority is threatened. And they have reacted. Just a few months ago, a meeting was held in Venice to plan a strategy of counter-attack. The meeting, organized and attended by such notables of reactionary academia as Ernest Van den Haag[3] and Sydney Hook[4], was for the express purpose of finding ways to reassert the lost authority of the

professors over rebellious students and to "raise academic standards" that have been lowered by the admission of blacks and other "unqualified" people into the universities. The struggle to preserve an old order of authority against a breakdown of consent and of old values has been the major and obvious preoccupation of elite academics for the last half dozen years. They perceive the breakdown of authority in their own institutions as symptomatic of a general challenge to authority in society at large. The unqualified, uninitiated, ignorant hordes are threatening. People no longer know their place. It is against this background that academics in elite institutions, like Shockley at Stanford, Jensen at Berkeley, Herrnstein at Harvard have initiated a campaign to rebuild the grounds of intellectual authority and to keep the vulgar masses out of their universities and out of power. To accomplish this purpose, these academics and their sympathetic colleagues have proclaimed that intellect is what matters in life, that intellect is a real and intrinsic attribute of individuals, and that differences in intellect are inherited and therefore unavoidable. It is on this argument that they rest their claim to their own unchallengeable superiority. The best people have brains. That's how they got to be the best people. And brains come from your genes so it's no use fighting it.

This ideology of inherited merit and brains that so suits the threatened academics, is a weapon that has been seized upon by the other institutions of society, especially the government, in their own struggle to protect the *status quo*. The academics are right when they say that the breakdown of campus authority is a symptom of a general impotence of constituted power. Because of a change in the world historical situation since the end of the last world war, the United States as a world power, and the ruling American elite within American society, are increasingly unable to cope with the challenges of oppressed people by the usual techniques.

The pressures on those who rule are not new. People in the dedeveloped countries of the world have been struggling for a long time against powerful nations who have controlled them politically and economically. The working class, the underemployed, the unemployed have been fighting for economic and political power in America for 150 years. But the situation has changed because the oppressed groups have new powers and new techniques, while those who rule are constrained by new political and economic forces. The total American frustration in Viet Nam is the most clear-cut example and has, in addition, contributed directly to the breakdown of authority at home. The



United States was unable to win a colonial war in South-east Asia because the Chinese revolution has created a style of popular liberation struggle many times more powerful than previous anti-colonial uprisings, and because the existence of a powerful socialist bloc, with its own nuclear arsenal, prevented the United States from using its real power, the atomic bomb. Years of frustrating losses in Viet Nam created a movement of dissent at home, of which only shadowy intimations were seen earlier in the Korean War, and more money has been poured into the military establishment as that establishment has become more and more impotent. This money must be diverted from general welfare, education, health and other public services for which demand is constantly rising. Excuses must be found for the withdrawal of funds from these projects. And an excuse has been found, manufactured by the educational psychologists. "The winds of Jensenism are blowing through the White House with gale force" we are told by Daniel Moynihan. He ought to know, being one of the great academic wind machines himself.

At the same time that money is to be saved from education and welfare, political credit is built up by the Nixon forces within large segments of the population who would not normally and naturally support the wealthy and powerful. This policy is carried out by placing the blame for the economic losses suffered by the working and lower middle classes on the shoulders of other members of the same classes. It is the standard ploy of playing off one group against another. It used to be the "native Americans" against the foreign born. Now it is "welfare chiselers" against hard-working people, blacks against whites, playing on the white backlash against the new black militancy. Every time black children are introduced into an all white school, a mothers' group to "save our neighborhood schools" is created, threatening and performing violence on black schoolchildren. Now those concerned mothers are armed with a new weapon by their allies in government—the black children are genetically inferior. This raises, subtly, the spectre of miscegenation and the genetic pollution of ethnic stocks.

Armed uprisings in American ghettos and demands by the poor and unemployed for their economic rights are not new phenomena. Industrial sabotage, workers' slowdowns, wildcat strikes are old features of American life. Yet these are all particularly frightening to the ruling elites today. First, black militancy has become much more widespread and constant. Rather than an occasional violent uprising in the urban ghettos, punctuating long periods of calm and apparent submission, recent black militancy has been in the form of continuing pressure, sometimes more violent, sometimes less, but always palpable as pressure on the ruling whites. There is no time for local governments to catch their breath and bring things completely under control. Second, labor militancy has increasingly passed into the hands of black workers, who have taken the place in the labor movement formerly held by immigrants. Thus a struggle against laborers' demands

has become increasingly a struggle against *black* workers who make up not only a progressively larger share of the industrial work force, but who are seen as the instigators of labor unrest. Third, there are new and surprising groups entering the battle. Teachers and other professionals who could formerly be counted on as the allies of those in power are now unionizing. The most threatening new unrest is among prisoners, more and more of whom are organizing, resisting, challenging the legitimacy of their imprisonment, seeing themselves as *political* prisoners. Again blacks are among the leaders and major participants in these prison uprisings.

The existence of a powerful Third World block whose economic and population power is ever increasing, makes it impossible for authorities to suppress black rebellion, Chicano resistance, and Indian uprisings in the ruthless way that was possible in the 1920's and 1930's. Juries over and over again refuse to convict militants accused of violence against organs of the state.

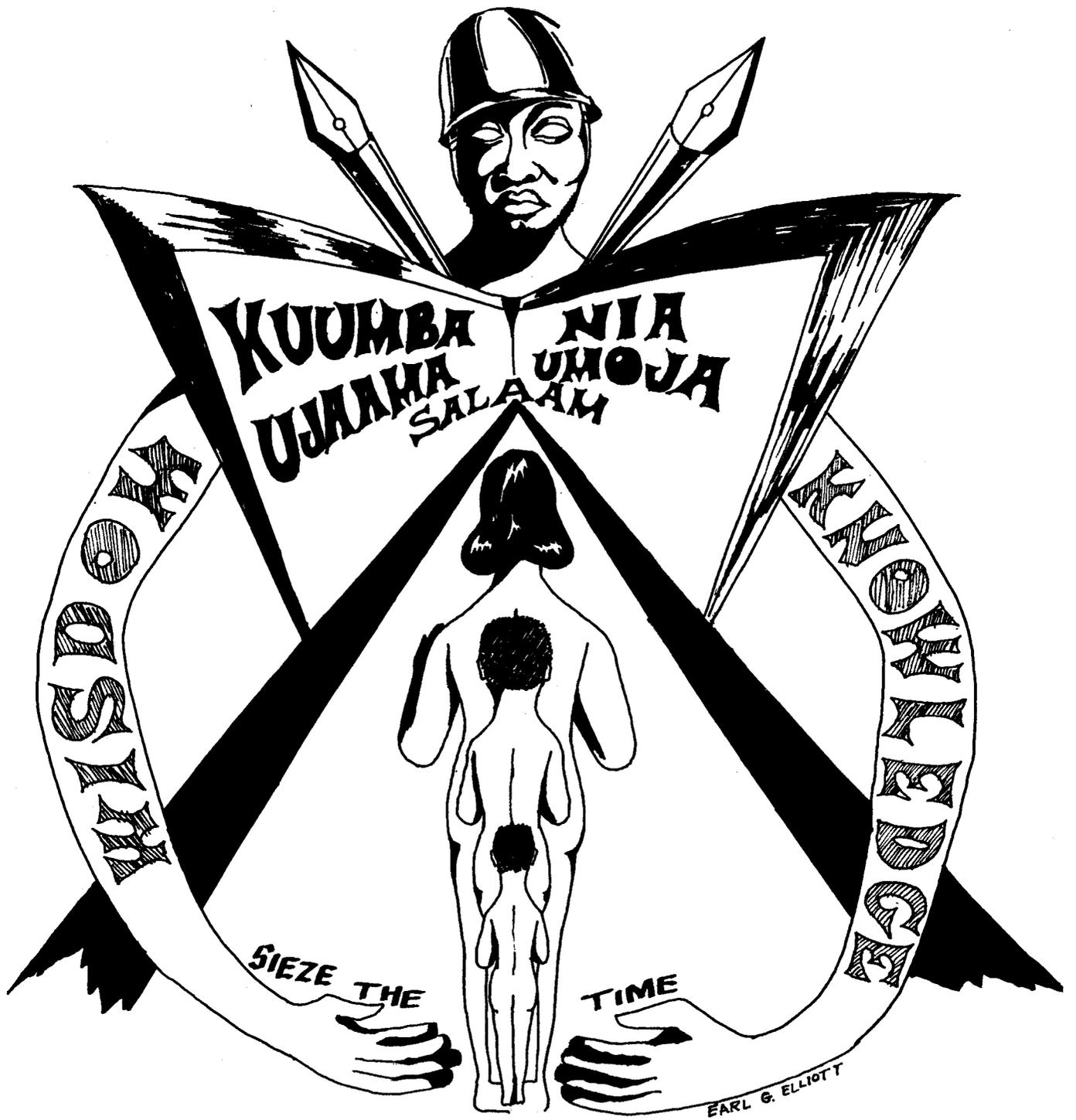
At the same time, the major expansion of competing industrial producers in Germany and Japan has cut strongly into domestic and export markets so that labor unrest is especially threatening. The U.S. balance of trade has been so unfavorable in recent years that the dollar price of gold has quadrupled. The ability to compete with foreign producers has, for the first time, become absolutely critical to the stability of American industry as a whole. This in turn means that labor unrest, interruptions of production, increased labor costs, are no longer simply reducers of profit, but they actually threaten the entire economic structure.

All of these elements are symptoms of a growing impotence of American institutions of power in their fight against the pressures which, in past times, they could resist and conquer. Thus, ideological weapons take on a new and vital importance for the ruling classes. If uprisings at home and abroad cannot be resisted by economic or military force, as they once could so easily, they must be prevented at their root. The wretched of the earth must be convinced that the fault lies within themselves, and that it cannot be remedied. This ideology is the bacteriological weapon in a class war, for if the disease of self-blame and inherent inferiority should successfully infect those who are struggling for their lives, they will lose all will to resist. Like other forms of biological warfare, it is a weapon that is released only when all others are failing. In the end, it, too, will fail.

R.L.

NOTES

- [1] Jensen, A. 1969. "How much can we boost IQ and scholastic achievement?" *Harvard Educational Review*, 39:1-123.
- [2] Herrnstein, R. "IQ," *Atlantic Monthly*, Sept.,
- [2] Herrnstein, R. "IQ," *Atlantic Monthly*, Sept., 1971. "IQ and the Meritocracy," Boston, 1973.
- [3] Van den Haag, a sociologist from N.Y.U., is a leading academic supporter of Nixon, a member of the Committee for Fairness to the President.
- [4] Hook, philosopher at N.Y.U., after his conversion from Marxism became a leading red-baiter and adherent of the C.I.A. sponsored Congress for Cultural Freedom.



kuumba — creativity
ujaama — cooperative economics

nia — purpose
umoja — unity

UNMASKING

THE IQ LIE

Jensen, Herrnstein and others have claimed that people's IQ is highly inherited and plays a large part in determining their "success" in later life. Their arguments can be broken down into the following points, none of which has any ground to stand on, as we shall demonstrate in the following articles:

1. IQ tests objectively measure something called "intelligence", which differs from person to person.
2. The ability to perform well on IQ tests is inherited.
3. Intelligence (defined and measured by IQ) is what determines people's socio-economic status in life.

From these points Jensen goes on to claim that the 15 point difference in the average IQ test scores between blacks and whites reveals a genetic inferiority of blacks, which he says makes compensatory education and other social programs doomed to failure. Herrnstein goes further to say that some people are born to be unemployed or poor since they are genetically inferior. Jensen, Herrnstein, and the others who push the IQ line find the source of society's social inequity in the genes of its victims.

In this section of the magazine we show the fallacies of all these arguments. "IQ and Class Structure" demonstrates that IQ is not a cause of success and that it is irrelevant to understanding the U.S. class structure. Next we explain what the IQ test really measures, and finally in the articles entitled, "Heritability: A Scientific Snow-Job" and "The Case for Zero Heritability" we show there is absolutely no basis for claiming that IQ is inherited.

So much for the claims of Jensenism.

IQ AND CLASS STRUCTURE

This article is based in part on an article by Herbert Gintis and Samuel Bowles, "IQ in the U.S. Class Structure," which originally appeared in Social Policy, vol. 3, nos. 4 and 5, Nov./Dec., 1972 and Jan./Feb., 1973.

The ideologues of IQ have been rightly attacked on the basis that their "scientific" claims are no more than distortions and lies. But those who attack Jensen, Herrnstein, and Shockley on this level often share with them an important underlying assumption. The assumption is that IQ is basically important to being an economic success in American society. Put another way, if you're smart, you'll succeed. Those who fail to analyze and attack this assumption are ignoring the essential political content of the entire IQ controversy.

In fact, IQ is not an important cause of economic success. Arguments about the heritability of IQ or what IQ measures are really irrelevant to understanding why some people are wealthy and successful and others are not. What *are* the causes of economic success, if not intelligence? And what part does IQ actually play?

During recent years many opponents of Jensenism have not addressed these crucial questions. They have rather ineffectively argued that IQ is affected by environment, and is therefore changeable. The answer, they say, is in progressive social reform—in providing equal opportunity by improving "disadvantaged environments." By sticking to an IQ-is-important-to-success basis, though, these reforms have had severe shortcomings. First, even though some programs have raised IQ scores, they have not increased the economic gains of their participants. There is continued militancy. Program planners then become disillusioned and end up putting the blame on the victims. Second, many "improved environments" for raising black IQ's are simply modeled after those of whites. This orientation seems to accept the idea that intelligence differences among whites of different class and environmental background are "natural." The meaning of IQ and the class structure of white society go unchallenged. And third, many of these program planners

accept the idea that society rewards people who are talented and smart by giving them better jobs, higher pay, etc. The corollary to this notion is that programs to eliminate unfair and unnecessary causes of lower IQ's will eventually lead to a stratified society based on intelligence alone. In fact, it would be even more absolutely stratified than now, but fairly so—since the "dumb" would be poor and the "smart" would be rich! As long as people think that IQ and intelligence are basic to success, and refuse to look at the source of the blatant inequities in the U.S. class structure, they will end up reinforcing these inequities every time.

Why have so few people questioned this basic, limiting assumption while practically every other part of the Jensen school has been blasted? The answer is that IQ serves an important function in maintaining the *status quo* for those who benefit from it by making it appear right and legitimate. IQ serves to detract from the real issues. Having a high or low IQ does *not* determine whether a person will be rich or poor; but it has made the privileged positions of the few appear more fair and acceptable.

IQ Doesn't Determine Success—The Evidence

The evidence presented in the following tables demonstrates that IQ is unimportant in determining who makes it and who doesn't. The data shows that IQ score and economic success do correspond; but there is also a direct relationship between years of schooling and economic success and between social class and economic success—more strongly than IQ. There is no logical reason for Jensenists to point to high IQ as the determiner of success. Why not schooling or social background? When each factor is considered separately to find out what has the most influence on becoming economically successful, we find that the influence of IQ is negligible. It only appears to affect economic outcome because it is attached to more important influences—schooling and social class. The following tables will demonstrate this clearly.

Table 1* Probability of Attainment of Different Levels of Economic Success for Individuals of Differing Levels of Adult I.Q.

		Adult IQ by Tenths									
		x 10	9	8	7	6	5	4	3	2	1
Economic Success by Tenths	10	30.9	19.8	14.4	10.9	8.2	6.1	4.4	3.0	1.7	0.6
	9	19.2	16.9	14.5	12.4	10.5	8.7	7.0	5.4	3.6	1.7
	8	13.8	14.5	13.7	12.6	11.4	10.1	8.7	7.1	5.3	2.8
	7	10.3	12.4	12.6	12.3	11.7	11.0	10.0	8.7	7.0	4.1
	6	7.7	10.4	11.4	11.7	11.8	11.5	11.0	10.1	8.7	5.7
	5	5.7	8.7	10.1	11.0	11.5	11.8	11.7	11.4	10.4	7.7
	4	4.1	7.0	8.7	10.0	11.0	11.7	12.3	12.6	12.4	10.3
	3	2.8	5.3	7.1	8.7	10.1	11.4	12.6	13.7	14.5	13.8
	2	1.7	3.6	5.4	7.0	8.7	10.5	12.4	14.5	16.9	19.2
	1	0.6	1.7	3.0	4.4	6.1	8.2	10.9	14.4	19.8	30.9

Table 1 shows the connection between adult IQ and economic success (the relation most often referred to by Herrnstein). Across the top, the table is divided in terms of IQ—from the lowest 10th of the population (1) to the top 10th (10). The same is done with economic success starting from the lowest 10th of the population up to the highest. The numbers in the slots correspond to how a sample population falls into these categories when their IQ's and economic success are measured and related to each other.*

In a survey of 100 people in the top 10th of the population for IQ, a person in that category would have a chance of being also in the top 10th economically approximately 30.9% of the time. This person's chance of being in the 2nd highest 10th of the population for economic success is 19.2%, in the 3rd highest, 13.8%, and so on. His or her chance of being at the very bottom while still being in the group of 100 with such a high measured IQ is only about 6%.†

Since the chances are randomly 10% that any individual will end up in any particular 10th of the population, we could also say that the person in the top 10th IQ rank

*Another way of looking at the numbers in the slots would be to say that of 100 people who are in the highest 10th of the population for IQ, 30.9 or about 31 of them will also be in the highest 10th economically. Or going to the far right side, only .6 people out of 100 who have an IQ in the lowest 10th of the population will also be on top economically.

†The perfect symmetry of the numbers in these tables occur because the results from the sample population are first calculated into a general correlation coefficient, and based on that number, then projected into the table's specific slots. The mathematics involved serve to give this balanced appearance, though the results are nearly exactly like the actual distribution of people for such a survey would be. We should also realize that the population used for these facts is one comprised of "non-Negro" males, aged 25 to 34, of nonfarm background. While that's obviously a selected & unrepresentative group, it nonetheless represents the dominant labor force in this country. So it's the one into which minority groups and women would have to integrate to get an equal chance by currently established standards. In this sense, it's an ironically appropriate group.

is 3.09 times (about 3 times) as likely (10% x 30.9) to end up at the top economically and .06 times as likely (10% x .6) to be at the bottom, than if IQ and economic success had nothing to do with each other. This is just another way of describing how much these two factors—economic success and IQ—will occur together in people.

So Table 1 illustrates the most immediate support for the IQ theory of social stratification—that high IQ and high level of economic success do have a strong association. On the other hand, Tables 2 & 3 show how misleading and narrow this statistical support really is. For when years of schooling (Table 2) and social class background (Table 3) are related to economic success, even stronger associations occur. For example, an individual in the top 10th in schooling is 3.76 times as likely to be also at the top economically and .01 times as likely to be at the bottom, while the corresponding numbers are 3.26 and .04 for social class background. These statistics could easily be used to draw up a "level of educational

Table 2* Probability of Attainment of Different Levels of Economic Success for Individuals of Differing Levels of Education

		Years of Schooling by Tenths									
		x 10	9	8	7	6	5	4	3	2	1
Economic Success by Tenths	10	37.6	22.3	14.6	9.8	6.6	4.3	2.6	1.4	0.6	0.1
	9	20.9	19.5	16.2	13.1	10.3	7.9	5.7	3.8	2.1	0.6
	8	13.5	16.1	15.3	13.8	12.0	10.1	8.0	5.9	3.7	1.4
	7	9.1	13.0	13.8	13.6	12.8	11.6	10.0	8.0	5.6	2.5
	6	6.1	10.2	12.0	12.8	12.9	12.5	11.6	10.1	7.8	4.0
	5	4.0	7.8	10.1	11.6	12.5	12.9	12.8	12.0	10.2	6.1
	4	2.5	5.6	8.0	10.0	11.6	12.8	13.6	13.8	13.0	9.1
	3	1.4	3.7	5.9	8.0	10.1	12.0	13.8	15.3	16.1	13.5
	2	0.6	2.1	3.8	5.7	7.9	10.3	13.1	16.2	19.5	20.9
	1	0.1	0.6	1.4	2.6	4.3	6.6	9.8	14.6	22.3	37.6

attainment theory" or a "socio-economic background theory" of social stratification since they are stronger than the correlation Herrnstein and the others use. Clearly, though, this is a case of selectively using numbers to prove one's own theory—which is just what they can do by using only the information found in Table 1 in his arguments. There are logical errors in using any of this data by *itself* to draw conclusions.

