ciples must be involved, and his technical arguments must be made clear and pursuasive. The emergence of the scientist as an active, responsible, if biased, citizen was a relatively radical idea a few years ago; this role is now more widely accepted. But the important thing is not the politicization of science but the active involvement of scientists and engineers in those arenas where the decisions on uses of technology are really made: (i) in standards-writing organizations, where professional societies could organize teams of engineer volunteers to represent the public interest; (ii) in industrial design, where economic expediency should encounter high professional standards; (iii) in universities, where the role is not solving social problems, but illuminating them and developing new choices for solutions; (iv) in state and local government, where regulation of technology is done well or badly, depending on the talent available and the help received; and (v) in the federal government, where the ability of this nation to tame technology depends on a choice between policies based on rational consideration of the

scientific facts in their social context and a reversion to know-nothingism and a destruction of confidence in our ability to master ourselves in harmony with nature.

Most of you who are scientists are discouraged about the prospects—for you see in the bright mirror of scientific truth a dark shadow of man's unwillingness or inability to use the gift of intelligence for beneficial purposes. You see the nonscientist, confident in his superior ability to manipulate the power that the scientists have indirectly given him, prepared to follow his intuition and his horoscope but unwilling to base his actions on the rich store of analysis and knowledge that science can give him. Where lies the greater vanity? Where lies the better hope for mankind?

Mankind must react rationally to the opportunities as well as the problems created by technology. On one side lies a harmonized world of interdependent societies, enjoying decentralized power and shared wealth, leisure, and learning. On the other is a despoiled planet of charred earth, dead lakes, and an acid atmosphere.

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Activist Youth of the 1960's: Summary and Prognosis

Understanding the modal personality of activists may help in making future decisions.

John L. Horn and Paul D. Knott

In looking back over the 1960's, it is apparent that activism among youth loomed large among the events and developments which must be regarded as important. Few issues were as hotly discussed by people in all walks of life, and few succeeded as well in drawing otherwise disinterested people into flushed and hostile advocate camps.

The interest in youth activism generated numerous theories intended to "explain" it—as an historical development, a sociological phenomenon, a psychological process, or a manifestation of personality. So numerous are these "explanations" that there is probably one to suit virtually anyone who has an opinion about youth activism.

But what do we know about youth activism (*1*), the people who foment it, or what to expect for the 1970's? Fortunately, there are some objective and systematic studies to provide information. In particular, there

are a number of empirical studies of the attitudes, beliefs, family backgrounds, and abilities of young people who were prominent in some of the most notable youth demonstrations of the 1960's. As can be expected, when studies of emerging phenomena are based on observations gathered in a charged atmosphere and under changing conditions, the results are often inconsistent. Yet these studies contain much of the reliable information we now have about an important area of human behavior. The aim here is to put one band of this information— that pertaining to the personality of activists—in as clear a perspective as possible. Results from several major studies are summarized, and some explanatory concepts deriving from these findings are discussed in an effort to provide an accurate, composite description of the young people who emerged as activists in the 1960's. Our analysis may help to provide guidelines for dealing with activism in the coming decade.

In this article, the word "activist," unless otherwise indicated, will

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refer to youth whose political philosophy is that of the left wing, in contrast to youth who accept right-wing or conservative philosophy. Young people of both the left and the right were active in the 1960's, and Kerpelman's results (2, 3) suggest that the modal personalities of these two kinds of activists were similar in more ways than many reports seemed to imply. However, the activists who leaned to the left aroused the most concern and were the objects of most of the research.

The focus will be on the personality of activists, most of whom were students. Little attempt will be made to describe institutional factors affecting activism or the historical and sociological context of activism. Several summaries of historical-sociological analyses have appeared in recent years—in the works of Brown (4), Barzun (5), Bettelheim (6), Laqueur (7), Lipset (8), Roszak (9), and Sampson (10), for example. These summaries give a comprehensive picture of what is now known, and what scholars believe, about youth activism. They indicate that activism is associated with such broad cultural factors as increase in dependence on machine technology, individual and family mobility, urbanization, and increase in the number of students attending college (9). They indicate also that activism directed at educational institutions occurred mainly at prestigious colleges and universities, especially at those in which the majority of curriculum offerings were in the liberal arts. It occurred in response to events that, in themselves, are of historical importance. However, student activism is by no means a phenomenon of the 1960's. As Laqueur (7) points out, it dates from the dawn of the Western university (the town and gown riots at Oxford in 1354) and has occurred with notable frequency in every century since then.

This article is based primarily on studies in which activism is defined by public acts and behavior other than verbal expression or membership in what can be identified as "activist organizations." Thus, we define activists as people who participate in sit-ins, marches, or similar protest action. Keniston (11) refers to these people as protesters and contrasts them with alienated youth. Specifically, our data come most directly from the Solomon and Fishman (12) report on youths who marched for peace in 1962; the Flacks (13) study of youths who, in 1965,

protested the University of Chicago's policy of ranking students for the draft; the Block, Haan, and Smith (14, 15), Lyonns (16), Heist (17, 18), Selvin and Hagstrom (19), Somers (20), Trent and Craise (21), and Watts and Whittaker (22) studies of participants in protests at the University of California at Berkeley between 1964 and 1967; and Keniston's (11, 23, 24) summaries of his studies of Vietnam demonstrators.

Several features of some of these studies are summarized in Table 1. The activism represented in these studies is distinguished from that represented by expressions of a militant philosophy, association with organizations that have a reputation for militancy, and unverified self-reports of rebellion. Consideration is given to a number of studies of youths who were members of activist organizations (2, 3, 25) or who were identified through neighborhood recruitment (11, 26), but the results from these studies are not used so much for the purpose of describing activists as they are for the purpose of distinguishing activists from other young people.

Activists Were a Minority

When specified in this way (indeed, even when specified in terms of membership in activist organizations), activists were a minority among youth of the same age in the 1960's. Most estimates of the number of individuals actively involved in student demonstrations suggest that no more than about 15 percent of the student body were involved (11, 17, 21, 27). More than this number provided some degree of support for particular activist causes [by staying away from classes, for example, or by expressing verbal support for the objectives or tactics of the activists, or both (20)], but most students who were thus "radicalized" did not continue to support activist organizations and programs after a particular demonstration. This is not to imply that the attitudes and beliefs of sympathizers remained unaltered after a demonstration, but only to note that, despite many kinds of pressures (including Establishment blunders) that could force youth to activism, most young people did not feel compelled to join a formal activist movement.

The findings of several studies indicated that activists were usually younger than nonactivists at the same institution, and this, together with evidence indicating a spread of activism from

the more prestigious to the less prestigious institutions, suggests that the proportion of students who could be identified as activists probably increased from year to year throughout most of the 1960's (2, 11, 21, 27). But this increase does not appear to have been dramatic or to have raised the proportion likely to be actively involved in a demonstration (at a given institution) above 15 percent. It seems that, once a cadre of activists became established at an institution and activism ceased to be a novelty, activist organizations gained members only gradually during the 1960's. Speculations and programs that are based upon the assumption that young people generally (or the majority of students at some institutions) are prone to activism are probably founded more upon the dramatics of journalistic accounts of demonstrations than upon the evidence (admittedly incomplete) of the extent of youth involvement in activist causes.

Just as activists should not be confused with the majority of college students, much less with the majority of all young people in that age group, so they should not be confused with hippies or alienated youth generally. That is, if the referent for the term "hippies" is young people who in the 1960's were rather easily identified by their exotic style of dress and their residency in communes, then activists simply were not hippies. Comparisons of the results from studies in the Berkeley area by Lyonns (16), Heist (18), Watts and Whittaker (22, 26), and Block, Haan, and Smith (14, 15) make this point clearly, as do Keniston's studies (11, 23) contrasting alienated and activist youth. Although some activists dressed in an unusual manner or had unaccustomed growths of hair, or both, most could not be distinguished on the basis of looks from "straight," nonactivist, and nonhippie youths (15, 22).