Tables 4-7 show how these factors (IQ, years of schooling, and social class background) contribute independently to a person's economic status, and to what degree. This is done by combining certain of the factors while holding one of them constant. For example, according to Jensen's claims, individuals who have the same social class background, but differing levels of adult IQ should fare quite differently in terms of economic success, depending on the amount of difference between their IQ's—the one with a higher IQ coming out better. Jensen would say that years of

Table 3* Probability of Attainment of Different Levels of Economic Success for Individuals of Differing Levels of Social Class Background

		Social Class Background by Tenths										
		x	10	9	8	7	6	5	4	3	2	1
Economic Success by Tenths	y	10	32.6	20.4	14.5	10.7	7.8	5.7	3.9	2.5	1.4	0.4
	9	19.7	17.5	14.9	12.6	10.5	8.5	6.7	5.0	3.2	1.3	
	8	13.8	14.9	14.1	12.9	11.6	10.1	8.6	6.9	4.9	2.4	
	7	10.0	12.5	12.9	12.6	12.0	11.1	10.0	8.5	6.7	3.7	
	6	7.3	10.4	11.5	12.0	12.0	11.7	11.1	10.1	8.5	5.3	
	5	5.3	8.5	10.1	11.1	11.7	12.0	12.0	11.5	10.4	7.3	
	4	3.7	6.7	8.5	10.0	11.1	12.0	12.6	12.9	12.5	10.0	
	3	2.4	4.9	6.9	8.6	10.1	11.6	12.9	14.1	14.9	13.8	
	2	1.3	3.2	5.0	6.7	8.5	10.5	12.6	14.9	17.5	19.7	
	1	0.4	1.4	2.5	3.9	5.7	7.8	10.7	14.5	20.4	32.6	

school and social class background only relate to success (Tables 2 & 3) because they are associated with higher adult cognitive (IQ) skills (i.e., people with more years of schooling and higher class background are also richer because they are smart to begin with). Table 4 shows that this is false. For in Table 4 individuals of equal education and class but differing adult IQ's do not vary too much at all in economic success; certainly much less than Table 1 would indicate they do (14.1% chance for the top in Table 4 as compared with 30.9% in Table 1). This indicates that the high relationship exhibited in Table 1 must be more due to the association IQ has with schooling and class than it does when measured as the primary cause, as in Table 4 (where its importance goes down). So although higher IQ's and economic success tend to go together, IQ's are not an important cause for this.

Table 5 deals with the role of schooling in promoting economic success when viewed independent of IQ. The IQ proponent argues that the reason schooling and econom-

Table 4* Differential Probabilities of Attaining Economic Success for Individuals of Equal Levels of Education and Social Class Background, but Differing Levels of Adult I.Q.

		Adult IQ by Tenths										
		x	10	9	8	7	6	5	4	3	2	1
Economic Success by Tenths	y	10	14.1	12.3	11.4	10.7	10.1	9.6	9.0	8.5	7.8	6.6
	9	12.4	11.4	10.9	10.5	10.2	9.8	9.5	9.1	8.6	7.7	
	8	11.4	10.9	10.6	10.4	10.2	9.9	9.7	9.4	9.1	8.4	
	7	10.7	10.5	10.4	10.3	10.1	10.0	9.9	9.7	9.5	9.0	
	6	10.1	10.2	10.2	10.1	10.1	10.1	10.0	9.9	9.8	9.5	
	5	9.5	9.8	9.9	10.0	10.1	10.1	10.1	10.2	10.2	10.1	
	4	9.0	9.5	9.7	9.9	10.0	10.1	10.3	10.4	10.5	10.7	
	3	8.4	9.1	9.4	9.7	9.9	10.2	10.4	10.6	10.9	11.4	
	2	7.7	8.6	9.1	9.5	9.8	10.2	10.5	10.9	11.4	12.4	
	1	6.6	7.8	8.5	9.0	9.6	10.1	10.7	11.4	12.3	14.1	

ic success are strongly associated in Table 2 is due to the fact that success depends on intellectual capacities (as measured by IQ). Yet Tables 2 & 5 are almost the same. When adults with equal IQs get a high level of schooling, they achieve only about the same level of economic success, as do adults with a high level of schooling and differing IQs (33.2% is highest in Table 5; 37.6% in Table 2—a negligible difference). Put another way, Table 5 shows that years of schooling does indeed make a difference on an individual's economic success, but that the intelligence factor that IQ may measure, accounts for an insignificant part of that schooling's influence. What you get rewarded for because you went to school x number of years isn't due to IQ. It may be due to what you learned there, or to the diploma you got, or to the particular socialization that went on. It must be some combination of these factors that school generates and rewards, and upon which it selects individuals for higher education, rather than IQ, that makes years of schooling significant.

Table 5* Differential Probabilities of Attaining Economic Success for Individuals of Equal Adult I.Q. but Differing Levels of Education

		Years of Schooling by Tenths										
		x	10	9	8	7	6	5	4	3	2	1
Economic Success by Tenths	y	10	33.2	20.6	14.6	10.6	7.7	5.5	3.8	2.4	1.3	0.4
	9	19.9	17.8	15.1	12.7	10.5	8.5	6.6	4.8	3.1	1.2	
	8	13.8	15.0	14.2	13.0	11.6	10.1	8.5	6.8	4.8	2.3	
	7	9.9	12.6	13.0	12.7	12.1	11.2	10.0	8.5	6.6	3.5	
	6	7.2	10.4	11.6	12.1	12.1	11.8	11.2	10.1	8.4	5.1	
	5	5.1	8.4	10.1	11.2	11.8	12.1	12.1	11.6	10.4	7.2	
	4	3.5	6.6	8.5	10.0	11.2	12.1	12.7	13.0	12.6	9.9	
	3	2.3	4.8	6.8	8.5	10.1	11.6	13.0	14.2	15.0	13.8	
	2	1.2	3.1	4.8	6.6	8.5	10.5	12.7	15.1	17.8	19.9	
	1	0.4	1.3	2.4	3.8	5.5	7.7	10.6	14.6	20.6	33.2	

Table 3 has already shown the strong association between class background and success. Table 6 shows that even if everyone had the same opportunity in terms of equal IQ, their social class would still serve as a good prediction of whether or not they would succeed economically. For example, suppose two individuals have the same childhood IQ, but one is in the 2nd highest 10th in social background, while the other is in the 2nd lowest 10th. Then the first is 7.4 (18.5/2.5) times as likely as the second to attain the top 10th in economic success.

We've seen in Tables 4-6 that the effects that IQ seems to have on economic success is really via its connection to years of schooling and social class. It is unimportant as a factor in itself. But let's go back to a table like Table 1 (a measure of the relationship between IQ & economic success)—but this time corrected in light of our new information—to see for sure. Suppose we now measure the effects of IQ on economic success, so that years of schooling and class background don't affect

Table 6* *Differential Probabilities of Attaining Economic Success for Individuals of Equal Early I.Q. but Differing Levels of Social Class Background*

		Social Class Background (adjusted) by Tenths									
		x 10	9	8	7	6	5	4	3	2	1
Economic Success by Tenths	y 10	27.7	18.5	14.1	11.1	8.8	6.9	5.3	3.9	2.5	1.1
	9	18.2	15.8	13.8	12.1	10.5	9.0	7.6	6.1	4.5	2.4
	8	13.7	13.8	13.0	12.1	11.1	10.1	8.9	7.6	6.1	3.7
	7	10.7	12.0	12.1	11.8	11.3	10.7	9.9	8.9	7.5	5.0
	6	8.4	10.5	11.1	11.3	11.3	11.1	10.7	10.0	9.0	6.6
	5	6.6	9.0	10.0	10.7	11.1	11.3	11.3	11.1	10.5	8.4
	4	5.0	7.5	8.9	9.9	10.7	11.3	11.8	12.1	12.0	10.7
	3	3.7	6.1	7.6	8.9	10.1	11.1	12.1	13.0	13.8	13.7
	2	2.4	4.5	6.1	7.6	9.0	10.5	12.1	13.8	15.8	18.2
	1	1.1	2.5	3.9	5.3	6.9	8.8	11.1	14.1	18.5	27.7

our results. Then, we'd have an accurate measure of how much IQ really does affect who makes it and who doesn't, independent of anything else. By factoring out the influence of the data in Tables 2 & 3 (schooling & class) from the IQ data in Table 1, we can approximate this hypothetical situation. Now we would be left measuring the situation Herrnstein refers to as the pure meritocracy. We have such a situation in Table 7. All that is left of the category Social Class Background in this data is the "pure trait" of intelligence as measured by IQ. Do the results fit with Herrnstein's vision of a highly stratified society based on differences in IQ? Hardly. Looking at Table 7, it's clear that such an IQ alone makes very little difference as to what happens to people economically. A person at the high end of the scale would have about the same chance of being at the top economically as a person at the low end, in terms of IQ ($10.6/9.4 = 1.07$)—about the same as might be predicted by chance. The difference among people in this table are low indeed as

Table 7* *The Genetic Component of Intergenerational Status Transmission, Assuming the Jensen Heritability Coefficient, and Assuming Education Operates Via Cognitive Mechanisms Alone*

		Social Class Background by Tenths									
		x 10	9	8	7	6	5	4	3	2	1
Economic Success by Tenths	y 10	10.6	10.3	10.2	10.1	10.0	10.0	9.9	9.8	9.7	9.4
	9	10.4	10.2	10.1	10.1	10.0	10.0	9.9	9.9	9.8	9.6
	8	10.2	10.1	10.1	10.1	10.0	10.0	9.9	9.9	9.9	9.8
	7	10.1	10.1	10.1	10.0	10.0	10.0	10.0	9.9	9.9	9.9
	6	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
	5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
	4	9.9	9.9	9.9	10.0	10.0	10.0	10.0	10.1	10.1	10.1
	3	9.8	9.9	9.9	9.9	10.0	10.0	10.1	10.1	10.1	10.2
	2	9.6	9.8	9.9	9.9	10.0	10.0	10.1	10.1	10.2	10.4
	1	9.4	9.7	9.8	9.9	10.0	10.0	10.1	10.2	10.3	10.6

far as economic outcome goes. There seems to be very little correspondence between the categories of IQ and economic success, as soon as schooling & class background have been factored out. So, even if your parents had transmitted you their IQ, it alone would have little to do with the money & status you have now. A test score isn't going to be anyone's key to success.

The Function of IQ

If IQ performance is not the basis for people's economic success, then what function does IQ serve? The IQ test is one of a battery of devices used in schools to separate kids out and put them into different educational tracks according to their class and racial background. It is a predictor of success and status simply because it is one of the many tools used to maintain the existing class structure in our society. But beyond this, and more broadly, IQ serves to legitimize in people's minds the unequal way that jobs and wealth are divided. Its use helps to perpetuate the belief that people who are on top got there because they had the intelligence to make it. IQ thus plays an important ideological function.

The need for IQ as an ideological instrument stems from the nature of the U.S. economic and political system. People are raised believing that theirs is a country of democracy and equality, yet every day of their lives they experience a very different reality. Their livelihoods are in the hands of those who purchase and exploit their labor—those who hire, fire, and lay them off at will. Those who determine what their work shall be, what is produced, how fast, in what place, under what conditions. Workers in the U.S. are confronted with alienating and meaningless work and with a hierarchy of bosses who use economic insecurity as their coercive whip. They know exploitation as death from black lung, forced overtime, union busting, the blight of Appalachia, the squalor of urban ghettos.

Work is not democratic and it is not equal. In this advanced capitalist society, work is characterized by extreme division of labor, not only in terms of the fragmentation and specialization of jobs, but also in terms of the division of power and authority. The entire hierarchy, from boss through manager, supervisors and foremen, and worker—on down the line—does not much resemble the democracy and equality that people hold so dear. In the face of such a blatant contradiction, the totalitarian nature of the capitalist form of production must be justified and made acceptable. Ideology must do what force alone could never accomplish.

The justification for this structure, for this system of production, is that it is "technically necessary." The management and supervision of this massive productive apparatus must be reserved for the few people who have the knowledge and ability to handle the task. Those of lesser skill should be lesser managers, and so on. Higher salaries and status are fair reward for the people who have the training and education to assume positions of power;

and these positions, the argument goes on, are won in a fair and freely competitive way by those with merit and intelligence, as measured by and reflected in their years of schooling. Their education is in turn dependent to a large extent on being bright—that is, having a high IQ. Eventually the whole arrangement, from kindergarten through retirement has been justified!

The insidiousness of this argument is that it is more or less believed even though people's direct experience is not one of being selected simply on the basis of merit or "intelligence." It is doubtful that experience in the workplace itself could ever make people believe in and accept the way jobs, salaries, and power are determined or distributed. The task of carrying out this ideological indoctrination is the primary function of the educational system, and IQ is one of its tools.

The view that people's economic success is dependent on their intellectual achievement is created and constantly reinforced in the schools. Schools are seen as oriented toward the production of intellectual skills, rewards (grades) are seen as being objective measures of these skills, and levels of schooling are seen as a major determinant of economic success. The apparent objectivity of IQ—of testing, grading, and tracking—all these experiences, however unobjective and class biased they may really be, begin to reconcile children and parents to the belief that it is "intelligence" that is counted and rewarded.

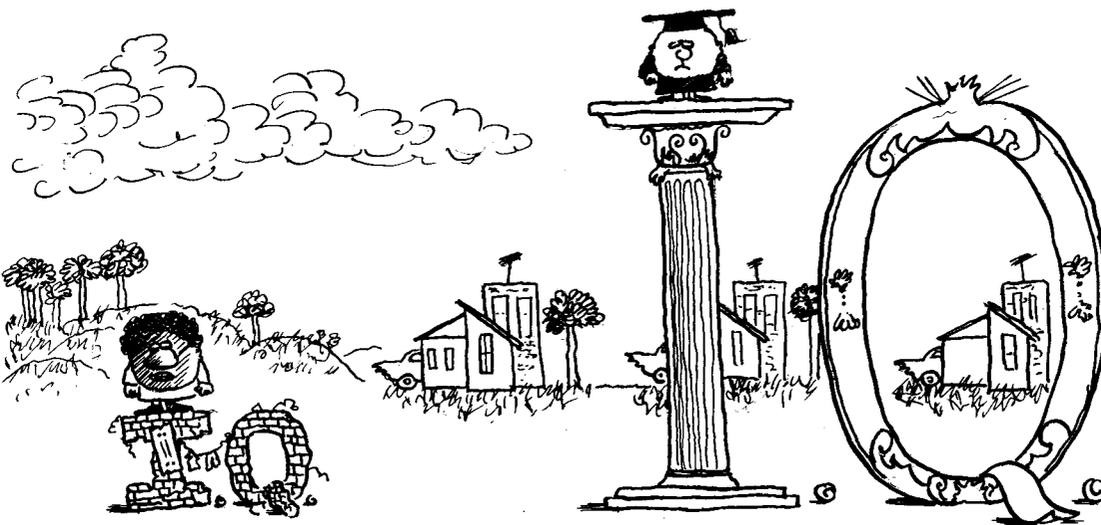
But while on the surface, the school is oriented toward the development of cognitive abilities, achievement is actually dependent on motivation, perseverance, sacrifice, and a host of other factors related to students social and economic background. By many years of testing, by gradually "cooling out" students at different educational levels, schools insure that students' aspirations are brought into line with their probable occupational status. By the time most students finish school they have convinced themselves of their inability or unwillingness to succeed at the next highest level. Through competition, success, and defeat in the classroom, people become reconciled to their class position in our society.

The Role of Education

That schools have served to condition people for their roles within the system of production can be seen from the historical development of education in the U.S. The common notion is that mass education developed as modern industry became so complex, its workings so intellectually demanding, that an increasingly intelligent labor force was needed to run it. But the history of the rise of universal education does not support this view, which puts the cart before the horse. In the West and South for example, mass education began before the growth of skill-demanding industry; it arose rather with the system of wage-labor agricultural employment, before mechanization took place. The development of the modern educational system has in reality grown from a coordinated attempt to provide the U.S. with a disciplined labor force. As a cotton manufacturer wrote to Horace Mann, then Secretary of the Massachusetts Board of Education, in 1841:

I have never considered mere knowledge . . . as the only advantage derived from a good Common School education . . . (Workers with more education possess) a higher and better state of morals, are more orderly and respectful in their deportment, and more ready to comply with the wholesome and necessary regulations of an establishment . . . in times of agitation, on account of some change in regulations of wages, I have always looked to the most intelligent, best educated and the most moral for support. The ignorant and uneducated I have generally found the most turbulent and troublesome, acting under the impulse of excited passion and jealousy.

As capitalism developed in the U.S., as small-scale enterprises gave way to corporations, as farm workers, blacks, and the millions of immigrants swelled the ranks of the urban workforce, and as labor militancy and the pub-



lic welfare burden developed, the educational system responded to the new demands. For example, as more and more working-class and particularly immigrant children began attending high schools, the older democratic belief in the common school—that the same curriculum should be offered to all children—gave way to the “progressive” theory that education should be tailored to the needs of the child. But in fact, these “needs” were a euphemistic expression for vocational schools and tracking for the children of working-class families. The more academic curricula got saved for those privileged enough to go on to college and white collar jobs. A system of guidance counseling gave a voluntary feeling to this process. Around the same time, as well, the eugenics movement and its theories of ethnic inferiority supplied the rationale for these changing educational programs. And then, mainly after World War I, these developments were finally rationalized by another “progressive” reform—“objective” educational testing; that is, the IQ test.

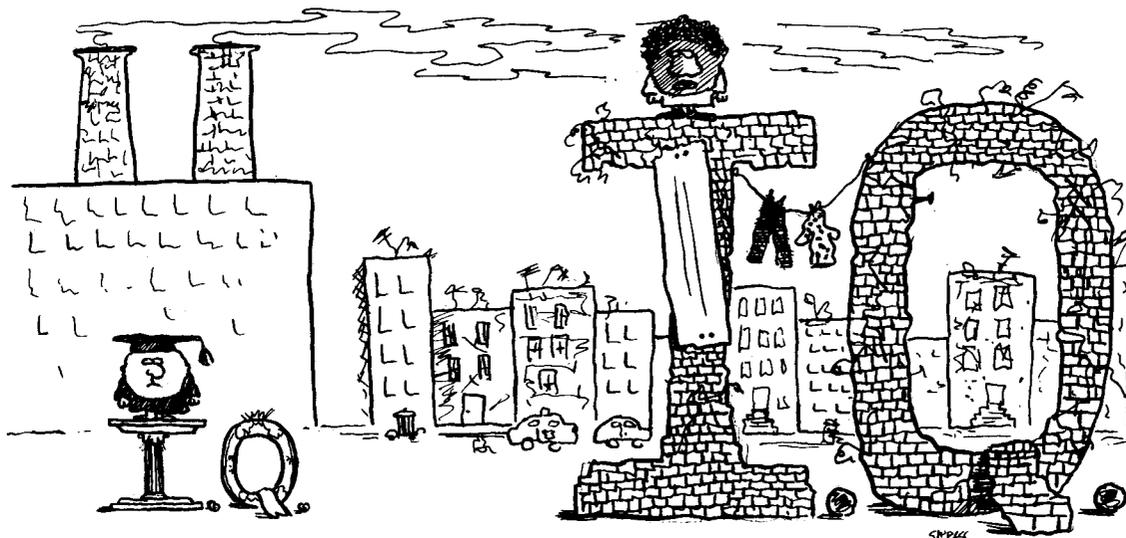
Thus it is a false notion that the school system has functioned primarily to promote the intellectual skills needed for a technically more advanced system of production (See Andre Gorz, “Technical Intelligence and the Capitalist Division of Labor,” *SftP* vol V, No. 3, May, 1973). Intellectual skills are more nearly a by-product. What the schools produce is a labor force matched to the demands of the hierarchical division of labor of U.S. productive enterprise. The different levels within this hierarchy demand different worker characteristics, and it is the purpose of the educational system to sort people out accordingly. Not surprisingly these characteristics themselves correspond to various class backgrounds—and so what the educational system actually does is reproduce the existing class structure of American society.

Of course employers don't directly ask for class background on job forms. But, then, they don't have to, since the characteristics more acceptable for different kinds of jobs are clearly associated with class status anyway. These characteristics are: personality traits (are you motivated, obedient, tactful, flexible, etc.); ways of be-

having (how you look, speak, who you associate with and how); race, sex, and age; and credentials (level of education and work experience). Each one of these characteristics is important in determining where a person will be placed on the job ladder. The inequalities that come from using these characteristics to place people are not the result of irrational and uninformed employment practices. They are necessary. They are used by those in control to keep things working smoothly, and would only be changed by employers if a change would help insure the objectives of profitability and control. These are the traits, then, beyond IQ (inherited or not) that account for a person's economic success. And they are ultimately traits that are identifiable not to individuals alone as much as to social class.

How do people come by the various traits that are needed within the capitalist system of production? Of course race and sex are acquired at birth, and aging is inescapable, thus far. Acquiring credentials means surviving the school system. But the acquisition of the right personality traits and behaviour are largely the results of processing by the school system (and family).

The structure of school is similar in many ways to the structure of the work hierarchy. The different levels of authority in school systems—with their rules, tracking, age divisions, grades and sex distinctions (shop, home economics, physical education)—all make the transition into the workforce fairly smooth. Students develop the traits in school which correspond to those required of them on the job. But, the school experience emphasizes different traits in different students depending on which rung on the job ladder they are headed for. So, for example, the heavy emphasis on obedience to rules and lack of independence in many high schools will fit what an employer needs of someone for routinized, assembly-line type of work. A four-year college experience, on the other hand turns out a person with different expectations and characteristics. A middle-class suburban high school and a ghetto high school, a four-year college and a junior college, all differ in the traits and behaviors they reinforce.



The different patterns in schools attended by students from different social classes, and even within the same school, are no accident. The educational objectives of administrators, teachers, and parents—and the way kids respond to the various teaching methods and controls) differ for students of different social classes. These differences are strongly affected by economic status: it's clear that money for schools of working-class and black children is scarce compared to those for the wealthy; so innovative teaching, small classrooms, free time and space, flexible environments are much harder to come by. Because of these conditions, kids in poorer schools usually get treated like raw material on the production line—obedience and punctuality are emphasized over creative work and individual attention. And the emphasis, as we've seen, corresponds to the traits for the job slots these kids will occupy.

So it is these non-intellectual, non-IQ factors, related to social class experience, that are reinforced by schools and transmitted over generations. They are qualities demanded and used by the structure of work in America; and their influence on an individual's economic success is decisive. For the very reason class differences exist, efforts to reform schools, create new programs, give more financial aid, etc.—while important demands in and of themselves for children in school—cannot alone change the chances for economic success kids will have.

IQ and Class Structure

Those who attack Jensen, Herrnstein, and Shockley, but who don't attack the idea that "smart people are the ones who make it to the top," are themselves perpetuating the ideology of IQ. By not analyzing and exposing the origins of the U.S. class structure and the roots of the existing division of labor, they give credibility to the notion that the present system of production and exploitation are "technically necessary." When academics and intellectuals fail to attack the systemic basis for inequality in our society, they are really defending their own elitist and privileged positions.

As we've seen, the function of education, with the help of IQ, is to achieve the division of labor into workers managers, teachers, housewives, engineers, etc., so necessary for the efficient functioning of the economy. But where do these categories of labor come from? What relationship is there between the system of production and the class stratification that the ideologues of IQ claim is inevitable?

The extreme inequities in this country, whether in income, wealth, access to health care, decent housing, conditions of work, racial discrimination, or any number of others, are not a consequence of the best use of people's talents, nor the inevitable product of human nature. They are structural features of the system of production. They stem from a form of economic organization in which the vast majority are forced to offer themselves as employees to the small fraction of American

people who own and control the resources of the society. The capitalist system of production defines not only the categories of labor, but also its use, according to what is necessary to maintain the vitality and longevity of the present economic system.

This system is organized for maximizing profit, and that includes growth of productive capacity, markets, and economic control. This goal is of prime importance in the manipulation and division of labor, in the creation of wage differentials, and in the limitation of social mobility. Division of labor because specialization means efficiency for the owner of labor, and fragmentation, separation, and powerlessness for the worker. Wage differentials because they provide the incentive for advance. Limited social mobility because it guarantees a reservoir of low cost labor. Unemployment and depressed wages to blacks, women, young people, and other minority groups are institutionalized in the system. The owners and managers hold the power of hiring, firing, establishing production priorities, and disposing of profits. The government, agent of capitalist interest, reinforces these practices through taxes, subsidies, labor legislation, and military force.

These, then, are the roots of social stratification—not intelligence or heredity. To explain the inequalities in our society requires us to understand the social organization and internal dynamics of capitalism. The variety of incentives, the use of IQ, and other methods of manipulating labor are tied up with the ideology which supports and rationalizes this system of production. While these relationships are complex, one thing is sufficiently clear: modern capitalism is abusive, oppressive, and irrational. People labor to produce waste or trivia, and those who produce the least of social value are the ones who reap the greatest rewards—economic and social standing depend on people's utility to the system and its ruling class, not their utility to other people. Bankers and money handlers manipulate capital, managers manipulate labor, corporate executives manipulate the market, government bureaucrats and executives manipulate people. These servants of capital reap high rewards while people's needs for food, health care, and decent housing go unmet (unless these generate profit).

People are reduced to mere commodities. Their creativity, humanity, and desire to be socially productive, are drowned in the competitive struggle for economic survival. The actions of both managers and workers are reduced by the demands of capital to mechanistic responses. At worst these actions involve the brutal murder or starvation of large masses of people; at best they mean the institutionalized violence of disease, slum life, and financial insecurity.

It is in the defense of this diseased system that IQ has raised its ugly head. And it is in the destruction of this system—in the struggle to create a humane and just society—that the IQ ideology must be buried. Not only must IQ disappear, but so too must the brutal class system which created it.

J.S.

WHAT IS THE IQ TEST ??

The material in this article came in part from the Progressive Labor Party pamphlet, Racism, Intelligence and the Working Class.

Jensen and his cohorts' claims concerning the heritability of intelligence are based on measurements of performances on IQ tests. It is assumed that IQ measures some trait called "intelligence" which differs from person to person, and which is an index of success in school and later life. But what, after all, is this "intelligence" except for a measurement of a certain type of behavior, (performance on IQ tests), and how can we say that a certain type of behavior is "correct" or "smart" without considering an individual's past experiences in similar situations. For example, from the point of view of black working-class children (who go to miserable schools with racist administrators and sometimes teachers as well, who are forced to read books depicting white middle-class people and to learn racist history, and who will probably end up unemployed or in a poorly-paid job with horrible working conditions) what kind of school behavior is "intelligent"? Is it not more reasonable for these children to rebel against the school authorities than to remain docile and work hard at school? When such children are given an IQ test, is it not a completely reasonable response to treat the test and tester as further examples of a racist school system? Obviously such children would not get very high IQ scores, since they would not be motivated to try very hard on the tests, but isn't that a sign that they are really very aware of the world around them? Deciding what type of behavior is termed intelligent is an extremely political act, and the desired behavior will merely be the kind which is approved of by the prevailing social system.

Political assumptions enter into intelligence testing in even subtler ways than the above. Every type of measurement presupposes some form of distribution of intelligence. For example, it would be quite valid scientifically to develop a test which 99% of the population would pass, indicating that 99% of the population were "intelligent," and 1% or so were mentally defective. Such an approach would not attempt to find little differences in how people think and behave and translate them into IQ difference, but would assume that intelligence is an attribute of the normal functioning human, while a small proportion of population is retarded. This approach, however, would not be at all useful for those who rule America, because if 99% of the population were about equal in intelligence, why should there not be equality in society as well? Present IQ tests magnify differences among people, and in fact, potential tests which did not reveal these differences have often been rejected.

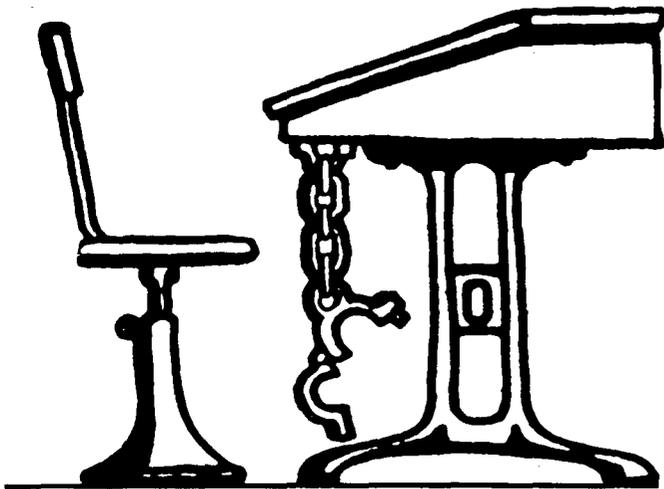
The reasons for this can be found by examining the people who have made up intelligence tests. Historically they have been racist, anti-working class, and pro-capitalist in their beliefs. Their tests have been designed to rationalize these beliefs, and to show that those who ruled society, and those who did well in it were the best, the smartest, and the most moral people. That the early intelligence testers thought that the ruling class of the time were the most intelligent people in society, and that it was by virtue of this intelligence that they had attained their position is shown in the following quote from Edward L. Thorndike, an educational psychologist.

It is the great good fortune of mankind that there is a substantial positive correlation between intelligence and morality, including good will towards one's fellows. Consequently, our superiors in ability are on the average our benefactors, and it is often safer to trust our interests to them than to ourselves. No group of men can be expected to act 100% in the interest of mankind, but this group of the ablest men will come nearest to the ideal. [1]

Not only did the early testers love and admire the ruling class, they also despised and looked down upon the masses, especially the black masses. James McKeen Cattell, the father of the testing movement in America and long time editor of *Science* and *Popular Science Monthly* expresses these feelings well:

The main lines are laid down by heredity—a man is born a man and not an ape. A savage brought up in cultivated society will not only retain his dark skin, but is likely to have also the incoherent mind of his race. [2]

Terman, who sired the famed Stanford-Binet Intelligence Scale, was also a *thorough going* racist and eugenicist. Further, he predated Herrnstein by 55 years in claiming that occupations and IQ were causally linked. He pro-



vided a list of numerous occupations and the corresponding mean IQ, and urged that students with those IQ's be channeled into courses whose curricula were designed to provide training for the student's prospective occupation. In this way, IQ became the rationale for inferior and oppressive education for millions of blacks and other working-class children.

As these people identified with the interests of the ruling class, they would obviously try to define intelligence and devise a test which would make those who were rich and powerful come out as the smartest. Francis Galton was one of the first to attempt this. In 1869 he wrote a book called *Hereditary Genius*, claiming that intelligence was inherited, and that the British ruling class had more of it than anyone else. Eventually he made up a test concentrating on measuring what he thought intelligence was, traits like "memory" and "sensory-motor development," and tried finally to correlate the results with "eminence" in science and society. His correlations were about zero[3] since he could find no skill on which the rich did better than the average British person. This did not stop him, however, from going on to develop new tests. In America James M. Cattell made up similar tests, but for him, too, the correlations between subjects' scores and success in life "were disappointingly low." [4]

A further problem for these people was that the early tests did not show black people inferior to whites any more than they showed poor whites as inferior to rich whites. It was often possible, however, to reinterpret test results in order to come to these desired conclusions. For example, R. Meade Bache, in a paper on "Reaction Time with Reference to Race," found that both Blacks and Indians reacted faster than whites, but claimed that the whites' "reactions were slower because they belonged to a more deliberate and reflective race." [5] There were a number of other failures of this type which the testers could hardly disguise. A statement by Thorndike in 1903, however, reflects their general attitude: "The

apparent mental attainments of children of inferior races may be due to lack of inhibition, and so witness precisely to a deficiency in mental growth." [6] So much for "objective" science and its results.

This failure to develop a test which would differentiate rich white people from the poor, the black, and the immigrant, was especially significant in view of the trouble racist anthropologists were having at the time. Up until this time, the "turn of the century" theories of racial inferiority had been based upon physical anthropology, the practice of measuring the differences between various groups of people. They measured such things as the ratio of the length of the arms to the length of the body, the ratio of the length of the heel to the leg, the facial angle, the size and shape of the brain, etc.—measurements were designed to prove that blacks were closer to apes than to men. But these theories were beginning to be doubted by many scientists, as well as by the general public. For a time, comparing physical characteristics had been the major method of justifying racism, but by 1909, R.S. Woodworth, Chairman of the Anthropology and Psychology division of the American Association for the Advancement of Science was writing, "We are probably justified in inferring from the results cited that the sensory and motor processes and the elementary brain activities, though differing in degrees from one individual to another, are about the same from one race to another." [7] Clearly, from a racist point of view a better measurement of racial differences and a better basis of racist ideology was needed. The IQ test's time had come.

The honor of coming up with such a test belongs to the French psychologist Alfred Binet. Binet's approach was to avoid an explicit definition of intelligence, and instead to simply assume that whatever intelligence is, it develops with age. If a child performed as well on a test as the average child in his or her age group, then he or



she was considered normal. If the child did better on the test than the average in that age group, his or her mental age was said to be greater than the chronological age and *visa versa*. Herrnstein explains approvingly,

As Binet well knew, the chronological approach to intelligence finessed the weighty problem of defining intelligence itself. He had measured it without having said what it was. It took a while to know whether the sleight of hand had in fact yielded a real intelligence test or just an illusion of one. [8]

At first it might seem from the above that those who would come out on top in Binet's test would simply be the more advanced children of their age group, but this is only half the story. The children who came out on top were also the children who did well in school and who were from the upper classes. Were they really the more intelligent children, or were the tests rigged in such a way as to favor the upper classes? The answer is that the tests were rigged, for the test items which were selected were not simply random items nor were they items which simply the majority of children at an age level passed. If the majority passing the item included those students judged by the teacher to be "dull," and excluded those children judged to be "smart," the item was not used in the test. Herrnstein explains this aspect of Binet's method this way:

"He took some children rated by their teachers as the brightest and the dullest in a grade and subjected them to a lengthy series of tests, going from simple sensory discrimination to arithmetic and perceptual speed tests. A number of the tests worked, which is to say they distinguished between the two groups of children."

The circularity of this method is obvious, Binet's test merely tested some quality which was approved of by teachers, and the teachers' opinions were surely based as much on the social behavior and attitude of the children as on their innate "intelligence." Again we see that the so-called intelligence tests really measure acceptable behavior, and that what is termed acceptable is socially and politically determined.

An example may make this clear. Scores on the Binet test do not correlate well with school success if the tests are taken below the age of six or seven; therefore from the point of view of the testers, these tests are less "reliable." Out of the six tests given at age three, four of them are "Copying a circle," "Drawing a vertical line," "Stringing beads," and "Block building-bridge." While these items might tell you which three year olds are not doing as well as others chronologically speaking, an upper class, highly motivated child would not enjoy much of an advantage on such tests. Therefore the scores obtained do not generally correlate well with later school

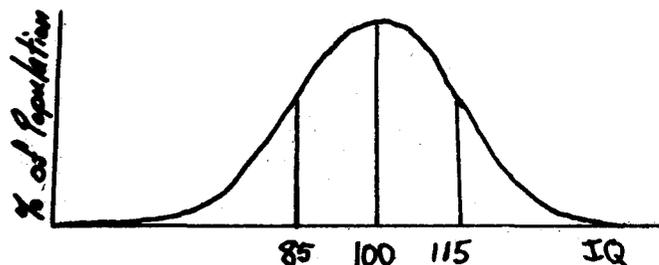
success. As a result, these "performance" type tests are dropped from the kinds of tests given to older children. As the testing manual for the Stanford-Binet Scale says,

Many of the so-called performance test items tried out for inclusion in the scale were eliminated because they contributed little or nothing to the total score. They were not valid items for this scale. [9]

In other words, when the results on this type of test were checked with teachers' ratings, they did not match, and the test was discarded. In fact, the better a test was in sorting out the children the more it was used.

This process of making the scores come out the way the testers want them, with the proper distribution and with the upper class children on top and the lower class on the bottom, is called "standardization." A test is standardized on a population by adjusting the scores so as to make it come out with a mean of 100 and a standard deviation of 15 (see graph). If a test is given to a population and the mean (average) turns out to be less than 100, then the testers change the scoring standards, making it easier and raising the average to 100. The scoring methods, and hence the average scores, can be changed by adding or dropping items that are either too hard or too easy, or by changing the relative value of the different items on a test.

On the original Stanford-Binet test published by Terman in 1916, women were not treated as a separate population and standardized for, and their scores were about 10 points lower than men's until 1937. Then, for the new version of this test, the means of men and women were compared, and the test was standardized for sex. Questions were added on which women did better than men and some of the ones on which men did better than women were dropped. In this way the averages for men and women were equalized.[10] The decision whether or not to standardize in order to wipe out group differences is a purely political one. Terman decided to eliminate the differences between men and women in the 1937 revision of the test, but the differences between blacks and whites and between upper and working classes have never been eliminated. Why?—Because, claim the testers, the predictive value of the tests would be lessened if black and white, and working and upper class averages were equalized by standardization.



The example of women is again relevant. When women were equalized on the test, the predictive power was lessened then as well. On the revised version of the test, women did as well as men, but because women are not treated equally in society, the test lost some of its ability to predict who would do well and who would do poorly in later life. As long as America is a male-chauvinist society, equalizing male and female scores on IQ tests will lower the predictive value of the tests. In just the same way, as long as racism keeps black people in the worst jobs at the lowest rates of pay, any attempt to equalize black-white scores will lower the predictive power of the test. This shows that the tests are designed to reflect prevailing class relationships and to prove that those on top are smart and those on the bottom are dull. Tests can be designed to reflect anything the designer wants, and racist and anti-working class assumptions have guided and determined the results of the IQ test.

In summary, we can see the following weaknesses and fallacies in the IQ tests.

1. "Intelligence," as measured by these tests, is never defined, but as we have seen is related more to behavior than to any innate quality. The desired behavior, such as "willingness to conform and obey," "respect for authority," etc., is determined by ruling class norms and ideals.

2. Questions on IQ tests are "loaded" to favor middle and upper class children. Tests which do not distinguish between groups are discarded.
 3. The tests were in fact *designed* with the express purpose of finding differences between people or groups of people. Differences in performance can be eliminated (men vs. women), so that the differences being measured are not absolute, but depend on the questions being asked. The decision of whether or not to eliminate any group differences is purely a political one.
- S.C.

NOTES

- [1] Thorndike, "How May we Improve the Selection, Training, & Life-Work of Leaders?" *Addresses Delivered before the 5th Conference on Educ. Policies* (N.Y., Teachers College, Columbia Univ., 1939) p. 32.
- [2] James McKeen Cattell, *James McKeen Cattell: American Man of Science*, Vol. II, (Lancaster, Pa., 1947) 165.
- [3] Shultz, *History of Modern Psychology* (N.Y., 1969).
- [4] Shultz, p. 121.
- [5] R. Meade Bache, "Reaction Time with Reference to Race," *Psychological Review*, Vol. II, No. 5 (Sept. 1895) 474-486.
- [6] Thorndike, *Educational Psychology* (New York, 1903).
- [7] R. S. Woodworth, "Racial Differences in Mental Traits," *Science*, Vol. 31, (1910) 179.
- [8] Herrnstein, *IQ in the Meritocracy* (Boston, 1973) 67-67.
- [9] Merrill & Terman, *The Stanford-Binet Intelligence Scale: Manual*, (Boston, 1960), 8.
- [10] Merrill & Terman, *Measuring Intelligence* (Cambridge, 1937). 34.

SOME SAMPLE IQ TEST QUESTIONS



QUESTION: Identify the Picture

CORRECT ANSWERS:

American flag
flag pole
Star Spangled Banner

WRONG ANSWERS:

pole, stick,
post, rag,
kite

QUESTION: What's the thing for you to do when you have broken something that belongs to someone else?

CORRECT ANSWERS:

I'd be scared I had to buy another one for 'em.
If I have one I give it to him.
Pay for it.
Give them something.

WRONG ANSWERS:

Be ashamed.
Tell my mother.
Feel sorry.
Tell 'em I did it.
My mother will spank me.

QUESTION: What's the thing for you to do when you are on your way to school and notice that you are in danger of being late?

CORRECT ANSWERS:

Hurry.
Go right ahead to school.
Take the street bus.

WRONG ANSWERS:

Go on to school and tell my teacher why I'm late.
Not stop.
Just keep on going.
Get a late card.

QUESTION: Which is prettier?



HERITABILITY: A SCIENTIFIC SNOW JOB

Jensen, Shockley, Herrnstein and the other ideologues of racial and class inferiority have claimed that scientific studies show that intelligence is largely inherited, that performance on IQ tests is determined mainly by genetic factors. By cloaking their ideological pronouncements in scientific garb, by talking about "correlations of IQ test scores," "heritability," and so on, they have sought to ward off those not familiar with such language and lend scientific authority to their statements. In fact the arguments used by Jensen and his cohorts are merely distortions and lies put forward as scientific evidence.

The scientific touchstone of the Jensen gang is a concept called heritability (Jensen says the heritability of IQ is 80%). As we shall see, heritability is a rather well defined and limited concept in genetics, but its advantage for Jensen is that it can easily be confused with what is more commonly thought of as inheritance. To bring out the contrast between these two different concepts, let's look first at what is meant by inheritance.

You inherit things from your parents (and past generations of parents)—things like black skin, or a long nose, or the color of your hair. These are physical traits that are largely independent of where you grow up or the kind of manners you are taught. They are thought to depend on the genetic material, DNA, which you also inherit from your parents (50% from each). But the main point is that what you inherit are characteristics that don't really change much with the environment you grow up in (though people have been known to get sun tans and nose jobs). Of course you also inherit poverty (wealth), social class, and other aspects of your parents socio-economic position and life style.

Now, what is meant by heritability? This technical concept grew out of the practical needs of livestock and

plant growers to increase their yields. A simple example will help make it clear. Suppose you are an agribusiness person from Iowa who grows corn. You notice that on your farm some plants have long-eared corn, others have shorter length ears. Does it make sense for you to select out and breed the long-eared corn for your farm? Well, if the variations in ear length of the corn on your farm is due to the fact that many genetic varieties are present, and that some of them grow better on your farm, then it would make sense to try to breed those with long ears. On the other hand, if the corn plants on your farm consist of a small range of genetic varieties, and the variation in ear length depends mostly on differences of soil, or moisture, or fertilizer, etc., then it would not make sense to breed the long-eared corn. (You'd be better off trying manure or bug spray.) In the first case where the variations in ear length are mainly the result of genetic factors, we would say the heritability of ear length is high. In the second case where the variations in ear length are mainly the result of environmental effects, we would say the heritability is low. What heritability measures* is the relative importance of genetic factors in producing the variations in a particular trait (ear length) in a particular population (the corn on the farm) in a particular environment (the Iowa farm). Technically speaking, heritability of a trait is the proportion of the total variation in that trait within a given population within a given range of environment which comes from genetic causes.**

Knowing the heritability in the context we've given above can be useful, but otherwise the concept has severe limitations. Since heritability only has meaning for a given range of environments, it tells nothing about what would happen if the range of environments were changed. The same field of corn growing through a warmer summer might have a totally different distribution of ear length among the plants. Also, heritability tells us only about the given population—it says nothing about a different population (of corn) or of the differences between any two such populations. We cannot correctly talk about the heritability of a trait *per se*; heritability only has meaning in reference to a specified population (with a specified history) in a specified environment.