The persons identified as activists were found to be adequate students who usually maintained their status as students. Although at some institutions (for example, the University of California at Berkeley) a slightly larger proportion of activists than of nonactivists lived off campus, most activists lived in residences of the kind usually occupied by students—that is, in student dorms, at home, or in rooms or apartments that traditionally had been let to students (15). Typically, their programs of action involved using (sometimes with an unusual twist) existing political, legal, social, and mass media

procedures. In contrast, youths who could be readily identified as hippies had usually dropped out of high school or college and in their protests seemingly despaired of using established social machinery for effecting change. [See the Watts and Whittaker (26) study of youth living in the Telegraph Avenue communes of Berkeley.] It would appear that there was sympathy between activists and hippies. As Roszak (9) suggests, both gave some allegiance to the concept of a counterculture that is ". . . outward-bound from the old corruptions of the world." But the *modus operandi* of the two groups was different. Those who truly adopted the hippies' philosophy of dropping out of society simply did not make the commitment required in activist causes. Thus, they generally did not fall into the samples upon which this summary is based. In contrast, the actions of activists indicate that they had not dropped out.

Although the available evidence indicates that hippies and activists were predominantly white and from the middle and upper-middle classes (as judged by the education and occupations of their parents), they appear to have come from somewhat different segments of these social classes. Results from the Watts and Whittaker study (26), for example, suggest that the occupations of fathers of hippies were not different in any noteworthy way from the occupations of the fathers of a cross section of students (mostly non-activists) on the Berkeley campus of the University of California. Typical occupations were businessman, engineer, skilled tradesman, white-collar clerk, airplane pilot, and physician. On the other hand, available studies indicate that the fathers of activists overrepresented such occupations as teacher, clergyman, social worker, and, at the doctoral level, those occupations requiring the Ph.D. rather than a professional degree (M.D., D.D.S.) (11, 12, 13, 22). Similarly, the parents of hippies were reported to have church affiliations that differed only slightly from the affiliations of the parents of typical students, whereas the parents of activists, when compared with the parents of nonactivists, were more frequently reported to be atheists, agnostics, Jews, Unitarians, and Friends. In this respect, it is noteworthy that the religious beliefs avowed by hippies themselves were notably different from the affiliations claimed by typical students, and a difference between the

Table 1. Summary of information on size and nature of sample used in several studies of activism.

Activism incident	Number and kind of subjects	Investigator
Peace marchers in Washington, D.C., 1962	247 activists	Solomon and Fishman (1964)
Sit-in around police car at Berkeley, 1964	618 activists, 287 "regular" students	Lyonns (1965)
Arrested, leaders or participants in sit-ins at the University of California at Berkeley free speech movement (FSM)	254 activists, 340 seniors, 2500 freshmen	Heist (1965)
FSM volunteers	65 activists, 142 "regular" indigents	Flacks (1965)
Arrested in Berkeley FSM	147 activists, 107 seniors, 2500 freshmen	Heist (1966)
FSM and San Francisco State College	57 activists, 97 dissenters, 252 not active	Block, Haan, and Smith (1966)

affiliation of a youth and his parents was markedly more common for hippies than for typical students.

Indeed, perhaps the most important finding that emerged from the Keniston (11) and Watts and Whittaker (26) studies is that the young who in the 1960's were commonly referred to as hippies were tragically estranged from their families, most of which, in outward appearance, seem to have represented the Establishment, to which the hippies were opposed. In part, at least, the rebellion represented by the hippie movement appears to have been directed at the parents, perhaps particularly at the fathers, of the rebels (11). In contrast, the evidence suggests that activist youths were not so much rebelling against their parents as they were extending a pattern of activism which characterized their parents.

Several commentators on youth movements in the 1960's attempted to distinguish between activist youth who appeared to want to work nonviolently (if a sit-in or peaceful take-over is considered nonviolent) within the system to effect the changes they deemed necessary, and the activists who believed that the existing system must be destroyed before a new and better system can be constructed. The former might be referred to as "evolutionaries," in contrast to the latter, "revolutionaries." Clearly, this distinction is of considerable theoretical interest and practical value. However, it is doubtful that the distinction was made in most of the available studies. The public acts which defined activism were not, generally speaking, clearly revolutionary; the extent to which individual activists sanctioned particular acts which could be

construed as revolutionary was not accurately determined; and the probes into subjective philosophy usually were not sensitive enough to allow for unambiguous classification into separate groups of evolutionaries and revolutionaries. Thus, while it is useful to keep this distinction in mind as one reads about youth activism, it is very difficult to distinguish between evolutionaries and revolutionaries in most of the studies reported in the 1960's.