Let's see how the Jensen gang perverts this concept and confuses it with inheritance. Jensen has claimed that the heritability of IQ is high in white, middle-class population (let us not contest this for the moment†) and then has concluded from this that intelligence is *inherited*, that

*Note that if all the corn had the same length, that is, if there were no variation heritability would have no meaning. If everyone had blue eyes you couldn't determine the heritability of blue eyes. If this seems odd, remember that we are not talking about inheritance.

**In this article we do not discuss the methods for determining heritability. Interested readers can consult a standard text on genetics.

†In the following pages, Jensen's claims of high IQ heritability are refuted and the case is made for zero heritability.

is, that it is fixed genetically, and unchangeable. Thus, he says, the 15 point difference in average IQ scores between whites and blacks is genetic in origin, and compensatory education (i.e., improved schooling) is doomed to failure, since some people are just born stupid. None of these conclusions can be correctly drawn, and to demonstrate the elementary fallacies in the reasoning, let us consider the following two examples:

1. Take 100 sets of new born identical twins (identical twins have *exactly* the same genetic material). Split each pair of twins so that we have two groups, A and B, of 100 unrelated babies each. Raise group A in the best environment money can buy—good food, books, sensory stimulation, attention, etc. Raise group B in a poor environment—poor clothing and housing, a near-starvation diet, rats, and other conditions which poor working class children are subjected to. Suppose after five or six years, we give IQ tests to both groups and find that children in group A have an average IQ of 120, those in group B 60. Further, we can imagine that we can measure the heritability of IQ in each group, and let us say for the sake of argument that in both groups A and B the heritability of IQ *for that group* is 100% (that is, any variation is genetic since all were treated exactly the same in each group). Does this mean that the IQ difference between the two groups is genetic? No, it can't be because the individuals in group B are genetically identical to those in group A. The flaw in this reasoning is that we measure the heritability within each group, but not for the sum of the two groups—everyone in both A and B. This example applies directly to Jensen's argument. The Jensen gang uses heritability estimates obtained from white, middle class people and go from there to conclude that the observed IQ differences between blacks and whites in the U.S. population as a whole are inherited. As we have seen in the above example, however, IQ differences between two populations in different environments have nothing to do with the heritability within either one of those populations.

2. Most babies thrive on milk, but a few with a real genetic abnormality suffer severe mental retardation on a milk diet. Remove the responsible ingredient (milk sugar), however, and all do equally well on a milk diet. On a whole milk diet we would find that mental retardation had high heritability, since all children with the abnormal genes would be retarded. On a diet without milk sugar, however, the children with the abnormal genes would be able to develop their mental ability. Note that the children's genetic material would not have changed—only their environment. Thus even if a trait is highly heritable in one environment, the development of the trait and the heritability can be changed by altering the environment. In terms of the IQ question, no matter what the heritability of IQ were, it would still say nothing about the feasibility of compensatory education. Jensen, as we have seen, incorrectly argues that since IQ is largely "heritable" there is no use trying to change it by educational methods.

The arguments used by Jensen and his cohorts, the equating of inheritance and heritability, are completely fraudulent. By using technical language they have attempted to cover up the misconceptions and fallacies in their work. In arguing the scientific basis of their conclusions, they are distorting the most elementary notions of genetics.

All of which might lead us to ask what light the advances in genetics over the last thirty years can shed on this issue. It seems that genetics has nothing more to say than that *nothing can be said*. No one has ever discovered the relationship of complex behavior patterns in humans like IQ performance to specific genes, in fact this hasn't even been done for fruit flies (which have been extensively studied). But even fruit flies have proved to be rather complicated organisms, so the study of genetics has been carried out more recently on a molecular level. If anything, these studies have shown the complex nature of the interactions between the environment and genetic material. So intertwined are these two aspects of biological development that breaking them down into separate identifiable parts has not been possible. What this means in practice is that in looking at the variation of a particular trait within a given population, it is not really valid to consider that variation as arising independently from genetic causes and environmental causes. The total variation is not merely the sum of an environmental variation and a genetic variation. Or put another way, the use of a concept like heritability which assumes such an arbitrary division is itself highly questionable.

We see that advances in genetics indicate that the studies of the Jensen gang have no basis at all in what has been learned by geneticists; and even more importantly, no studies in the conceivable future would be able to link IQ performance to a person's genetic makeup. The question is an ideological one, only raised by Jensen and his cohorts to perpetuate an old form of political oppression.

S.F. and A.W.

JOB OPENING

SCIENCE FOR THE PEOPLE

MAGAZINE COORDINATOR

Beginning May or June 1974

Write to 9 Walden St.
Jamaica Plain, Mass. 02130

THE CASE FOR ZERO HERITABILITY

Jensen claims that the heritability of IQ is high. But work that we and others have recently done clearly refutes this claim, and in fact leads us to the conclusion that there is *no* genetic component to variation in IQ performance at all. We will briefly summarize the relevant kinds of studies and we will hopefully succeed in demystifying Jensen's procedures so that people will be able to see for themselves why the studies are evidence in favor of zero heritability without having to rely on "expert" opinion to make the arguments.

The actual studies are not difficult to understand but considerable mystification exists because of the use of the concept of heritability. The heritability of IQ performance refers to whether there is a genetic component to individual *differences* in IQ scores (see previous article). Zero heritability means that individual differences in IQ performance are due *entirely* to differences in environmental factors such as social class, geographical location, birth order and the like.* Clearly genetic material, DNA, is implicated in everything any human being does from eating to taking IQ tests. But just as one would expect a zero heritability of eating habits (i.e., individual *differences* in eating habits are a question of upbringing and adaptation) there is a zero heritability of IQ performance because IQ tests are simply a passport to middle class jobs and as such test (white) middle class habits of speech, perception and upbringing.

As for the studies themselves, we will review three kinds of studies, two of which involve twins. The idea behind using twins to study genetic differences is as follows. Identical twins have identical genes whereas fraternal (sexist terminology) twins only have 50% of their genes in common. If it can be shown that identical twins are more similar to their partners in IQ score than fraternal twins are to their partners then this difference could be interpreted as being due to the extra genetic similarity of identical twins. Likewise if identical twins raised apart (that is, in different environments) have more similar scores than a random pair of the same age, same sex, same social class, etc., then this extra similarity could be interpreted as being due to the genetic similarity of the separated twins.

*Even as sophisticated a commentator as linguist Noam Chomsky falls into the trap of arguing that IQ can't have zero heritability since we know genes contribute to brain development, and hence to intelligence. The point is that it's not genetic influence that gives a trait high heritability—it is genetic *differences* in the trait among the population that gives high heritability.

Every study used in this kind of work is based on the same principle. One examines pairs of individuals and if they prove to be more similar in IQ scores than some control group the extra similarity is assumed to be genetic in origin. The faults in all the studies are that other factors such as similar age, similar sex, similar appearance, similar social class and similar geographical location all produce similarity in IQ scores. One or more of these factors has been ignored in every study purporting to show a high degree of genetic similarity in IQ performance.

Here is a breakdown for the major kinds of studies:[1]

1. *Identical Twins Raised Apart*

Jensen claims that the similarity in IQ scores of identical twins raised apart is due to genetic similarity. Leon Kamin has recently reanalyzed the actual data on which Jensen bases these claims.[2] Kamin's work shows that the similarity is accounted for by the following factors: (1) In the study by Cecil Burt the data was extensively tampered. Burt assumed that IQ was genetically determined and this bias influenced not only the design and interpretation of his experiments, but also the data he collected. (2) In Shield's study 27 out of 40 of the separated twins were placed in the homes of close relatives and a number of the remaining 13 were given to close friends; in other words, they were all placed in similar environments,* thus negating environmental effects. (3) In the remaining two studies random pairs of the *same age* are as similar in their scores as the separated identical twins.

2. *Comparison of Identical and Fraternal Twins*[3]

Jensen assumes that in those cases where identical twins are more similar to their partners in IQ score than fraternal twins are to their partners the extra similarity is due to the extra genetic similarity of the identical twins. All studies of this type suffer from ignoring the fact that identical twins are treated more similarly than fraternal twins. Identical twins are of the same sex, look alike, are frequently dressed alike

*Note that the different environments for identical twins are limited from the start. Having black skin certainly makes the environment of U.S. society different than it is for a white person, but have you ever seen a twin pair where one was black and the other white? These differences never show up in identical twin studies; black skin is a genetic difference and thus any effect of skin color on IQ would increase the heritability of IQ!

and in general receive far more similar treatment than fraternal twins do. These treatment effects are large. For example consider fraternal twins of the same sex compared to fraternal twins of the opposite sex. Twins of the same sex are more similar in their IQ scores than twins of the opposite sex. This extra similarity in their IQ scores is due solely to similarity of treatment and it is as large as the extra similarity observed between identical and fraternal twins in six out of eight of the studies cited by Jensen in his original paper.[1]

3. *Studies of Adopted Children and Their Foster Parents*[2] Jensen's claim for these studies is that adopted children are less similar in IQ scores to their foster parents than natural children are to their natural parents. Kamin has shown however that in families with one adopted child and one natural child the *adopted child is as similar* to the parents as the *natural child* is to the same parents. Such a finding is concrete evidence in favor of zero heritability.

All these studies point to zero heritability of IQ performance. In addition there is another class of studies consisting of identical-fraternal comparisons that show no difference between identical and fraternal twins. In general such studies are either ignored or not reported. As Scarr-Salapatek, one of the workers in this field, describes it[4]:

There are few published reports of null results unless a major theoretical point is at issue. I, for one, obtained the same [results] for blood grouped identical and fraternal twins on an individually administered test of non-verbal IQ and did not submit the results for publication (because no one would believe that the identical twins were not more similar, there were only 60 pairs and so on.

However, there is too much information in her published report[5] of the IQ scores of twins in Philadelphia for this results to stay hidden. A straight forward analysis [3] of her data shows that there is no significant difference between identical and fraternal twins for any race or social class grouping of the entire school population, grades kindergarten through twelfth grade, in the Philadelphia school district. Quantitatively Scarr-Salapatek's data gives an upper limit to the genetic component of variation (the heritability) in IQ performance of $15\% \pm 16\%$. This result is consistent with zero heritability. All other studies cited to support high heritability of IQ performance are consistent with this low figure because of the large environmental effects that have been ignored as discussed above. Thus for identical-fraternal comparisons the identical twins are sometimes more similar than the fraternal twins because they are treated more alike. Thus for identical twins raised "apart" the identical twins are similar because they have actually been raised close together or because they are similar in age (non-standardization of the tests for age). All the studies are actually evidence in favor of zero

heritability of IQ. Every one can be understood in terms of particular pairs receiving similar treatment with zero genetic component. It is not a question of "a little of this" (genetics) and "a little of that" (environment). Every single study used to support high heritability of IQ performance is either consistent with zero heritability or is direct evidence against the heritability of IQ performance. The reason for a zero genetic component to IQ variation is that the test tests (white) middle class habits of speech and perception, and variations in these habits are a result of variations in the social class and upbringing of the individuals who are forced to take them (see article on IQ Tests, pg. 17).

Conclusion

Some previous work attacking Jensen concedes that a genetic component to IQ variation exists. Such a concession is not only wrong it is weak. Statements to the effect that everyone is equal, they just have different talents; society needs diversity; etc., tend to reinforce racist, sexist and class divisions. Buried in the idea of equal but different is the existence of a line down the middle[6] with someone on top and someone on the bottom each knowing their place. The equal but different argument concedes too much. In the context of a class society equal but different means everyone knows her/his place.

Granting the genetic part of the argument (or else hysterically denying that such an argument can even be made) is itself an example of how deeply prejudice has penetrated our minds. Jensen's work has had great

a working-class free s



impact because it sounds plausible—not 80% perhaps, but why couldn't there be racial, sex, and class genetic differences in IQ? Shoddy, superficial and wrong arguments to this effect slip by because we sneakily think maybe blacks are different, maybe women are better suited to careers in the arts, not the sciences. Jews made it why not other ethnic groups. When Jensen comes out with “scientific” support for this, the reported “differences” are accepted as real or else arguments are made that such studies are impossible. We ourselves were reluctant to confront the studies directly because deep down we were afraid they might be right even if, when all was said and done, environmental factors would prove to be more significant than “inate” factors. The effects of racism, sexism and class division are very deep. Zero heritability puts the issue squarely back on politics. Genetics is a convenient no struggle position; it's now being used to handle all kinds of “intractable” problems; racism[7], crime (the so-called XYY syndrome)[8], schizophrenia[8], and compulsive eating and obesity in women[9] (fat is a feminist issue, don't you know[10]).

But there should be no misunderstanding. We are not saying that since IQ performance is not inherited, give black people, working class people an “enriched environment” and they too will score high on IQ tests. Such arguments accept the validity of testing, i.e., the present social structure. It is not a question of enriched environments. Our goal is not to let those who can become upper class but to abolish the upper class altogether because it is exploitative and criminal in its relationship to the great mass of working people.

in Detroit



March 1974

And there is a final point to be made. It's about intelligence. Anthropologists[11] have argued for years that it is impossible to define intelligence without reference to language and culture. This is the material basis for intelligent behavior. One acts “intelligently” in the context of a language and culture. An oppressive culture creates its own intelligence and we should never forget this.

Personal Conclusion

This nation was built by slave and immigrant labor. Every generation has faced the same ideology—slaves who ran away supposedly had drapetomania[12], a blood disease; immigrants were inferior, they had big lips, sub-human intelligence[2], they were polluting the white race—no Irish need apply, dirty Wop, dirty Kike, dirty Nigger, dirty Spik—the vile names and the crimes committed by a vicious and brutal capitalist system from 1776 to 1976; Slavery, genocide of the American Indian, generations of sweat shops on Seventh Avenue and on the Lower East Side, Welsh coal miners in Pennsylvania, Irish railroad workers, Chinese gold miners in California. The solution to America was the same for all—try to pass for white, speak good English and become American. Generations of first born Americans were ashamed of their parents' accents and tried to pass for white—America the Melting Pot—jump in and get smelted.

But there is another tradition. Those that didn't pass for white. Tom Mooney, Sacco and Vanzetti, Eugene Debs, Emma Goldman, Malcolm X, our parents, people who didn't buy the mythology, communists, traitors to the Great American Dream, who brought revolutionary struggle to America. S.O., J.S., and M.S.

NOTES

- [1] Jensen originally wrote a seven page paper in the Proceedings of the National Academy of Sciences, 58, 149 (1967) reviewing the literature on the IQ scores of identical twins raised together and fraternal twins raised together. He then blew this up into a 123 page paper at the invitation of the *Harvard Educational Review*, 39, 1 (1969) by adding 115 pages of explanation and a sketchy 9 page review (pp 50-59) of the studies of identical twins raised apart and other categories such as studies of adopted children and their foster parents. The overwhelming majority of studies (22) is in the first category while there are only four studies of separated twins and four studies of adopted children and their foster parents. Recent citations in the literature emphasize the first two types.
- [2] Kamin, L.J., Invited Address, Eastern Psychological Association, Washington, D.C., March, 1973.
- [3] Schwartz, M. and Schwartz, J., *Nature* (in press).
- [4] Scarr-Salapatek, S., *Science*, 178, 236 (1972) Letters.
- [5] Scarr-Salapatek, S., *Science*, 194, 1285 (1971).
- [6] Mitchell, J., *Women's Estate*, (Vintage, New York, 1972) p.161.
- [7] Jensen, A.R., *Harv. Educ. Rev.* 39, 1 (1969).
- [8] McClearn, E.E. in *Annual Rev. Genetics*, 437 (1970) (Annual Reviews, Inc., Palo Alto).
- [9] Bruch, H., *Eating Disorders*, (Basic Books, New York 1973) p.26.
- [10] Susie Orbach and Carol Munter, *Fat is a Feminist Issue*, WBAI-FM, April 24, 1973.
- [11] Bohannon, P., *Science*, 181, 115 (1973) Letters.
- [12] Ehrenreich, B. and English D., *Complaints and Disorders. The Sexual Politics of Sickness. Glass Mountain Pamphlet No. 2* (The Feminist Press, Box 334, Old Westbury, N.Y. 11568).

LOOK WHAT THEY'VE DONE TO MY SCORE...

Just about everyone living in the apartment building on the corner of Clayborn and South Plaine calls Audon Moses "Big Mo." Her grandson, Cornell Greenwood, who is thirteen, maintains a special relationship with her; he gets to call her "Biggest Mo." Audon loves the name; she loves Cornell too and her six other grandchildren, but even their busy activity around the small apartment or their parent's easy style does not seem to heighten the energy in her body. Approaching seventy, she is barely able to move about and take care of herself anymore.

"Just getting my one foot and then the other off of that mattress every morning is enough exercise for me," she has told me. "Takes all the little bit of strength I've got to drag that big right leg over that ugly blanket and drop it on the floor. I'll be lying there, you know, watching my leg, cheering for it to get the hell off that bed. Probably do best to get one of those children who's always running around here to get it off of there for me. Feeling tired, too. Always feeling tired now, like I had this invisible sickness creeping all around inside me. Takes me fifteen minutes to get my two legs off that bed. And then, when I do, all that happens is they touch that cold floor and I'm thinking maybe I better get them back up on the bed for a little while, you know. But hell, takes too much energy to get 'em both back in the bed when I've just gone and spent all that time trying to get 'em on the floor in the first place. I mean, it I'm lucky I'll hit the floor first try. More likely I swing that big right one over the top and drop it right in the ash tray I got down there near the side of the bed. Can't move it right away when I ought to cause I'd have to get out of bed to do that. I can't see it either. So like I say, I'll drop it over the bed there and smack it right down into that fancy ash tray my son gave me."

Audon Moses loves to hear her grandchildren laugh, and when she realized that I too was part of her audience, it only encouraged her. In the five years that I've known

her there has never been a visit without at least one good laugh.

"I love to see a man like you who looks so worried most of the time show the world those nice teeth of yours. Go on, smile for Big Mo. Tell her what you're writing. What's the new book going to have in it?"

"Probably stuff about intelligence tests and the business of students being put in tracks," I answered, almost hoping she would help me with my work. My words stopped any playfulness she might have had in mind.

"Well, now, you've cut quite a piece out for yourself this time, ain't you? Better talk to the children about that. All I know about that is what they tell me, coming home every day with their stories and their homework and their grades. Far as I can tell they're all born smart, it's just that they don't work hard enough. Maybe some of the teachers don't push 'em to work hard enough either. Maybe they let 'em get away with too much. You ain't got a thing to brag about in the world until you've got an education. You hear this child or that one saying how she's so pretty. 'Look at me, ain't I pretty, Big Mo?' That don't mean nothing. I'd tell her too. Right to her face. 'Child, Big Mo thinks you may be the prettiest little girl in the world, next to Big Mo herself, but don't you come back until you can show me how *smart* you are.' " She whispered the word *smart* as though it were a term of sacredness. " 'You come back here someday to Big Mo and you say, Big Mo, I have got to be one of the smartest, best educated, intelligent people walking around on this here land. Then you got something, child. You've got the best the world can offer. This world anyway. Don't you get yourself involved with anybody but the right somebody, and don't you work on anything but what your teachers say you should be working on. Then you come on back to Big Mo and tell her how you've learned all these things. You tell her you've got great plans, plans that include

getting more education. Maybe by then old Mrs. Moses here will be able to get both her heavy old feet off this stinking mattress.’ ”

“Biggest Mo,” Cornell Greenwood said one day after I had been visiting with his grandmother, “she’s all right for an old lady.”