An exception to this difficulty may be the investigations of Block, Haan, and Smith (15). In this study a distinction was made between Dissenters and Activists. The former were defined as persons engaged in protest activities, some of which might be construed as revolutionary (for example, opposing the police), but who were not engaged in social service activities (for example, tutoring in a ghetto). Activists were defined as youths engaged in both of these kinds of activities. These definitions do not capture the whole of what is implied by the distinction between revolutionaries and evolutionaries, but they may come close to it. In any case, Block and her co-workers identified some interesting differences between the two groups. These will be discussed later.

Family Backgrounds and Socialization Patterns

It might be supposed that most activist youths would have come from the lower economic and social classes of our society, classes in which they would have acquired firsthand knowledge of inequalities, injustices, and difficulties.

Yet, as suggested above, the available studies (*13, 14, 15, 22, 25*) show that this supposition has little merit. They suggest instead that, as youngsters, activist youths had little more than storybook acquaintance with the lower classes. (This is true of white activist youths, and the available studies have sampled white youths almost exclusively.) Typically the activists' fathers had completed some tertiary education, and many had completed college. The mothers, too, had usually completed high school and had done some college work. The occupations of the fathers were generally classified as skilled and professional. Frequently the fathers of activists were found to be in service occupations (teacher, social worker), but a substantial number were also in technical fields (chemistry, computers). The salaries in such positions typically would be above the average, although perhaps not above the average of occupations requiring a comparable level of education. In the Flacks study (*13*), participants in sit-ins reported higher family incomes and higher levels of education for both fathers and mothers than did students who either did not participate or who signed a petition opposing the sit-ins. The incomes of the fathers of most students at the University of Chicago, as at other institutions where demonstrations took place, were well above the average for men in general. The activists' economic setting, thus, is not one of deprivation.

In general, then, the activists of the 1960's can hardly be described as "hungry fighters," set upon a career aimed at overcoming the economic, educational, and social adversity they knew as children. This finding comes as no great surprise to people who have studied the youth movements and revolutions of history. These studies of the past indicate that most political activism has been instigated by persons of middle-class origin, although such movements have gained the dimensions of true revolution only when the lower classes became involved.

Interestingly, evidence suggests that activist youths derived their motivations from parents with whom they formed solid bonds of identification. There are a number of facts which support this finding. First, activists selected high school and college course work in areas in which their parents had studied. Typically, their fathers and mothers had majored in the social sciences and humanities, and activist youths did the bulk of their college course

work in these areas. In their professions, the fathers of activists could often be described as intellectually or socially oriented, rather than oriented toward financial or prestige goals. Similarly, the youths, insofar as they identified at all with the world of work, typically preferred a career in service to other people rather than a career that ensured status or financial prominence.

A similarity between the occupational and educational activities of a youth and those of his parents does not indicate the youth's complete identification with his parents. Nevertheless, a young person who admires an older person is likely to attempt to be like the older person in some ways. A youth's admiration of his parents is indicated, in part, by his choosing to study and work in areas similar to those of his parents.

The studies indicate, also, that the political and ethical views of activist youths were often similar to those held by their parents (*12, 13, 23*). As youths and as adults, the parents of activists were affiliated with organizations that had programs of social action somewhat similar to the programs sponsored by activist youth. The parents were most usually described as liberals rather than conservatives. In economic matters, they tended to favor the policies of the socialist, the Keynesian, the New Deal, the Fair Deal, and the Democrats rather than the philosophies of laissez-faire, Ayn Rand, William Buckley, and the Republicans. They tended to support the civil rights movement and to de-emphasize or oppose States' Rights platforms. In the Flacks study (*13*) it was found that only 27 percent of the fathers of activists favored the bombing in Vietnam, whereas 80 percent of the fathers of a comparable sample of nonactivist youths favored this course of action. In general, the social philosophies and economic orientations of the parents of activists were similar to, although less extreme than, those of their children. Again the evidence suggests that activist youths identified with their parents and were carrying forward programs of action which, in general principle, if not in every detail, were favored by their parents (*28*).