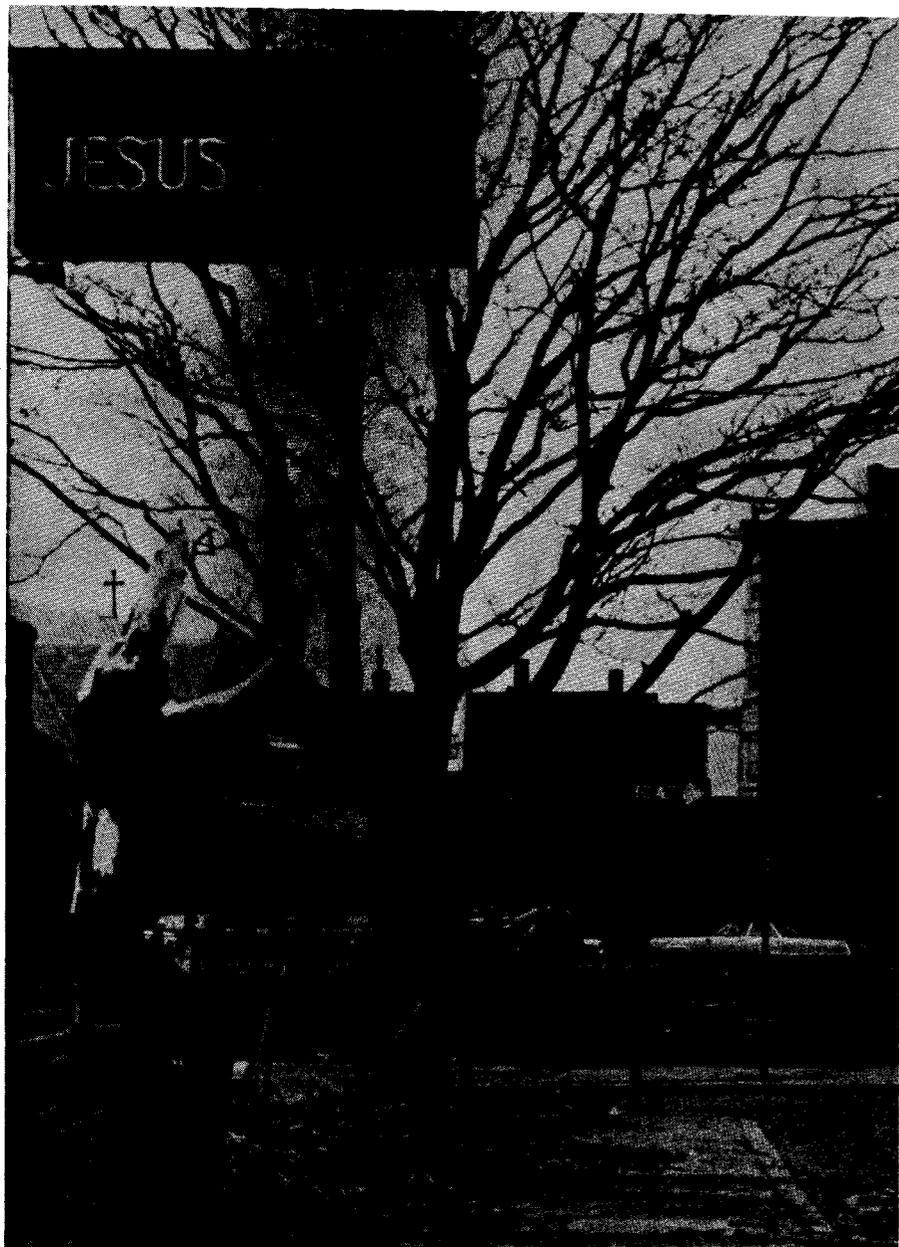
“She sure thinks well of you.”

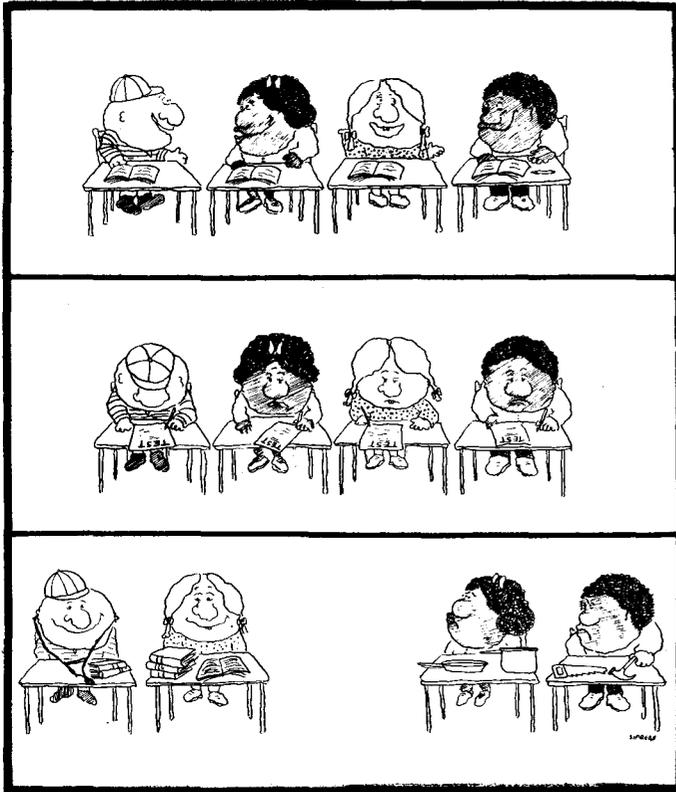
“Yeah,” he said, showing his modesty. “She thinks all her family is real special and stuff.”

“She’s got her ideas about school too, doesn’t she?” I smiled.

“She don’t know about school,” Cornell replied angrily. He had been leaning against a wall in the Green-

wood living room but now he pushed himself away from it and took a step back from where I was sitting. “She thinks all you have to do is work hard, obey the teachers and you’ll get smart. She doesn’t know. She’s never even been to my school. It ain’t anywhere near like what she thinks. Like, you could be the smartest person in the school but if you’re black they won’t put you in the good classes, unless maybe if you’re a super athlete. Then they give you some advantage but they think they’re being nice. The rest of us, they give us the worst teachers, no matter how good we do. They keep telling us if we work hard they’ll advance us into a different division, you know, but they never do. They’ll help the athletes





and some of the real good looking kids, 'cause they like them, they show 'em off, you know. I'm as smart as anybody in that school but you'll see, they'll fix it so I don't go to college. They always have their ways of stopping me. You'll see how they'll do it."

"I.Q. tests?" I asked cautiously.

"Yeah, that's one way."

"How does that work, Cornell?"

"Well, say they want you to stay where you are, they give you an I.Q. test and say you did bad. You can't argue to no one. The dude says 95, you got 95. Or like, if they want you out of their class they'll put you in some special ed class. What do they care? We got kids in our school, they've been in those special ed classes all their lives! Every year they keep going back to those classes and there's nothing in the world wrong with them. We ask the teachers, hey, what they got him in there for? What he do? Oh, he did bad things, they'll say. Or they'll say, 'Old Jonah he's a *strange* little boy. Something wrong with his brain. Been that way since he was a little tiny baby. He can't learn the right way like the rest of us. And that's a fact!' But that's a lot of stuff, man, 'cause we'll know different. Old Jonah, see, he's got a brother or sister maybe, and they know there's nothing wrong with him. Folks at the school just don't like him, that's all. So they shut him up in that special ed class. Teachers try to tell us kids like him will learn better in there but we know it's a prison. I don't care what they lie to us, because we always got ways of finding out the truth. But I'll go pitch a bitch when one of those high and mighties goes around thinking I don't know what the truth is."

Cornell was steaming mad. Audon always quieted him down when he got like this, at least she did in front of me. I suspect she did the same when I was gone. She would throw in a few words too about behaving politely in front of company while Cornell, who was already uneasy about talking to a white visitor in his home, would give her a look as if to say, I'm no child anymore. You take care of the little children and I'll take care of myself. But Audon, I could see, valued Cornell's outrage. She knew he "had it," as she said. He wouldn't "let things go on as they had all these years. Cornell and his friends will change things no matter what it takes because they keep their eyes and ears open, and know when to do the same thing with their mouths. And that's a sign that they're intelligent. It doesn't matter, see, how people answer somebody else's question. Even a teacher's. What matters is that children like Cornell and his friends understand what it's like living in the real world. They know what's happening to them at the school. They know everything there is to know about what's going on. The secrets have been told. They used to have a kind of a sheet they'd throw on themselves and all their institutions," Audon said, "especially where black folks were involved. But this generation, with the help of their elders, have pulled that sheet away, and there is America, the rich and the poor, the black and the white, just laying out there naked like a woman ready for her lover to come in that front door of hers, for everyone to see. But these kids see it all in a special way. They see it and behind it too. Every last one of them. 'Cause they got it. The intelligence I mean."

Cornell was looking around the room, wanting to say something else, about school presumably, but checking to make certain Audon wasn't able to hear him.

"I think she's asleep," I said, trying to encourage him to speak.

"She don't let me say my piece."

"I think she would."

"I tried to tell her about the way they run their intelligence test at the school and she didn't believe it. She told me I made it all up."

"Tell me, Cornell. What stories?"

"You won't believe me either."

"Try me. I've got some stories myself."

He was clearly interested. "Oh yeah? What you got?"

"Kids given I.Q. scores without ever being given I.Q. tests."

"Right on! I'll tell you something else—we got a boy in our school took one of them tests and scored seventy something. Everybody knows he ain't that dumb. Teacher, she was surprised to find that out too, so she asked him how come he did so bad? He told her it was because partly he got so scared he couldn't think straight and partly cause when he'd take too much time or miss something, the man giving the test would say, 'Well, if you don't know that one and it's the easiest, no sense giving you the rest.' Then another kid, he said

that when he took the test the man kept telling him he was sounding like he wasn't only dumb but sick in his mind, you know. He kept saying, 'Maybe we better stop, maybe we'd better stop.' So finally the kid got so frightened they stopped and he wasn't half way through the test. But then they put down his score without anybody saying he'd only worked half the test. Everybody's got a story like that, man. Everybody.

"You know my sister Paula? She was taking the test and they came to the part where they got these blocks, you know, and you're supposed to match up the designs on these little cards. So she starts working on the first one, and the guidance counselor, Mr. Kiplinger, he's sitting there real stitch ass, you know, like he really knew his business, timing her with this big stop watch. So Paula's working away, looking at her blocks, then looking back at the little cards." Suddenly Cornell began to laugh out loud. Nothing he did could suppress his laughter. "She's working these, see," he continued, trying to catch his breath and looking over his shoulder for fear that Audon might have heard him, "putting all these blocks together only she figures out there's two blocks missing. Well, she's ready to lay her bitch on him when he says, 'Smile awhile, Pretty Paula face. You go on and do the best you can with the two blocks missing. Don't make no difference. Just go on like they were there.' So she does. Each time she finishes a design she says, 'There it is and the other two blocks would go, like, here and there,' you know." Cornell poked twice in the air in front of him, as if pointing to the missing blocks. "So old stich ass, he smiles and compliments

her, but all the time he's marking on the page that she couldn't figure it out. She could see what he was writing all the time. That's why her score was low and why she stayed in the same class.

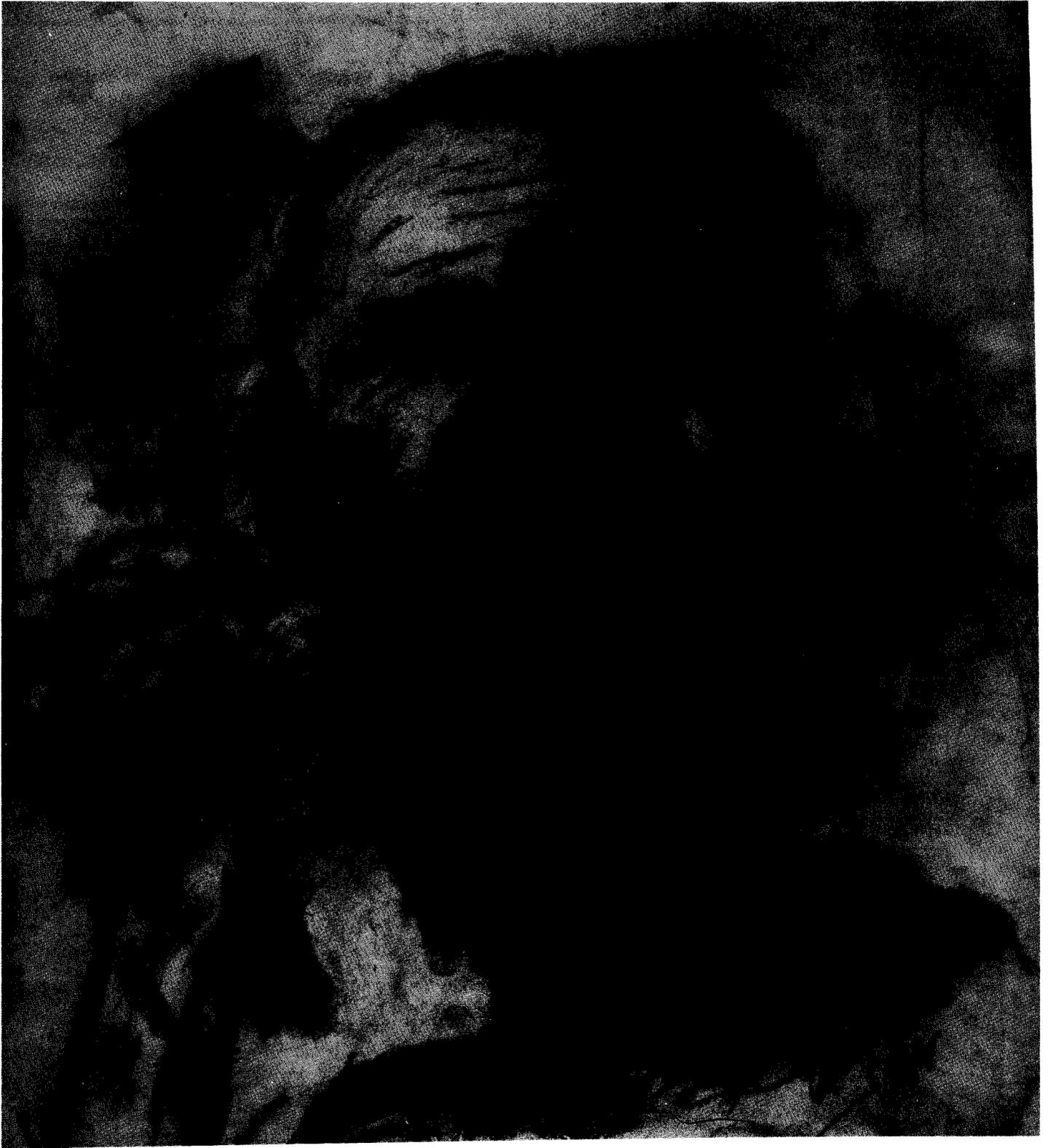
"I don't know this one boy but Derond Williamson told me about a kid who did real well on his test. Fact he did so well that when he got done the woman giving him the test stuck out her hand, you know, to shake his hand. So he just walked away. Spun around, man, dug that heel of his into the rug and departed. So she yells at him, 'Where you going, boy? I'm waiting here to shake your hand.' 'You ain't touching my hand,' he goes. 'Oh yes I am,' she goes. He goes, 'I don't know of a single rule in the Constitution of the United States that says I got to shake your hand!' 'Don't you give me stuff about the Constitution. In this school you'll do as I say!' 'I did your little whitey test,' he goes. That's what he said. 'And that's all I was supposed to do. Nobody told me about shaking no lady's hand at the end.' Now she's really screaming at him but he don't pay her no mind at all. He just goes. So she takes a whole lot of points away from him and they put him in that special ed class I was telling you about. That kid was three years older than me. He was sixteen and a whole lot smarter. He just proved that on the woman's own test, but he committed the fatal sin, man. He misbehaved. He talked back to the goddess. Nobody ever said nothing about her calling him boy. He was in that class half the year before they sprung him. Then they put him in the second year class where everybody was too young for him. I tell you, man, that dude, he was really smart. I heard him talk. He could find a word for everything, man."

"He finish school?" I wondered.

"Not a chance. He left school two weeks after they sprung him from special ed. I saw him hanging around outside a couple of times after that, but he's gone now. Maybe he's in the army." His voice had become soft. "Maybe the streets got him."

Cornell stared at me without speaking. Then he sighed deeply and his eyes closed halfway as though he could see Paula, frustrated by the absence of the two small wooden blocks. This time he didn't smile. "Hey mamma," he whispered, "look what they've done to my score. They do it to us everytime. Move us here, move us there, pushing us around all the time. It ain't what school's supposed to be. You know what you got to learn in that school, in all these schools? You got to learn where your place is. If they think you're dumb, they put you in that special ed class until you drop out of school, which is what they want you to do. If you got too many brains showing they paint over your test scores so no one will come around and ask, how come this kid ain't in a higher division? Up and down, we're a bunch of yo-yo's. If anybody'd ever stop to think what we got to do to finish they'd know where we're spending all our energy. Hell, getting out of bed ain't no easier for me than for my grandmother. What do I got to get out of bed for? What do they think I'm supposed to be doing in school that matters?"





I ain't learning from school, I'm learning *about* that school. They're teaching away but I see way behind their sweet asses.

"They're all hung up in these I.Q. tests. They ain't honest tests. Everybody knows that. All the advantages go to the white kids. And since they mess all over with us, why do they even bother to take time to give us the tests? I'll tell you why. So's they can convince themselves that they're doing the right thing. So's they can sleep at night. Go on home to their old lady and tell her they did the best they could that day with those nasty little black boys and girls, that evil eleven percent, but those nasty little black boys and girls just couldn't do the tests so they'll go into the special classes. Hate to do it to you little boys and girls, but you know the rules we've written here for you all. Doing the best we can." Cornell's imitation had ended. "Hell, that Kiplinger was probably spreading his fat stich ass over Paula's blocks so to make sure she'd flunk. He got a glimpse pretty quick how smart she is and he knew there'd be no way of keeping her back after that. Folks like they got there would eat those blocks 'fore they'd be honest enough to admit black kids got what it takes to be intelligent.

"They control us with those tests, man. They got us dancing on the end of those scores. Hey mamma," he shouted out, looking upward, "they're going to break my ass just like they broke my score. 'I ain't going to give you no trouble, teach,'" he announced to an imaginary person in front of him. "'I won't try to bust out of my division. Just let me take the good courses. Let me see if I can do 'em. Let me show you what I know. You folks got to change your minds about this intelligence idea. You got to learn from us and *our* intelligence. You think, lady, we could make it this far without being super intelligent? You think we don't know what's happening? You think we're blind and stupid? You bet your fat ass, lady, I ain't going to shake your hand. I'll let the streets get me too 'fore I stoop to you! You going to tell me that the guy who invented those divisions and prisons we got in that school was intelligent? You ever hear those people talking, lady? They ain't intelligent. They're dumb, man. I mean, where they're supposed to have brains they got fuzz. Golden white fuzz.'" Cornell was grinning. His eyes met mine.

"What are you thinking?" I asked.

"I was just thinking," he mused, "that when I go to decide who's the most intelligent person in the world, it comes out to be my grandmother. She's got wisdom, man. She's wise, man. She knows about things she's never even seen. She ain't never once been near my school and she knows it. Hell, she ain't even ever been to school that anyone can remember. Least she says she ain't. But she knows. Grant the lady her due. She knows what a kid needs to know. She says her heart tells her more than her brain, that's why she knows she's smart."

I remembered Audon using the same phrase with me once, only she had said, "A person who knows when

to listen to his heart and not his brain is bound to be a wise person."

"She's smart, all right," Cornell was saying. "She's the reason I stay on. I ain't going to drop out and let her down. Even after she dies I'll keep at it, no matter what they do to me at school. Paula says we got some of Biggest Mo's blood, which is all right. You can bet I'll be plenty careful not to cut myself so I won't waste a drop. I'll say okay if I end up like her, even laying in that bed. I'll be like that, 'cause her brain is going every minute; it's going and she's learning something about life, something that if she can't use she passes on to us. They may be shrinking us to death in school, but my grandmother's making us big."

"You've got a grandson that sure admires you," I told Audon later that same week.

"I've got all good grandchildren," she replied. "I hate to hear how the schools hurt them. Been going on too long, seems to me. No sense to it anymore. What's anybody got to prove by it now? No sense hurting children. Not just my children, but all these children, sending them out where they'll only find trouble. Everybody can see that. Oh what the hell." Audon's mood had changed suddenly as it so often did. "If I could get my old body out of this house I'd probably go with those children and make a little trouble myself. I'd like to hear the sounds out there. Haven't been outside, you know, in eleven years. All I got is the television and a few books and the words those children and their parents got for me. Eating ain't too exciting. News just gets me mad, but it don't teach a person much. I depend on those kids now for feeding me whatever food they got leftover from living. And what I hear is that their school is closing off more things to them than it is opening things up for them. They don't let them advance, don't treat 'em fair, and they sure got their ways to stick 'em. Miracle of it all is that they stay intelligent about so many things; who they are, where they come from, where they might be going. There's no way to measure that sort of thing, you know, not with all the tests in the world. Only person can measure that is the Man who gave it to them." Audon was leaning her weight to one side of the bed, straining to see where the ash tray was. The room was dark and very cold. Finally she gave up and lay back, flicking the ashes of her cigarette on the floor. "The Lord makes them smart, then their parents got the problem of keeping them that way, which ain't as easy as you might think when you stop to consider what everybody does to them, or might like to do."

The simple conversation kind of research that I conduct is criticized because of its subjective, personal and idiosyncratic nature. True enough, but I wonder whether the living presence of people like Audon Moses and her grandson Cornell Greenwood wouldn't stop researchers from making certain "scientific" claims if the claimers had to face these people every time they made one of their claims. The first step in examining the implications of one's findings is to see the reaction on the face of the human being about to be affected by that finding. T.C.