Parents Influenced by Spock

These matters of orientation and identification may also be related to the way in which young activists were brought up. For example, results from

several studies have suggested that the parents of activists, more than other parents, were influenced in rearing their children by Freudian theory, particularly as this was embodied in Spock's popular manuals on child care. As is well known, most interpretations of Freudian theory imply that mental illnesses, particularly the neuroses, are caused by harsh, punitive, unreasoning, overstrict, demanding, authoritarian treatment of children by their parents. In Spock's books, Freudian theory is reflected in advice to reduce or eliminate harsh, punitive, and strict treatment of the child and to replace it with demonstrative expressions of affection and democratic procedures for handling differences between child and parent. Spock's advice is sometimes interpreted as encouraging the parents to be permissive. This is not a fair interpretation if "permissive" is construed as placing no restrictions on the child, encouraging licentiousness, or the like. The Spock advice does encourage parents to give the child reasons for the kinds of behavior they want and for any punishment they mete out. It discourages the use of spanking or other forms of corporal punishment; it asks parents not to punish when they are angry and to avoid shows of temper. It also suggests that parents encourage their children to experiment in living and to express themselves openly. But Spock does advise parents to encourage responsible maturity in children.

If we were to judge by the sales of Spock's books, we would have to conclude that many parents of nonactivists must have put the Spock advice on their bookshelf, if not into their practices. But the studies of young activists suggest that their parents (often trained in, or well read in, social science fields where Freudian theory and Spock's advice held considerable sway) reacted more favorably to this advice than did the parents of nonactivists. Parents of activists expressed more frequently than others a belief that their own parents had been too harsh, too remote, too unfriendly, too strict, and too arbitrary. They indicated that they hoped to make things different for their children, and they expressed a belief in the efficacy of Spock's advice. Concomitantly, activists, more frequently than nonactivists, described their parents as lenient or not strict.

Thus the suggestion is that the young activists of the 1960's were "Spock marked." More pertinently, several studies in child psychology (*29*) suggest

that the love-oriented methods of discipline advocated by Spock tend to foster close identification of the child with the parent and corresponding acceptance by the child of his parents' values and expectations.

A contradiction of popular beliefs about activists is indicated here, for this evidence suggests that the young activists of the 1960's, far from being the rampant deviates that they were often said to be, were, in fact, conformists. They were conforming, through identification, to a model presented by their parents. This does not mean that activists did not differ from their parents in noteworthy ways: as young people everywhere and in all times, they devalued much that their parents held dear and valued much that their parents would not have. But these differences should not obscure the important similarities between activist youths and their parents—similarities in basic values and orientation toward life. Indeed, in line with the arguments of Flacks (13) and Keniston (11), it would appear that often young activists were trained, as it were, to assume roles as activists and that identification with their parents, implying various kinds of reinforcement, was a crucial factor in this development.

Several studies have indicated that a relatively large proportion (around 20 percent) of activists come from Jewish homes. This has led some people (8) to suppose that activists are products of homes in which the mother dominates in relatively many decisions pertaining to the family life. The analyses of Keniston (11) and Block, Haan, and Smith (15) argue against this interpretation, however. In the latter study, all activists of Jewish origin were eliminated from one set of analyses. The results of comparisons between activists and nonactivists were found to be essentially the same as they were when students from Jewish backgrounds were included. Similarly, Keniston (11) interpreted the results from his studies as indicating that alienated youth—but not activists—came from a family environment characterized by a ". . . parental schism supplemented by a special mother-son alliance of mutual understanding and maternal control and deprecation of the father" (11, p. 113). In contrast, as noted, activists often appeared to be emulating and living out the values of fathers who were highly respected within the family.

Although this summary of the background information seems to fit the results from a number of studies in which somewhat heterogeneous samples of leftist activists were contrasted with even more heterogeneous groups comprised of inactives, rightist activists, and others, it should be recognized that several studies [notably those of Block, Haan, and Smith (15)] have described distinct subgroupings within both of the larger groupings. Within the group of activists, for example, Block (30) has identified a subgroup for which there are indications of rejection of parental values and of sharp conflicts between parent and child. Block refers to this as a discontinuity subgroup. The parents of the individuals in this subgroup were found to be less receptive than most activists' parents to Spock's theories of raising children and more inclined to practices which emphasize prohibitions, punishments, and forcing the child to do things that make a good impression. The personality attributes most closely associated with this subgroup of activists were found to be, in several respects, more similar to those attributes described as characteristic of hippies (26) than to those which seem to be characteristic of activists generally. This observation led Block (30) to speculate that youths of the discontinuity subgroup are likely to be relatively early dropouts from activism; however, no results to support this hypothesis have yet been produced. But the principal point here is that one should remain aware of the fact that by no means all activists are well characterized by descriptions applicable to the group as a whole.