A HISTORY OF EUGENICS IN THE CLASS STRUGGLE

A raft of reports has appeared claiming a genetic basis for intelligence in human beings. These hereditary explanations for intelligence have been given considerable publicity—by far more than given to opposing views. As a result, whether consciously or not, the U.S. scientific and general public has begun to absorb the mistaken notion that the biological evidence supports the idea that intelligence is largely inherited. Considering the large number of other scientific developments which could have been given such wide publicity during the same period, the frequency of articles on the heritability of IQ is somewhat surprising. It raises the question of why certain ideas in a field of science are investigated more at some times than others, and why they receive so much popular exposure.

Perhaps a good way to answer this question is to examine past cases of a similar nature. This article will compare the present IQ studies with the eugenic arguments of the early part of this century. Not only does that movement provide the scientific foundation for the present controversy, but we shall see that there are many similarities in the two historical periods which may help explain why the current rebirth has occurred.

Eugenics claims to apply genetic principles to the "improvement" of mankind. There are two general subdivisions in its efforts: Positive eugenics—increasing the reproduction of especially "fit" individuals, and Negative eugenics—reducing the breeding of particularly "unfit" types. At the turn of the century, the eugenics movement proposed both types of programs and had a wide influence. Between 1905 and 1920 eugenics courses were quite fashionable in colleges. A number of institutions devoted largely, or solely, to eugenic research and propa-

ganda were founded in the same period. Two international congresses of eugenics were held, and a number of scholarly and propagandistic journals were published on the subject. The impact of eugenics was not, however, limited to academics. Eugenics and eugenicists exerted a considerable influence on popular opinion and on state and federal legislation. Twenty-four states passed sterilization laws for various social "misfits" (e.g., criminals, mentally retarded, or the insane). Some thirty states passed miscegenation laws restricting or outlawing interracial marriage. Perhaps the key triumph of the eugenics movement was the passage in 1924 of the Johnson Act by the Congress. This immigration law almost totally stopped immigration into the U.S. from Eastern European and Mediterranean countries. This act also brought the eugenic doctrines the most public exposure.

From its beginnings, the eugenics movement was closely associated with a sense of white Anglo-Saxon superiority and racism. Francis Galton, the founder of the movement, was an elitist and racist. He was first drawn to the study of human heredity and eugenics looking for a genetic source of his own family's "genius." (His cousin was Charles Darwin and his family tree was decorated with numerous illustrious ancestors).

The American eugenics movement started in 1904, when Charles B. Davenport persuaded the Carnegie Foundation to establish a Laboratory for Experimental Evolution at Cold Spring Harbor, of which he became the director, and at the same time leader of the American eugenics movement. In 1907 he persuaded Mrs. E.H. Harriman, wife of the head of the Union Pacific Railroad, to financially support a Eugenics Records Office, also at

Cold Spring Harbor. Here, Davenport and his colleagues made studies aimed at developing eugenic programs in the U.S.

Davenport shared Galton's belief in superior and inferior races (with the Anglo-Saxon at the pinnacle). Galton had remarked, "there exists a sentiment, for the most part quite unreasonable, against the gradual extinction of an inferior race." Davenport emphasized the possible ill effects of "race-crossing," especially between blacks and whites. Racism was a prominent element in Anglo-Saxon middle-class society at the time, and easily became part of hereditarian doctrine.

Before 1915, a number of prominent biologists supported and actively took part in the eugenics movement. Davenport himself was a respected geneticist and one of the early supporters of Mendel's theories of inheritance in the U.S. Other prominent biologists included E.G. Conklin, T.H. Morgan, H.S. Jennings, and W.E. Castle; all professors at elite American universities and members of the National Academy of Sciences. Castle wrote a popular textbook, *Genetics and Eugenics* which became a standard text for eugenics courses. Conklin edited a eugenics text and supported the eugenics movement in public lectures. These and many other less prominent biologists contributed large numbers of articles to the American eugenics movement's "scientific" publication, the *Journal of Heredity* which blended research, reporting, and propaganda on eugenics.

It is understandable that immediately after 1900 many geneticists wanted to see the newly discovered theory of Mendelian heredity applied to humans. Indeed a few studies, such as those by Landsteiner on the A-B-O blood groups, and Garrod on metabolic disorders (alkaptoneuria and phenylketoneuria), provided good evidence for the existence of Mendelian inheritance in humans. However, these studies dealt with easily identified clinical traits whose inheritance could be checked by reference to clear-cut family pedigrees. Eugenically oriented geneticists such as Davenport and Castle, on the other hand, tried to show the inheritance of more complex traits in simple Mendelian terms. For example, Davenport tried to show that alcoholism, seafaringness, degeneracy, and feeble-mindedness were each due to single Mendelian genes, inherited in a dominant or recessive way. Similarly, Castle tried to argue by analogy that marriage between human races might produce the same type of misfit hybrid as a cross between a thoroughbred and a draft horse.[1] Intelligence was prominent among the traits that eugenicists tried to demonstrate as inherited. With the newly designed Binet test for intelligence as the standard of measurement (see "What is the IQ Test?", p. 17), studies flowed forth showing connections between low test scores ("feeble-mindedness") and delinquency, criminality, sexual promiscuity, and degeneracy. Needless to say the "evidence" for such claims was meager, based largely on assumptions, biases, analogies, and a variety of non-rigorous methods of "proof." Yet before 1915 many biologists still hoped that the study of human heredity would allow the elimination of some of the worst human diseases and the improvement of mankind's genetic potential.

As the popular side of the eugenics movement picked up steam after 1915, biologists began to withdraw their support. There were several reasons, which we can summarize briefly:

1. increasing evidence that few genetic traits were determined by single genes.
2. evidence that even genetically identical individuals showed variation, underscoring the importance of gene-environment interactions.
3. penetration of the idea of genetic equilibrium, which began to convince scientists of the difficulty of removing undesirable genes from a population.
4. increased scepticism about the methodology used by eugenic researchers.

This last problem was highlighted by the difficulties in measuring human intelligence. The first large scale study of IQ in the American public (done by the U.S. Army) showed that by current standards, half of the U.S. population was "feeble-minded"! Further, although the tests fulfilled racist expectations in that on the whole blacks did worse than whites, northern blacks did better than southern whites! Biologists began to see the immense difficulties in trying to produce a simple genetic explanation of intelligence or intellectual differences, and indeed of even measuring such an ill-defined trait. Without planned matings, the study of human heredity even for well-defined traits seemed a long-term project. For vague traits such as intelligence it was clearly impossible. In general, biologists shifted their attention to studying laboratory animals. Scientific support for eugenics gradually dwindled away, although die-hards such as Davenport and Castle remained believers.

Despite the withdrawal of professional support, popular exposure to eugenics continued to grow. In 1914, 44 colleges taught eugenics. By 1928, the number had swelled to 376, or roughly 3/4 of all colleges and universities—some 20,000 students! At the same time popular books on the subject began to appear more frequently. Although these books usually claimed to be "scientific", they often demonstrated a highly biased and racist tone. Perhaps the most popular of these works were Madison Grant's *The Passing of the Great Race*, published in 1916, and Lothrop Stoddard's *The Rising Tide of Color Against White Supremacy*, published in 1920.[2] Both lamented the increasing number of foreign immigrants in the United States, and the decline of "Nordic civilization" in the west. Both supported their arguments with references to the works of Davenport, Castle, and other geneticists who had suggested biological ill-effects of race crossing. As Grant wrote:

Whether we like to admit it or not, the result of the mixture of two races, in the long run, gives us a race reverting to the more ancient, generalized and lower type . . . The cross between a white man and a negro is a negro; . . . and the cross between any of the three European races and a Jew is a Jew.[3]

Race feeling might be called prejudice, Grant said, but it was a "natural antipathy" which served to "maintain the purity of type." Both books drew heavily not only on biological, but also anthropological and historical "evidence" to show that the white race, the Anglo-Saxon and the Nordic, was the superior group on the human evolutionary tree. While not all eugenics books were as overtly racist, the more subtle texts contained most of the same implications. By the end of World War I, the eugenics movement had taken on a distinctly pro-Nordic, anti-everything-else demeanor.

Such eugenics propaganda led to the passage of strongly racist legislation. Perhaps the most important law passed was the Immigration Restriction Act of 1924 (the Johnson Act). Except for the war years, prior to 1921 the U.S. government had placed virtually no restrictions on immigration to the United States.[4] Only after the war did people begin to call for halting or greatly restricting both the numbers and types of immigrants. The major reasons for this were economic; it seemed necessary to stop additions to an already glutted labor market. The immediate response of Congress was the passage of a temporary Emergency Act of 1921, which restricted immigration from any European country to three per-cent of the foreign-born of that nationality listed in the 1910 census. (This act, as well as the permanent Immigration Restriction Act of 1924, applied only to European immigration. Oriental immigration had been restricted by earlier measures in the 1880's.) Since the Emergency Act was only temporary, proponents of immigration restriction began work immediately for a more permanent law. Between 1921 and 1924 biological (genetic) arguments became important in justifying a campaign against all non-Nordic immigration. Eugenicians were very active in this campaign.

The eugenicians claimed that the new immigrants were genetically inferior to the Nordic or Anglo-Saxon, and even to the older immigrants who had come to the United States in the 1850's and 1860's. Like the Social Darwinists several decades earlier, the eugenicians argued that a person's economic and social status showed his or her hereditary worth. The high levels of disease, illiteracy, poverty, and crime in immigrant neighborhoods proved to eugenicians that the non-Nordics were inferior and debased. Eugenicians also claimed without proof that heredity was far more important than environment in determining human behavior. They also fastened onto the genetic idea of "disharmonious crossings"—the idea that the children of interracial marriages will always be inferior to both parental races. (By 1920 most geneticists were well aware that mating between different "pure" strains produced more vigorous offspring than the continued mating within the "pure" strain, thus the idea of "disharmonious crossings" was an outmoded concept.) But the conclusion from these two "genetic" beliefs, according to eugenicians, was that the inferior qualities of immigrants could never be improved by the new American environment; and indeed, that dilution of the superior American blood (genes) by intermarrying with inferior

immigrants would produce an inferior population. The eugenicians argued not for an end to immigration, but for *selective* immigration favoring the "better" races of Europe, meaning the Nordic and Anglo-Saxon.[4]

To make the biological side of the argument most effective, eugenicians tried to summarize and "document" the genetic claims in a "scientific" way. This task was undertaken by Davenport's Eugenics Records Office. In April, 1920, Harry Laughlin was appointed as "expert eugenic agent" of the House Committee on Immigration and Naturalization. During the next three years he appeared in person several times before the committee, and in one of his testimonies, in 1922, concluded sweepingly:

Making all logical allowances for environmental conditions, which may be unfavorable to the immigrant, the recent immigrants, as a whole, present a higher percentage of inborn socially inadequate qualities than do the older stocks. [5]

His evidence from the start was questionable, and his conclusions totally unjustified by the facts, yet the "Laughlin Report," made up of Laughlin's congressional testimonies, complete with "scientific evidence," became widely regarded as a scientific and unbiased presentation of fact. Laughlin's testimony, backed by the authority of the Eugenics Record Office and the Laboratory of Experi-

***From those nice people
Who brung you the 1930's:***



A HAPPY & PROSPEROUS 1974 !

mental Evolution at Cold Spring Harbor carried the weight of scientific authority with many congressional leaders.

The legislative debates over immigration restriction were furious throughout 1923 and early 1924. In the Senate hearings, biological arguments were minimal; but in the House, they became a major factor in getting the bill passed. Almost the only strong opponents in the House were either themselves representatives of minority groups (which at that time meant Jewish), or else came from northeastern states, where immigrant groups were well organized politically. The House Committee hearings were enormously biased, since "experts" called in to testify were hand-picked to present the eugenicists' Nordic and hereditarian line. At the insistence of Representative Celler of New York, the professional geneticist H.S. Jennings of John Hopkins was grudgingly asked to testify. Jennings was by this time entirely out of sympathy with the eugenics movement, but he was given only a few minutes to speak. He was told by the Chairman of the Committee not to present his arguments at that time in any detail, but to submit a written report later. In the end, the Immigration Restriction Act passed by large majorities in both the House and Senate.

After 1924 more scientists began to speak openly against the eugenic and racist propaganda which was being published in the name of "science" and "biology." Jennings was one of the first to speak out loudly—for he had seen the uses to which garbled biology could be put—and the countless ill-effects it could have. Later Raymond Pearl, E.M. East, T.H. Morgan and W.E. Castle all joined in publicly repudiating the racist propaganda of the eugenicists on biological grounds. Unfortunately, the geneticists efforts were too little too late. The major effects of the eugenics movement had already been achieved by the time geneticists began to criticize the movement publicly. The results included the restriction of immigration, especially from eastern and southern European countries—restriction which was not repealed until 1965. But more damaging perhaps than this were the attitudes of racism, superiority, and outright hate which the movement helped to intensify among the American people. Some of this racism might have been counteracted had scientists as a whole spoken up earlier and louder than they did against the eugenicists' biological arguments.

Why the Eugenics Movement

I do not wish to suggest that scientists should bear all or even a major part of the blame for the success of the eugenicists. Why, after all, did the eugenics movement get going in the first place? Who supported it and for what reasons? Was it simply the work of some crackpots and overly ambitious zealots? The sudden rise in general popularity of hereditarian and racial views was not an accident or the result of good publicity on the part of a few fanatics either within or outside of the scientific community. It was at heart a social, political and economic phenomenon arising from the struggle between classes.

What does this mean, and how can it help us understand more recent events such as the IQ and race issue?

First, we can ask: Who were the people in the Eugenics movement between 1900 and 1925? Those non-scientists who founded, financed or in other ways supported the eugenics movement from the early 1900's onward were, almost to a person, wealthy businessmen, investors, and other representatives of the financial and ruling elite of America at the time.

The ruling elite which in the early decades of this century initiated and provided financial support for the eugenics movement included: David Fairchild, President of the American Genetic Association (AGA—publishers of *Journal of Heredity* which became for a time the chief outlet for "scientific" studies of eugenics) and wealthy brother-in-law of the founder of National Geographic; Corcoran Tom, Treasurer of the AGA and vice-president of American Security and Trust Co., Washington; Mrs. E.H. Harriman (who personally supported The Eugenics Record Office at Cold Spring Harbor) whose husband, E.M. Harriman was a railroad and telegraph magnate in the late nineteenth century; J.H. Kellogg, founder of Kellogg foods, who was the financial and ideological force behind the Race Betterment Foundation established in 1913 at Battle Creek, Michigan; Robert D.C. Ward, who established the Immigration Restriction League in 1894, and who was a member of the Saltonstall family of Boston, a Harvard Graduate of the class of 1894 (along with his friend Charles B. Davenport), and later a Harvard Professor; and Madison Grant who was a conservative New York lawyer, privately wealthy, and deriving from an old aristocratic family.[4]

A major portion of the support for many philanthropic or social movements comes from wealthy interests, since the financial elites are usually the only ones having enough time and money to support the "humanitarian" causes. This was true to some extent with respect to the eugenic movement of the early 20th century. The question is whether their self-interest prompted them to give extra aid to the eugenics groups. In fact this appears to be the case. For example, Franz Boas, an eminent anthropologist and anti-eugenicist in the early decades of the century, attempted to raise funds for an African Museum in the United States. Boas appealed to the same financial elite, like the Rockefeller or Carnegie Foundations, which supported eugenics, only to be turned away flatly.[6] It is apparent that members of the ruling class supported first and foremost those movements which agreed with their ideology and hence served their own ends. They made rational (to them) choices about how to spend their philanthropic dollars.

In what way did the eugenics movement serve the class interests of the ruling elite? One answer can be found in the social history of the United States between 1890 and 1920. At the turn of the century the propertied, politically conservative classes enjoyed considerable position and influence.[4] But the Haymarket Riots, the Homestead Strike, the Pullman Strike, and the Populist Revolt, to mention only a few militant movements be-

tween 1880 and 1910, showed a rising unity and power within the working class. The years 1900-1920 saw an increase in the organization of labor and trade unionism, the rise of the International Workers of the World (the IWW or "Wobblies"), the founding of the CIO, and the militant, revolutionary Seattle General Strike of 1919.[4, 7,8] During the war, hysteria had increased the suspicion with which immigrants and foreigners were regarded. Immigrants were linked with the "Red Scare" of the 1920's, the increasing radicalization of workers, in general, and the IWW, in particular. Indeed, many of the more radical union leaders were immigrants who had found the land of milk and honey less utopian than they had expected. The American rulers clearly saw the labor movement and other socialist-oriented mass organizations as endangering their (ruling) class interests. They used one of the classic techniques of those in power to maintain their position: "Divide and Conquer." The eugenics movement was one way—not the only way but certainly a very effective one—of implementing this strategy. Nothing works more effectively to keep people apart than to convince one group that others are biologically inferior and thus "not as good." This is what racism does, and the eugenics movement was a form of racism with "scientific" backing. The eugenics movement, in general, and immigration restriction, in particular, were responses of the ruling class to a growing popular demand for more control over society. It was not a conspiracy in the usual sense. There was no one powerful ruling class

leader or group who laid out long-range plans. But class interests are such that members of the class generally know what movements serve their vested interests and what movements pose a threat.

The writings of members of the ruling class show they were aware of the threat which continued immigration posed. It was evident in social, political, and economic ways. Lothrop Stoddard's book *The Rising Tide of Color Against White Supremacy* (1920) was inspired by the threat which the awakening of the peoples of Asia, Africa and Latin America would have on U.S. (and particularly Nordic) domination of the world. Madison Grant shows the aristocrat's reaction to increased immigration. He described New York as becoming a "*cloaca gentium* which will produce many amazing racial hybrids and some ethnic horrors . . ." The old stock American, he complained bitterly, "is today being literally driven off the streets of New York City by the swarms of Polish Jews." [3] This fear was genuine and not uncalled-for. While most immigrants were, in fact, conservative, overall the working class strongly favored a reordering of society. The era of the robber-baron had made it clear to American workers that anything they got they would have to fight for. Immigrants figured prominently among the radical leaders of the labor movement and the IWW. It was this which led the ruling class to aim the argument of biological inferiority at immigrants, for the ruling class found in the eugenics-movement a strategy for disrupting workers' moves toward collective action.



Strikers of Standard Oil, New Jersey, stoning scabs, Bayonne, N.J., 1915.

How did the ruling class influence the spread of eugenic ideas, and the passage of eugenic-inspired legislation? It exerted its considerable effects on public opinion and legislative action through several processes. The news media and publishing houses were by and large controlled by the same wealth which controlled the steel mills and coal companies. Publication became a useful channel for moulding public opinion. Through their control of these channels, the ruling class could introduce and defend ideas which supported their general interests. The ruling class also controlled the universities financially, and these institutions pushed ruling class ideas. This was not done by forcing faculty to teach ideas which they did not agree with, rather it was done by hiring and giving special support to those whose ideas were agreeable. Anti-eugenic ideas were debated in universities, during the heyday of the hereditarian movement, but Castle's textbook was the most widely circulated, and influenced thousands of students. There were few publications available to counteract that book's eugenic assumptions.

How does class analysis account for the line-up of forces during the debate on the Immigration Restriction Act of 1924? In fact, a quick look at the lobbying groups involved seems to contradict what we'd expect from class interests. For instance, in the classical sense it might be expected that industry would favor the bill, since industrial leaders, as members of the ruling class, would fear an increased population of genetically inferior and socially malevolent proletariat. On the other hand, it might be expected that labor leaders would have opposed the bill, since increased immigration meant increased numbers of workers in the unions, and increased strength to fight the bosses. In fact, however, the matter was more complex. Testifying on behalf of the bill were various patriotic groups, fraternal societies, eugenics organizations, and organized labor. Opposing the bill were steamship companies, agriculture, immigrant aid societies and industry.[4] The positions of all except labor and industry are easy to understand. If we look closely, the positions of these two latter groups are neither unexpected, nor in contradiction to a class analysis.

Labor supported the bill because the job market in 1920 was rapidly becoming glutted with an oversupply of labor. In the north, particularly, this was due both to immigration and job reduction because of slowdown from wartime expansionism, and the migration of workers (mostly black) from the south. Partly because of the eugenists' propaganda, and partly because the unemployment problem was a reality, labor tended to focus especially on the immigrant as the immediate threat. Industry was opposed to the bill because unemployment was desirable to drive wages downward; industry was ever on the prowl for ways to reduce labor costs. It is interesting to note that industry was *less* opposed to the 1924 bill than it had been to the 1921 emergency measure. In the interim, the popular fear of the racial effects of immigration had increased, businesses had continued to prosper even without the previously large supply of cheap labor, and large-scale black migration from the south had kept

the labor pool from falling too low.[4] Thus, industry and labor both acted within the framework of their perceived class interests.