Abilities, Beliefs, and Related Orientations

Since activists tended to come from homes in which academic achievement was high and in which, therefore, academic pursuits were valued, and since they attended schools that provided good opportunities for academic achievement, it is not surprising to find that they were good students. Several studies indicate that activists were making B's in their college or university work rather than A's, but that they were clearly performing better than C students (13, 20, 23, 31). Activists were also found to score high on tests that indicate a liking for intellectual activities, independence of thought, and openness to ideas (15, 21). Many people have interpreted these findings to mean that activists were somewhat more intelligent than nonactivists. This may indeed be the correct interpretation; however, grade point average (GPA) typically correlates only about .50 with test scores that are widely accepted as indications of intelligence. Often GPA is assumed to indicate motivation relatively more and intelligence relatively less than test scores. In addition, the GPA of activists was commonly obtained in liberal arts studies rather than in the physical sciences and science technologies (for example, engineering), and a somewhat higher intelligence test score is associated with a given GPA in the latter fields. Using a vocabulary test as a measure of intelligence in three colleges (32), Kerpelman (2) found no significant differences between students belonging to activist organizations and students who did not belong to such organizations. (However, in an earlier study (3) he, too, found differences favoring students in activist organizations—of the right and the left.)

But whether or not the activist was more intelligent than the nonactivist, the results clearly indicate that activists were capable students in the fields in which they chose to major. Moreover, although counterculture philosophy rejects exclusive dependence upon intellect and is very critical of only technical applications of intellect (9), it appears that activists were not anti-intellectual in the sense of deprecating the use of the mind. Yet the studies suggest that young activists lacked the academicians' enchantment with ideas in the abstract and were, in fact, considerably less than worshipful of, and sometimes rather contemptuous of, well-educated people—the intelligentsia. In this regard the activist could be characterized as pragmatic, as requiring that ideas have practical applications (33). He was apt to be critical of education that was premised upon a belief that it is worthwhile to know just for the sake of knowing. He viewed this as either downright irresponsible or, at best, as representing a luxury we can ill afford in this day and age. Interestingly, however, the activist was described as high in romanticism, concerned with development of the capacity for esthetic expression, and in support of expenditures of educational effort (land, labor, and capital) on the arts, theater, and music (14, 15, 22).

The young activist's attitude toward the intelligentsia may help to explain why, in contrast to the young liberal of previous periods, such a high proportion of his protest was directed at the educational system of this country, particularly at tertiary education. One of

his principal beliefs was that the educational system has not been responsive to the personal and social needs of the majority of the people, but has responded instead primarily to the demand of a corporate elite that the system turn out trained automatons to man the machines of industrial, mercantile, military, and scientific enterprises.

The political-economic philosophy of the activist was socialistic to a considerable extent, but it was not communistic in the sense of national identification. The young activist accepted a belief that the American form of life is superior to that found elsewhere, but he rejected "my country, right or wrong" conceptions of patriotism. He expressed some sympathy for certain communist causes, perhaps particularly for that of Cuba, but he was also found to be critical of well-established communist states. He expressed the view that in several respects these states embodied more extreme examples of what is evil in this country—particularly the centralization of political power and the means of production in the hands of a power elite.

The activist expressed a strong belief in the essential dignity of poor people, ignorant people, psychologically maladjusted and socially maladapted people, and people of various minority groups—that is, what he referred to as third-world people. He implicitly accepted the premise that the conditions of life for these people are undesirable and that these conditions are a result of exploitation by a power elite. Concomitantly, he expressed considerable faith in the abilities of third-world people to construct the better society, and little faith in the ethical integrity and world view of wealthy people and, particularly, people holding administrative positions in government, business, or educational institutions.

Were Activists Psychologically Ill?

Many persons and some theorists, notably Bettelheim (6), have expressed the view that activist youths must have been seriously maladjusted or just plain "nutty," but the evidence does not support this belief (34). Activists constituted only a small minority of the students at the relatively few educational institutions where activism was identified. Thus, they were a statistical abnormality. But this is hardly an ac-

cepted definition of psychologically sick.

It is clear, too, that by the fact of their opposition to some of the established institutional practices, and to the beliefs which seemingly support these practices, activists indicated some lack of adaptation to the existing political, social, and institutional conditions in this country. The activists also evinced a rather jaundiced, stereotyped view of what they referred to as the Establishment, a fact that might be taken as evidence of a kind of paranoia—a condition of holding fixed beliefs not well founded in fact, usually accompanied by fear and mistrust of those (or that) with regard to which the fixed beliefs are held. But such views of the "opposition" (whatever shape or form it may take) are so common as to be normal. If activists were to be regarded as psychologically sick by this criterion, we would probably have to regard almost all political action groups (not omitting "silent" majorities) as similarly sick.

When we look to the studies for such signs of psychopathology as excessive anxiety, neurotic preoccupations, general paranoid beliefs, delusional thinking, diminished self-esteem, loss of self-control, excessive dependency, flattened affect, irresponsible interpersonal relations, lack of drive, hysteria, depression, extreme hostility, and psychopathy, we fail to find that such behaviors were any more common among activists than among comparable samples of nonactivists. Moreover, in the direction of positive mental health, the evidence indicates that activists were relatively high in self-respect, self-sufficiency, intellectual orientation, and concern for others and relatively low in ethnocentrism, possessiveness, and dependency.

Recent studies by Block (30), Haan, Smith, and Block (35), and Keniston (24) indicate that the activist is characterized by a set of moral and ethical beliefs which can be viewed as indicative of sound mental health and character development. The measurements that indicate this derive from Kohlberg's (36) attempts to identify three distinct levels (37) of moral development. The first of these represents expediency, or beliefs that one can do what one can get away with or what leads to the greatest personal gratification (narrowly conceived and not long-circuited). The second level represents a rather unquestioning acceptance of widely accepted standards of right and

wrong. The belief structure in this case appears to be very similar to that described by Freud as the superego—that is, beliefs that are "stamped in" before an age at which the child reasons effectively. Such beliefs come to function as moral absolutes. A third level represents beliefs that derive from such moral philosophies as those represented by the concept of a social contract or the categorical imperative. At a first stage on this level, the beliefs are mainly taken from major world philosophies. The structure in this case would appear to be similar to that described in theory by McDougall (38) as a self-regarding sentiment and is represented in measurements developed by Cattell and Horn (39). A second stage on the third level is characterized by idiosyncratic extension of precepts acquired through previous development.

As noted, Kohlberg regards these belief patterns as representing levels of development, the implication being that an individual at the third level is more mature, more advanced ethically, than a person displaying one of the first two belief patterns. This interpretation can be seriously questioned, both on grounds that the empirical evidence is not yet compelling and (particularly with reference to the distinction between the two stages at the third level) on the basis of philosophical reasoning. However, this is not the issue here. The points of interest are findings (24, 30, 35) indicating that activists, in contrast to nonactivists, are characterized by the belief patterns of the third level: of the 109 activists of the Haan, Smith, and Block study, 56 percent were at the postconventional level, 34 percent were conventional, and 10 percent were preconventional; the comparable percentages of 284 nonactivists were 12, 85, and 3, respectively. Thus, whether or not the notion of levels be accepted, the suggestion is that the behavior of activists, relative to the behavior of other youth, was guided more by ethical principles that are derived by explicit reasoning from general moral philosophy than by the precepts implied by the most widely accepted conventions concerning what is right and what is wrong.

Some Extrapolations

A confusing plethora of important questions can be raised by considering implications of this portrait of the

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modal personality of activist youth. Only a few of these questions can be considered here.

Perhaps the most important questions pertain to the apparent incongruity between the activist described in this article and the activist shown in mass media accounts, which often depict him as a morally depraved, neurotically alienated, nihilistic neo-Luddite. How can we associate the modal personality of activists with reports indicating that in activist causes there has been violence, intimidation, harassment, disregard for the rights of others, and, in general, the demeaning of liberal values which, according to the summary above, activists cherish? Are the two portraits really incongruent?