We must remember in applying a class analysis to historical events, that there are many different class interests, some of which may be predominant at one period, some at another. Many times these interests can be contradictory within each class. For example, the ruling class faced two conflicting self-interests in regard to immigration in the 1920's. Unrestricted immigration meant a larger labor pool and thus low wages (and high profit). At the same time, too many immigrants, or too great an increase in the size of the proletariat, meant increased danger of labor organizing and eventual social revolution. To the ruling class the advantage of increased cheap labor had to be balanced out against the disadvantage of labor discontent and unionization. A fear of the latter turned many ruling class members to support the eugenics movement.

Labor also had contradictory positions. Increased immigration provided more recruits to the rank of the proletariat: a necessary condition for effectively organizing against the bosses. On the other hand, with a restricted job market, increased immigration heightened competition for available jobs. A dislike of the racial hatred fostered by the eugenists caused some workers (especially immigrants themselves) to oppose immigration restriction. The immediate problems of unemployment, however, caused labor leadership, along with other workers to favor the immigration act of 1924.

The Current Controversy

The hereditarian arguments over race and IQ in the 1970's have many similarities to the eugenics movement during the period 1900-1925. Both attempt to differentiate between superior and inferior characteristics allegedly associated more with one race or class than another; both have based their arguments on supposed biological traits (inherited differences); both have found support within the scientific community and have tried to derive prestige from "scientific data"; both have involved large elements of subjectivity and bias in the use of evidence; and both have been picked up by the ruling-class controlled media and have received far more publicity than their questionable conclusions would warrant; both have drawn favorable attention from political and governmental leaders of their day, and have had a variety of influences on public policy; thus, a study of the older eugenics movement can help us understand and respond to some of the deleterious public effects that might arise from a general acceptance of a new brand of hereditarianism.

That the hereditary differences in IQ between races has already, as a policy, begun to enter the public domain, may be demonstrated by several examples. Shortly after Jensen's original article appeared in February of 1969, a southern congressman had the entire 123-page article read into the *Congressional Record*. Daniel Patrick Moynihan reviewed Jensen's studies to the Nixon cabinet, pointing

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THE INHERITED IDEOLOGY OF SCIENCE

We have inherited from bourgeois society a science whose structure presupposes that man exists inherently as a passive object of external natural laws that science must discover but over which man has no ultimate control. A revolutionary movement that intends to liberate man's repressed desires will need to overcome all forms of bourgeois science that so roots human domination in human nature; the only "human nature" is that man knows the natural world by consciously acting on it to modify it, while constructing his own historically specific "nature" in that process. I want to undertake a project of Marxist journalism with respect to the current political/scientific debate over IQ; understanding the present as history requires revealing the social basis for the views of all those involved, including the scientists on both sides, the leftists, and this writer himself. This means understanding not just the political effect on scientific investigation, but also the political content of scientific categories themselves, which for our purposes here can be traced back to the 19th century transition in biology.

The debate over Darwinian evolution proceeded on political grounds, each participant looking to evolutionary theory for a basis in science for his social views, which often required attempting to separate Darwinism from its Malthusian precursor. Huxley tried to show—contrary to those participants' thinking—that political predictions do not follow logically from biological theories, but he failed to see that Darwin's theory incorporated a changed ideology of man's place in nature corresponding to the increasingly competitive urban world of 19th century England. In other words, even though Darwin did not actively enter the debate, his anthropomorphic "survival of the fittest" already contained certain Malthusian conceptions inseparable from political economy and natural theology.

Radicals should understand that a major ideological obstacle today is the secular religion of science derived from that period (although possibly tracable back to Bacon or even earlier). Many Darwinians underwent a theistic religious conversion in which they came to identify the traditional Deity with natural laws, the latter operating as super-human forces controlling man, just as God "out there" had done earlier. In the same period, "dialectical materialism" located similar forces in the "objective laws of history," which only vulgar Marxists*

*Term used to describe oversimplified Marxist views.

were to have understood, instead of God, it was the base that made history by using the superstructure as the instrument of its will. Neither version understands the human dialectical basis of history; both abdicate to objective knowledge of science. That myth of progress through science is perpetuated in its most subtle and therefore insidious form by those who attack genetic racism (or behaviorism, etc.) as "unscientific."

In the Lysenko debate†, Engels' suspicion of genetic inheritance was carried over into the 20th century against the new Mendelian genetics, which many Russian scientists considered a pseudo-scientific basis for imperialist ideology. Many people who took diametrically opposed positions in the genetics debate still operated within a (implicitly) common assumption: that biological theory (Mendelian vs. Lamarckian) determines human nature and therefore politics (capitalism vs. socialism). A generation later, Medvedev remained incapable of explaining the Lysenko episode except by excluding Lysenko's school from the realm of science, in order to salvage his notion of scientific objectivity. However, it is less useful to brand Lysenko as unscientific (or his Western opponents as more scientific) than to understand his place in the Engels tradition of preference for Lamarckianism (inheritance of acquired characteristics), which seemed to them more consistent with the inevitability of world socialism.

In the current IQ inheritance debate, many participants choose sides according to their political assessment of racial minorities based upon moral attitudes that they attempt to conceal behind science. The anti-racists reveal their own ideology when they attack Herrnstein's "pseudo-scientific" activities for undermining "socially progressive" government programs, as if politics and science can be separated for them or for Herrnstein. As with Huxley a century ago, some observers (such as Chomsky) have argued that a political view or educational policy doesn't follow logically from a scientific theory; but in so doing, he implies that the scientific question can be politically neutral.

On the contrary, the very question being debated is continuing the 19th century controversy in a modern

†Trofim D. Lysenko, a Soviet geneticist, held that the foundations of Mendel's theory of genetics sprang from metaphysics and idealism. He supported instead the Lamarckian view that traits were acquired or changed through interaction with the environment, rather than inherited.

form. Appropriate to the advance of "scientific objectivity," or the bourgeois reduction of quality into measurable quantity, the 19th century moral character judgements on the Negro race (whether pro or con) have been stripped of their emotional component and reduced to a more technically measurable category: intelligence. Similarly, Piaget greatly advanced psychology by basing his epistemology upon a subject-object dialectic, which replaced 19th century religious-moral models of intellect; but his model remains ideological precisely for divorcing individual cognition from its emotional & social basis.

The very notion of intelligence is a modern ideological category, a commodity to be measured for sale on the marketplace. The science of measuring IQ (or even gauging stages of intelligence) presupposes that intellectual growth actually occurs by some isolable process of logical operations. So in the IQ debate, the non-neutrality of science originates not at the point of application of some neutral knowledge, but much earlier, at the point of the production of that knowledge. The paradigm of measuring intelligence informs a particular mode of practical activity that already contains the limits of its application. IQ measurements inform bourgeois society's scientific management of the production and use of cognition for the process of reproducing bourgeois society—regardless of one's scientific conclusions as to the inheritance of intelligence or its political implications.

A revolutionary science, like bourgeois science, will certainly contain a political bias, but will not deny or mystify that social basis in daily life. Revolutionary science will abolish all man-made separations and fragmentations rooted in "scientific objectivity," but not by alternatively pretending that man is merely identical to nature, since man's place in nature is an historical product of man's own conscious activity. Revolutionary science will understand itself as a part of human history, and therefore as a science not of natural law but of human struggle.

L.L.

ESSENTIAL REFERENCES

Robert Young, "Evolutionary Biology and Ideology: then and now" in *The Biological Revolution* (or in *History of Science*, Vol. II), 1971.

Robert Young in *Changing Perspectives in the History of Science*, 1973

TELOS #15, Spring '73, Commentary and book reviews.

Karl Marx, *The German Ideology*

Horkheimer & Adorno, *Dialectic of Enlightenment*, 1944



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out that Jensen's scientific credentials were exemplary. A Virginia court introduced Jensen's work as evidence in a desegregation case .[9] In recent months hereditarian thinking has been overtly reflected in a public statement by Dean Watkins, chairman of the Board of Regents of the University of California: "It is just possible that the reason some people are rich is because they are smarter than other people; and maybe they produce smarter children." [10]. What is also significant is the timing of both the old and the new hereditarian movements. Both emerged in periods following considerable social upheaval: the labor movement and strike agitation in the 1890's and first decades of the present century; and the strong civil rights and anti-war organization of the period 1963-1970. Both movements sought to explain social inequalities and injustice by appealing to hereditary differences between the people on top and those on bottom. Both such explanations are merely different brands of racism.

It would be rash to claim that the eugenics movement of the 1920's, the Nazi racism of the 1930's, or the hereditarian views of the 1970's could have been totally defeated had scientists spoken out at the time. Academics do not often have such power. But strong opposition from scientists would have made those earlier movements less easy to build, and would have forced their inherent racism to appear more strikingly. The same can be said for the hereditarian movement of the present. By understanding that movement we can more easily lay bare the fallacious conclusions which, as a brand of self-serving racism, are masquerading under the mantle of legitimate biology.

G.A.

NOTES

[1] Castle, W.E. 1916 *Genetics & Eugenics* (Cambridge, Harvard University Press).

[2] Haller, Mark 1963 *Eugenics; Hereditarian Attitudes in American Thought* (New Brunswick, N.J.)

[3] Grant, Madison 1916 *The Passing of the Great Race* (N.Y., Charles Scribner's Sons).

[4] Ludmerer, Kenneth 1972 *Genetics & American Society* (Baltimore, Johns Hopkins Press).

[5] Laughlin, Harry H. 1922 "Analysis of America's modern melting pot." Hearings before the House Committee on immigration and naturalization. 67th Congress, Third Session (Washington, Government Printing Office) p. 255.

[6] Beardsley, E.H. 1973 "The American scientist as social activist; Franz Boas, Burt G. Wilder, and the cause of racial justice," 1900-1915. *Isis* 64: 50-66.

[7] Anon. 1973 "Seattle general strike, 1919: Can we do better next time?" *Progressive Labor* 9 (July, 1973): 33-44.

[8] O'Connor, Harvey 1964 *Revolution in Seattle* (New York, Monthly Review Press).

[9] Neary, John. 1970, "A Scientist's Variations on a Disturbing Racial Theme." *Life Magazine*, 63 (June 12, 1970) 50B-65.

[10] *Daily Californian*, April 2, 1973.

GENERAL REFERENCES

Haller, Mark (1963) *Eugenics; Hereditarian Attitudes in American Thought*

Ludmerer, Kenneth (1972) *Genetics and American Society*

"Eugenics, survival of the bosses; revolution, survival of the workers" *PL* 9,78-86

Racism, Intelligence, and the Working Class Progressive Labor Party 1973

ONE BATTLE- FRONT

In spite of the depravity of the ideas they spread (or because of it) the followers of Jensenism have had full access to the public media. Both Shockley and Herrnstein have appeared on nation-wide T.V. and their theories have been given repeated exposure in the press. Originally published in magazines for the intellectual set like *Atlantic, Encounter, and Commentary*, Jensen's and Herrnstein's claims have more recently appeared in more popular magazines and newspapers—*Time*, the *New York Times*, and many working-class dailies. In *Time*, for example, in an editorial called "The Usefulness of Obsolete Ideas," Jensen's and Herrnstein's theories of genetic inferiority are held up as the explanation for the failures of the social programs of the 1960's.[1] In the *New York Times*, Shockley's right to be given a public forum for advocating sterilization of low IQ mothers is defended.[2] And in working-class newspapers around the country (for example, the *Chicago Tribune* and *Minneapolis Star*) syndicated columns are featuring articles in which Herrnstein argues the inevitability and justice of poverty for those who are born "inferior." [3]

Within academia, as well, their reactionary ideas have been kept alive. Textbooks and college courses abound with racist theories. Following many attacks made on

them last year, Jensen and Herrnstein and 47 others signed a statement in the *American Psychologist* endorsing the "hereditarian" view of human behavior; and, likening themselves to Galileo, claimed that their "scientific" work was being suppressed! [4] The suppression certainly wasn't coming from the government. The National Institutes of Health, for example, is funding a \$1.5 million study at the University of Hawaii entitled "Genetic and Environmental Bases of Human Cognition." This project is just another attempt to link intelligence to specific genes. The purpose is explained in the research proposal:

With respect to long-range significance these data will serve as a basis for future decisions about the disturbing but inevitable questions about population control which will have to be made at government level. Obviously, many different answers are possible. The purpose of this study is to provide some solid information about the genetic correlates of intelligence so that an informed decision may eventually be made. [5]

The "informed decisions" of government so far have been cutbacks in educational, social, and welfare programs like Head Start, Upward Bound, legal assistance aid, and many other Office of Economic Opportunity programs. The justifications for these cutbacks have come from the Moynihans, Jensens, Herrnsteins, and others whose research attempts to demonstrate the genetic or cultural inferiority of the poor and the black. The extension of their ideas to social policy takes the form, for example, of recommendations of the Committee of Economic Development, which calls for doubling of college tuitions and the turning of state colleges into technical and occupational training centers.

The struggle against Jensenism has been waged on many fronts. On the job it has taken the form of organizing black and white and other workers into a united struggle against racist and exploitive work conditions. On a community level it has involved fights to stop cutbacks in government economic, educational, and social welfare programs. And on the academic front it has taken the form of an ideological struggle to expose and discredit the IQ ideology and those who are pushing it.

There are intelligence genes, which are found in populations in different proportions...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 easily be made and profitably used by the pragmatic man in the street.
— William Shockley, 1971

The false belief in human equality leads to rigid, inflexible expectations, often doomed to frustration, thence to anger. Even 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. — Richard Herrnstein, 1973

If the entire American population were properly educated — by properly educated, I mean given a true picture of the history and contributions of the black man — I think many whites would be less racist in their feelings. They would have more respect for the black man as a human being. Knowing what the black man's contributions to science and civilization have been in the past, the white man's feelings of superiority would be at least partially negated. Also, the feeling of inferiority that the black man has would be replaced by a balanced knowledge of himself. He'd feel more like a human being, in a society of human beings.

So it takes education to eliminate it. And just because you have colleges and universities, doesn't mean you have education. The colleges and universities in the American educational system are skillfully used to miseducate.

— Malcolm X, 1965

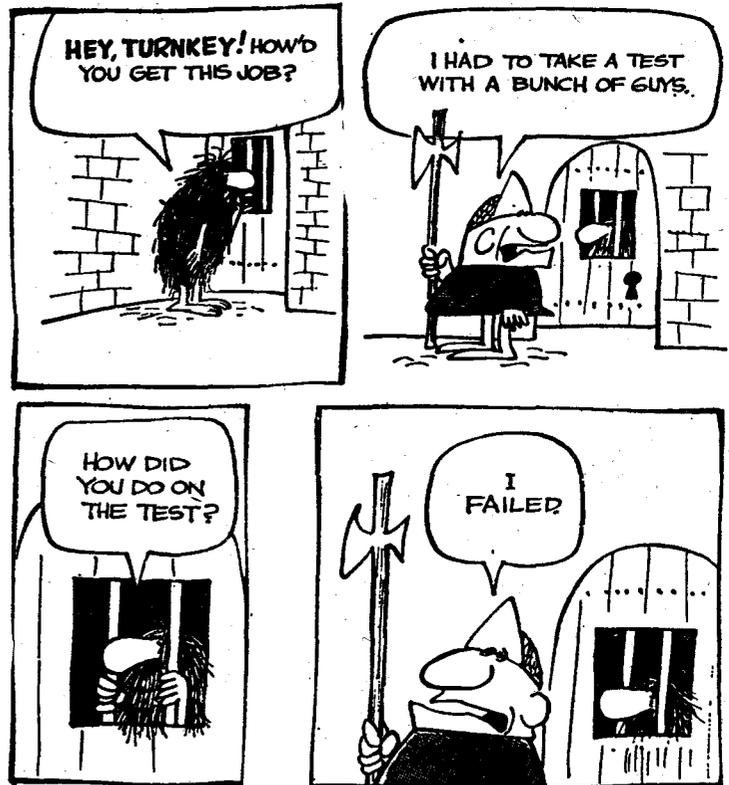
Within the universities, the fight against racist, anti-working-class theories has involved the refutation of Jensen's and others' "scientific" claims. Herrnstein has been directly confronted at Harvard University (where he does pigeon research) and a campaign has been waged against Shockley on his recent lecture tour of eastern universities (Harvard was forced to cancel his talk, he was applauded down at Dartmouth, boycotted at Princeton, and booed down at Staten Island Community College).

Many groups have been involved in these and other actions. Several months ago 1200 people met in N.Y. City to form a national Committee Against Racism (CAR). This organization had its origins at the University of Connecticut two years ago, where a group was formed to combat academic racism. It drafted position papers, circulated petitions, and more recently organized a response to Jensen's and Herrnstein's advertisement, referred to above, in the *American Psychologist*. This response was "A Resolution Against Racism" published in the *New York Times* and signed by 1400 academics.[6] Among other things, this resolution called for the November, 1973 New York convention out of which came the national CAR with 25 local chapters. The organization was formed on the basis of the following principles:

1. *We are a multiracial organization; we stand united, Black and White, Latin and Native American, because racism is a deadly enemy to all of us.*
2. *We are a mass rank-and-file organization, drawing our strength from ordinary people and not from super-stars; we are convinced that our colleagues will join us and stand with us.*
3. *We are action-oriented; we will oppose racist ideas and practices by deeds as well as words.*[7]

Most CAR chapters have been holding forums and teach-ins to publicize how the IQ theories are being used on college campuses and what people can do against them. For example, one struggle all CAR chapters have been involved in is fighting classroom racism, that is, racist text books, courses, and professors. The actions they have been taking include boycotting various books and circulating position papers against professors and courses. Other CAR chapters have been holding forums on such issues as racism in employment (discrimination through testing for employment), firings of black faculty, racist policies in admissions, academic freedom and racism, etc.

Another form of struggle is with institutional racism, that is, the local effect of government and administration policies. The University of Massachusetts (Boston) chapter, for example, is fighting around two such issues. First, educational funds are being cut back while at the same time the state legislature is considering a bill which would double tuition. Second, the University has just moved to a new campus in a working-class neighborhood bordering on a nearly all-black housing project. The University, not having built any student housing, is planning to take over the housing project. The U-Mass chap-



ter of CAR has written an "Indictment of Racism" against the University and has held several forums to explain the issues and explore what can be done in opposition. The chapter is also working with people living in the project to form a strong interracial front, beginning with the organizing of a rent strike.

These battles in and around academia will be significant only when combined with attacks on many other fronts. Successful campaigns have been waged to abolish IQ testing in some schools, and in some cases courts have ruled that IQ tests are (racially) discriminatory.[8] In some cases the courts have also ruled against using IQ tests for screening job applicants. But the battle must go far beyond the courts, to militant organizing of teachers and students and parents against IQ tests, to militant organizing of black and white workers against the racism on the job, to the militant organizing of all working people against the ideas and practices that keep them divided.

P.C.

NOTES

- [1] *Time*, Sept. 3, 1973, p.59
- [2] *N.Y. Times*, Nov. 16, 1973, p.39M
- [3] *Minneapolis Star*, Nov. 19, 1973, p. 9A
- [4] *American Psychologist*, July, 1972
- [5] Letter from Hawaii Committee Against Racism
- [6] *N.Y. Times*, Oct. 28, 1973
- [7] *CAR National Report*, vol. 1, no. 1, Dec. '73-Jan. '74
- [8] Center for Law and Education, Harvard University, *Inequality in Education*, no. 14, July, 1973

To obtain more information on the national CAR, write to Committee Against Racism, P.O. Box 305, Storrs, Conn. 06268.

NEWS NOTES

Everyone! Please contribute items of interest and humor to this regular section.

COMPUTER PEOPLE SIGN OFF

Computer People for Peace (CPP), publishers of *Interrupt*, have announced that their organization has folded. The organization, composed of a broad spectrum of computer workers including programmers, researchers, designers, and teachers, was born out of the anti-war movement of the 1960's. But since the height of that movement, its activities had gone beyond simply attacking the computer industry's role in the war. CPP confronted professionalism and job discrimination and the use of computers for political repression in the United States.

Recently, in spite of continuing interest from new people, CPP had been unable to sustain active local chapters. Without this support, publication of *Interrupt* and other activities became impossible. A letter recently sent out by the N.Y. group responsible for *Interrupt* explained the organization's difficulties as arising from the fragmented nature of its activities and the lack of a comprehensive or unified political perspective.

With the demise of CPP, political activity among computer workers will have to find a new form of expression. The proletarianization of computer work over the last several years will no doubt affect the form it takes.

PURTO RICO DECLARED A U.S. COLONY

The Puerto Rican struggle for self-determination won an epoch-making diplomatic victory in December when the United Nations General Assembly approved a committee report declaring that Puerto Rico was in fact a colony of the United States, not an independent country.

The vote was 104-5, with 19 abstentions. The opposing votes were cast by the U.S., Britain, France, Portugal, and South Africa. The U.S. press virtually ignored the decision.

The vote showed that the great majority of the world's countries, after hearing the arguments of both sides, were not persuaded by the U.S. propaganda that Puerto Rico is a "free associated state"—an independent country whose people voluntarily choose to live under U.S. hegemony.

The vote marks an epoch in the struggle by Puerto Rican independence forces for international recognition. It signifies that, in the view of the world body, Puerto Rico is similar to Angola, Mozambique, and other territories directly ruled and occupied by a foreign power. This, according to U.N. principles, means the people of the island nation have the same legitimate right to rise up against their foreign master as do the people in Portuguese-occupied Africa and other colonial territories.



UNIONIZATION EFFORT

An effort is being made to unionize the research and engineering personnel at SCM photocopier research facility in the Stanford Industrial Park. This effort has thus far been quite successful. A petition has been filed with the National Labor Relations Board (NLRB), supported by the signatures of 30% of the personnel at the facility. The NLRB has ruled this petition valid and has approved a representation election for the facility. The success of this effort is indication of an historic move of science workers toward organization in industrial settings as well as on campus. This organizing effort is by no means won; the company is putting out rumors threatening (illegal) abandonment of the facility in the face of organization. However, this drive will hopefully be successful and establish a precedent for the rest of the industrial park. If anyone needs assistance in mounting similar efforts elsewhere, please contact Palo Alto SESPA, listed on the inside back cover of this magazine.

BAN THE B-1

From the people who brought you the the \$4.4 billion C-5A, which has weak wings, and the \$3 billion B-58, which is in mothballs, and the \$1.5 billion B-70, which is in a museum, comes now the B-1.

The B-1 Bomber is the Air Force's proposed replacement for the B-52 and FB-111 bombers—a manned, nuclear and conventional, supersonic and subsonic plane that, when finished, will be the largest, most expensive weapons system ever built. Total cost estimates for research and development, production and support systems for the 241 bombers the Air Force wants range from \$43 billion to over \$75 billion.

Both the outrageous cost of the B-1 Bomber and the motivations of its proponents raise the following inter-related questions: 1) What role is envisioned for the B-1 in U.S. foreign policy? 2) Which corporations have a major stake in the development of the B-1? 3) What impact will the B-1 have on the environment? How will the high cost of the B-1 affect national priorities?

Three large corporations—Rockwell International, General Electric, and Bo-

COMMUNIQUE from the NATIONAL SECRETARIAT of the MIR

It is our duty to inform the workers of Chile and the world that Bautista von Schowen Vasey and Alejandro Romero Guzman, members of the political commission of the Revolutionary Left Movement (MIR), dedicated revolutionaries with many years of work, medical doctors, have been arrested by the Gorilla Regime and sentenced to death.

Our comrades and friends were arrested due to unforeseeable circumstances while carrying out their responsibilities. Whereas members of other left political parties have sought asylum, the decision of the MIR has been that party members remain in Chile and not go into exile. The rest of MIR's leadership continues to work carrying out their responsibilities.

For many months now, Bautista von Schowen and Alejandro Guzman have been submitted to brutal tortures; they have been destroyed physically by their torturers.

Throughout history neither torturers nor assassins have escaped punishment, whether in Chile, Nurenburg, Spain, or Argentina.

We call on the Chilean working class and the Chilean people, on all workers, revolutionaries, and true democrats throughout the entire world to demand the end to our comrades torture, to prevent their murder and to demand their freedom and that of all prisoners held by this military dictatorship.

Struggle for Liberty in Chile!

Demand wage increases of 100% to meet the rise in the cost of living!

The Popular Resistance against the Military Dictatorship Will Win!

Emergency telegrams are urgently needed to save the two MIR leaders, as well as Marxist historian Louis Vitale who is old and cannot suffer much more abuse at the hands of the Chilean Military. Send telegrams to : General Sergio Arellano, Ministerio de Defensa, SANTIAGO, CHILE

JOB OPENING IN CHILE

One year visiting positions are available at the University in Santiago, Chile, for physicists doing research in Solid State Theory, Surface Phenomena, and MNR techniques. This is part of a \$14 million development project contracted by the University and the Interamerican Development Bank. The visiting scientists will strengthen teaching and research activities related to the Graduate Program in Physics. The monthly salary is U.S. \$1,200 (one fourth of this amount is more than enough at the official exchange-rate for a family to live very comfortably in the City of Santiago). Travel expenses for the scientist and his family will also be paid.

Send resume as early as possible to:

Prof. Ricardo Ramirez, Chairman
Institute of Physics
Universidad Catolica de Chile
Vicuffa Mackenna 4860
Santiago, Chile

ing—are expected to receive billions of dollars in defense contracts for production of the B-1.

The American Friends Service Committee, and Clergy and Laity Concerned are working closely with several other organizations such as the Center for Defense Information and Members of Congress for Peace through Law in order to strengthen Congressional opposition to the B-1 Bomber production. For information: AFSC, 160 N. 15th St., Phila, Pa. 19102.

BEHAVIOR MODIFICATION PRISON PROPOSED FOR NEW ENGLAND

A Harvard professor has recommended that a regional prison for "disruptive" inmates—apparently another thinly-veiled mind control facility—be created by Maine, New Hampshire, and Vermont. He reached this conclusion after an 18-month feasibility study of regional programs to treat what are labeled "dangerous special offenders" in New England prisons.

William J. Curran, professor of legal medicine, offered this proposal as a reform measure, with the comment, "If we reform this small minority, we can reform the whole system." Since segregation doesn't work to change inmates, he says, "The most successful ways of dealing with them tend to be related to behavior modification."

For Massachusetts, Curran saw the greatest promise for developing programs for the "special offenders" in a center which would specialize in research, training, and treatment to deal with various "special groups," including what are labeled "non-psychotic special offenders." The center would be operated by the division of legal medicine.

Curran identified 365 New England "special offenders," whose actions in prison—judged by a search of records and assessments by a study team and prison personnel—marks them as "dangerous and disruptive." The fact that "political protest" was at least partially involved in the actions

that brought 35% of the group their "disruptive" label has been strongly criticized by Matthew P. Dumont, assistant commissioner for drug rehabilitation in the Massachusetts Department of Mental Health.

Dumont sees a "dangerous possibility that political activists, organizers, and protesters in prison will be seen as 'special offenders' who require massive and highly professionalized forms of control." Over the last several years more sophisticated forms of behavior modification have been developed by federal agencies for use on prisoners, and to forestall outbreaks such as the Attica Rebellion of 1971.

The forthcoming May issue of Science for the People will focus on the use of behavior modification and control in prisons, mental institutions, and schools, and the struggle against these behavioral technologies.

MORE LETTERS

continued from page 4

Dear SESPA,

...News of your organization was gained through [a comrade] whom I met by luck in Chile, where I was a delegate from the Australian Metal Workers Union to a conference on transnational corporations and the trade union response.

As a unionist I hope to be a modest sort of catalyst between the union and the embryonic SESPA movement in Sydney.

You are certainly far more involved in analysis and exposure of the honeyed explanations of corporatism and government policies than we are here, even allowing for difference in size, development, and closeness to the centre of imperialist decision making.

Let it be a spur to efforts here.

Solidarity,
Steve Cooper

Dear Colleagues,

In view of the tendentious report in your September issue of the London Conference on Scientific and Technical Aid to Vietnam and the criticism of me personally I trust you will give me the opportunity to reply. If your correspondents M.G. and T.G. had sought to understand the basis on which our Vietnamese colleagues came to Europe, they would have been able to provide your readers with a more objective assessment.

The original proposal for the Conference was made by Henri Regemorter who sought my aid in view of the close contacts between Vietnamese scientists and the World Federation of Scientific Workers, of which I have the honour to be President. The President of our affiliate in Vietnam, the Association for the Dissemination of Scientific Knowledge, Professor Le Khac, is also Vice-Chairman of the State Committee for Science and Technology (SCST). In response to my request he informed me that the SCST would be ready to send a delegation of their Vietnamese scientists to London to attend a conference on the co-ordination of scientific and technical aid to his country by groups of scientists from several European countries, provided I sent an invitation on behalf of the WFSW.

In the meantime, however, I had already approached the British Society for Social Responsibility in Science (BSSRS) for help in setting up an ad hoc committee to organize the Conference. They had agreed, and at the first meeting of the committee representatives of the Technology Sub-Committee of the Indochina Solidarity Committee (ISC) were co-opted. Further, the WFSW being a world-wide body, it would not have been possible to obtain permission from its Executive Council sufficiently

quickly to allow them to be included as sponsors. The telegram of invitation was, therefore, sent jointly in my name, in my personal capacity, and in the names of Maurice Wilkins, President of BSSRS, and of Norman Dombey of the Technology Sub-Committee of ISC. The purpose of the Conference remained, however, the co-ordination of the efforts of scientific and technical aid to Vietnam by European groups. This was the understanding on which the SCST of the DRVN sent the delegation and this and only this was the reason I used every effort in the Committee to ensure that the Conference should be primarily devoted to this topic. Since I had initiated the request to our Vietnamese colleagues on this basis, I believed it a matter of honour and of deeping faith with them to take this stand. I might say that this was appreciated by them. One of them remarked to me that if his Government had understood the Conference was to be primarily political in nature it would have sent three political figures and not three working scientists.

Of course, the question of aid in the reconstruction of Vietnam is a political question and discussions aimed at increasing the political understanding of scientists about the implications of their work, about the role of science in our society, and about the lessons to be drawn in these connections from the war in Vietnam are of great importance. There is every reason to have a conference to discuss these questions, but that was not the purpose of this particular conference, and not the basis on which the Vietnamese delegation came to Europe.

With regard to some of the other inaccuracies contained in the report about me personally; colleagues

ACTIONS FOR UPCOMING MEETINGS !

APS WASHINGTON MEETING

Washington, D.C., April 22-25, 1974

N.Y.C. SESPA/SftP plans to be active at the American Physical Society meeting and has organized a session entitled, "The Job Crisis—Why?" This session will deal with the economic roots of scientists' unemployment and the use of the ideology of professionalism to disguise its causes and effects. Anyone interested in helping to organize actions for the meeting, please contact us at the address shown on the inside back cover.

CALL TO IEEE ACTION

We are planning an action at the IEEE (Institute of Electrical and Electronics Engineers) Annual Convention to be held in New York City, March 26-29, 1974, at the Coliseum (59th Street, Columbus Circle). Anyone interested in helping is asked to contact us at the address below:

Committee for Social Responsibility in Engineering
475 Riverside Drive
New York, N.Y. 10027

who know me will derive a good deal of amusement from the categorisation of me as an "Establishment scientist". My remark about driving away people whose material support we needed was made not so much in relation to the Draft Appeal we were discussing (of which the one actually adopted and printed by you was a drastically toned-down version), but rather in relation to the indiscriminate use of the term "elitist" as an abusive epithet. You also give a false impression by omitting to mention that in resigning from the Organizing Committee after the end of the Conference, due to a tremendous pressure of other commitments, I suggested the name of a colleague with a similar point of view to mine who should be approached to replace me. As far as I know that approach was not made!

Perhaps I myself may be permitted to mention a conclusion I would draw from my experiences in the organization of this meeting: it is the very sad one that it is difficult to co-operate with followers of the Fourth International afflicted with the infantile disorder.

Yours sincerely,
E. H. S. Burhop

The authors reply—

We certainly think that Eric Burhop's letter should be published. Burhop's elitist, manipulative, opportunistic nature rings forth from his own words. It might be wise to print some of the following rebuttal as well.

1. We made many attempts—before and during the conference—to understand the background and to do what we could to influence the organization away from the elitist "lecture mode" into a form that would result in educational political discussion.
2. We talked to members of the BSSRS* and the ISC* including several members of the conference coordinating committee and the consensus about how things evolved was very different from Burhop's narrative. In particular the central role played by the WFSW* (which, by the way, excludes anyone but research scientists from membership) seems to be a figment of Burhop's imagination.
3. Burhop's major point seems to be that the purpose of the conference was only to coordinate scientific and technical aid to Vietnam. To refute this we enclose a copy of the announcement sent out by the organizing committee (note carefully Burhop's signature on the call). This document clearly states that the political lessons of the war (for scientists) and technical aid were to be viewed as the complementary subjects of the conference. If Burhop mislead the Vietnamese about this, then only *he* is to blame.
4. If indeed one of the Vietnamese delegates made the remark attributed to him by Burhop suggesting that "political figures" and not "working scientists" are the

appropriate people to discuss the politics of science, we surely should have discussed this crucial point. We sincerely doubt that this was actually said. The limited contact that we had with the three Vietnamese delegates indicated that they were aware of the folly of making such artificial distinctions.

5. *Elitism is abusive.* The term elitist is neither abusive nor inappropriate when used to accurately describe elitist behavior.

- * BSSRS—British Society for Social Responsibility in Science
- ISC—Indochina Solidarity Committee
- WFSW—World Federation of Scientific Workers

In the Struggle,
Ted and Minna Goldfarb

Dear SftP,



PERSON
What can one ~~do~~ do, my friend
PERSON
What can one ~~do~~ do
To fight pollution in the air
That's closing in from everywhere?

There is one thing you can do, my friend.
**SEXISM AND
SMASH CAPITALISM**

In Struggle,
Nancy Shaw

The above illustration and text, taken from page 3 of the January, 1974 SftP, elicited a lot of response from our readers. Originally it was an advertisement from some slick magazine (no one remembers which) to which someone responded with the words SMASH CAPITALISM in a whimsical fashion. These words are not meant to be a slogan, a program, or a manifesto of Science for the People. We realize that eliminating capitalism will not in itself do away with the sexism and individualism permeating the ad nor the pollution to which it refers. But we are convinced that destroying capitalism is a necessary part of the struggle against all forms of oppression that exist today.

SCIENCE TEACHERS REPORT

The N.E. Regional National Science Teachers Association (NSTA) convention in Boston, last December, was different from past national NSTA conventions the Science Teaching Group has attended. We were asked to present our own sessions, given space for our literature table, and the NSTA sessions were run in a more open manner. Since the regional NSTA sessions allowed more teacher participation, there was no need for confrontation in order to raise questions or suggest alternatives. Some of the people we had met at previous NSTA conventions remarked that we had changed! (Evidently we had not made our reasons for confrontation clear at those conventions.)

After the conference that we had held last March on science and society issues, we were in good shape for the NSTA regional convention. We had prepared a number of workshops and materials. Our largest effort for the convention was preparing a series of booklets for students. It took four months' hard work to edit the pamphlets so that they could be understood by high school students. Our effort has paid off. They can be used not only for students but for interested people with varying scientific and work backgrounds. The topics covered are: The Energy Crisis, Issues of Health Care, and Genetic Engineering. (Politics of Ecology is on its way!) All together we had a lot to offer the other teachers at the convention. (And they dug it!)

Science Teaching Group Sessions

Three of our workshops were listed as regular NSTA sessions, and we also sponsored a talk by geneticist Richard Lewontin. His talk on genetics and IQ served as a catalyst to look at the racist theories of Jensen, Herrnstein, and Shockley. Some of the participants were surprised by the poor background that some of the teachers had, still holding the Lamarckian view that environment changes genes. The time for the talk was too short for extensive discussion.

The genetics and IQ issue was picked up again in our session on Genetic Engineering. After a half-hour presentation, the 80-100 people in the session broke into three groups. The discussion in the groups ranged from the use of Jensen-Herrnstein ideas in their (ghetto) schools to the impact of genetic testing (like for sickle-cell anemia). The participants report that the discussion was really good, with people drawing upon a wealth of personal experiences.

Our politics of ecology session showed us that many of the other socially concerned teachers had been doing their homework. They weren't surprised by the three speakers' twin contention that the energy crisis was brought on by the oil monopolies for their own benefit and that the wasteful nature of the American economy was also a product of the large corporations. In fact, in the discussion groups following the three talks, the other teachers presented a lot of additional information as we tried to define the politics surrounding the ecology movement. One problem brought up was how to reconcile the fact that the energy crisis was promoting needed energy conservation with the fact that it was staged to benefit the energy companies. Of course, it's the working people who are asked to conserve, with little challenge to the wasteful (but profitable) structure of the economy. There seemed to be a consensus that teachers could best act by showing their students how to think critically and by giving them a sense of acting politically in their own common interest.

The Science and Society Courses session was a repeat from our March conference, so it didn't require much preparation. There were a couple of new faces among the speakers, including a high school chemistry teacher we met at the March conference. The session was organized so that each speaker described some particular aspect of their teaching for 5-10 minutes, and after each speaker a short time was given for comments and questions from the floor. This was in contrast to the normal NSTA session with its "expert" monologue, and was well received by the session participants.

The speakers outlined their efforts to develop students' critical thinking, to streamline basic science curriculum and insert social issues, to study how science has treated women, and to go beyond the "sense of doom" one gets from studying social issues of science. The topic which generated the most interest was probably the way science has seen women. The talk provided a good example of how science has served some interests to the detriment of others, and how people can act together to understand and change society. Several people pointed out that it was by working with political action groups such as Science for the People—actually doing something—that both students and teachers lose their "sense of doom." The session benefitted from having a number of teachers attending who had been leading science and society courses. Instead of trying to get people to teach science and society courses, as in the past, we were now talking about the best way to do it.

We made several attempts to organize *informal sessions* to talk about general teaching problems, including a wine and cheese get-together at one of our evening meetings. The only successful one took place in the afternoon following the Science and Society Courses session. Evidently people were really turned on by that session and by the advertizing done around the literature table. So many people came that we had to break the group up into a number of discussion groups. People talked about everything from work-study programs to grading, from non-traditional teaching situations to student lack of preparation and confidence. Teachers got to share their successes, as well as the system's failures. At the end there were a lot of comments about how enjoyable it had been to talk with other teachers.

NSTA Sessions

The Science Teaching Group broke up into smaller units to attend some of the NSTA sessions which had social and political content. Sessions such as: Health Education, Population Control, Business and Technology, etc. Our *objective* was to open up the sessions so that the teachers present could actively take part in the discussion. The usual NSTA convention session revolves around monologues by a few "experts". These same "experts" often praise *open education*, letting students dis-

cover on their own. This bit of hypocrisy is not too astonishing when one realizes what the purpose of the convention is: a trade fair for the education corporations and big ed schools—not a place for teachers to share ideas.

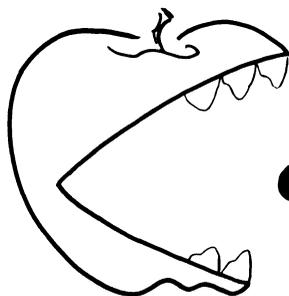
Sure enough, all of the sessions began in a monologue fashion. But this year there was little resistance when we politely broke the ice with questions and differing positions. Other teachers followed suit. The newer members of the Science Teaching Group got a chance to learn how to open up closed monologues. Surprisingly, there were few people at these sessions compared to our own sessions and the few other similar ones.

The closest thing to a confrontation took place around some guerrilla theatre. The NSTA was playing up the Boston Museum of Science (which glorifies the high-technology war corporations like Honeywell), so we asked the Honeywell Project for some help in exposing what the Museum does. They put together a good skit on the "neutrality" of science, and we both worked up a packet for using the Museum as a teaching tool (available for \$3.35). Of course, critical theatre pieces are not too welcome in ITT's Sheraton Hotels, but the skit was put on four times—much to the enjoyment of the onlookers. It did a lot to create a favorable environment for discussing the politics of science teaching.

We went to the regional convention to meet and listen to more teachers. We wanted to tell them what we've been doing and explain our perspective on science and teaching. We also wanted to join up with others who share our concerns. So now we're sending out a questionnaire about our booklets and teaching problems to the people we met. And we are putting together a discussion-meeting on the energy crisis for all who are interested, which we want to expand to look at the social relations in the classroom.

All the way through the convention and afterwards we were enthusiastic about the response we got. The literature table was crowded, many people came to our sessions. We met a number of people like ourselves (except they weren't as activist as we). It can probably be said that we were successful in putting political issues into the normal discourse of science and teaching.

K.B., P.B., M.T.



edcentric

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SESPA is defined by its activities. People who participate in the (mostly local) activities consider themselves members. Of course, there are people who through a variety of circumstances are not in a position to be active but would like to maintain contact. They also consider themselves members.

The magazine keeps us all in touch. It encourages people who may be isolated, presents examples of activities that are useful to local groups, brings issues and information to the attention of the readers, presents analytical articles and offers a forum for discussion. Hence it is a vital activity of SESPA. It is also the only regular national activity.

We need to know who the members are in order to continue to send *SCIENCE FOR THE PEOPLE* to them. Please supply the following information:

1. Name:
- Address:
- Telephone:
- Occupation:
(if student or unemployed please indicate)

- If you are working, do you work in industry [], government [], university [], other _____
2. Local SESPA chapter or other group in which I'm active:
 3. I am enclosing money according to the following scheme: (a) regular membership—\$12, (b) indigent membership—less than \$12, (c) affluent or sacrifice membership—more than \$12, (d) completely impoverished—nothing, (e) I have already paid.
 4. I will sell _____ magazines. This can be done on consignment to bookstores and newsstands, to your colleagues, at meetings. (If you want to give some away free because you are organizing and can't pay for them, let us know)
 5. I am attaching a list of names and addresses of people who I believe would be interested in the magazine. Please send them complimentary copies.
 6. I would be willing to provide technical assistance to community, movement, or Third World groups in the areas of:

Please add any comments on the magazine or SESPA or your own circumstances. We welcome criticism, advice, and would like to get to know you.

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