To get the proper perspective on this question, it seems necessary to recognize, first, that there are exaggerations in both pictures. The mass media makes news as well as reports it, and the psychological studies, on the other hand, have been of activists when they were "on their good behavior." It is a well-established principle of psychology that witnesses to emotional events concerning issues about which they have some prior opinions are not fully objective: their reports tend to be shaped by their own needs. Looking to the other side of the issue, it is also well established that, in the heat of group actions, individual behavior often sinks to a low (if not the lowest) common denominator, and people do things that are quite contrary to the beliefs they earnestly espouse in more reflective moments.

But while these observations may help us to understand some of the dynamics or incidents associated with activism, they do not explain the policies of violence which have been proclaimed by some people who are identified as activists, for example, the Weatherman faction of the Students for a Democratic Society. It may be worthwhile to recall the speculative distinction we drew earlier between revolutionaries and evolutionaries. The policies advocated by the Weathermen and other such groups may not be the policies of the people who have made up the majority in the samples of the studies we have reviewed. Instead, they may represent a vocal minority of revolutionaries in a population comprised mainly of evolutionaries. The investigations were, after all, based upon groups, and measures of central tendency were used to characterize

these groups. Thus it might be argued that the violence and violent policies associated with activist movements have been primarily the work of a small group of people who have not really been studied in their own right. This is consistent with Bettelheim's (6) reports that some activists he treated were paranoid, consumed by self-hatred, and neurotically group-dependent (34).

Block (30) and Block, Haan, and Smith (15) have come closer to identifying the hypothesized difference between revolutionaries and evolutionaries than any other investigators of whom we are aware. They classified students who were above the mean in protest activity (PA) but below the mean in social service activity (SSA) as "dissenters," in contrast to "activists," who were above the mean in both PA and SSA; "constructivists," who were above the mean in SSA but below the mean in PA; "conventionalists," who were below the mean in both PA and SSA but who belonged to a fraternity or sorority; and "inactives," who reported no participation in political or social organizations or activities. Their results present a picture of activists which is similar to that discussed here, but dissenters were found to be rather different in a number of ways. In particular, dissenters, in contrast to both activists and constructivists, more frequently described their relationship with their parents as involving conflict, anger, criticism, tension, and the absence of warmth, intimacy, and appreciation. Dissenters' parents were described as permissive in some areas of child training (for example, discipline, punishment, development of self-control, and expression of aggression), but controlling and intrusive in other areas (demands for achievement, encouragement of competition with others, and opposition to the child's needs for privacy or secrecy). Thus, the parents of dissenters appeared to be inconsistent—permissive and indulgent at some times, but controlling and demanding at others. This inconsistency suggests impulsiveness and exploitation in the parents' relationships with their children. In fact, a parent-child relationship of this kind might be characterized as permissiveness gone awry, with an added ingredient—intrusive disrespect for the child's individuality.

It is possible that the dissenters are especially prone to radical and violent modes of protest, whereas the activists and constructivists are predisposed to

less radical and nonviolent forms of dissent. One must proceed with considerable caution here, however, for no research has yet been conducted to determine if there are relationships between modes of protest among persons of similar personality and socialization.

Is Violence Justifiable?

The legitimacy of policies of violence should be considered in any attempts to understand the relationships between the personalities of activists and the records of their public acts. After all, in practically every generation of man, as in our own generation, persons believed to be morally and psychologically sound have engaged in violent destruction of their fellowmen. Although many people proclaim that violence and revolution are not justified, it is nevertheless true that most individuals in this country implicitly accept the position that violence and revolution are justified, indeed necessary, under some conditions: for example, most of our citizenry have a favorable regard for the American Revolution, and most have supported, either directly or indirectly, the violence loosed by this country in wars of the last 30 years. Presumably such courses of action are justified out of a sense of moral outrage directed at "an enemy of man." That the present parent generation does not feel the sense of moral outrage that some youths have directed at "an enemy within America" may say more about the rigidity and insensitivity of the older generation than about the excesses of youth.

Blackburn (40) has suggested the existence of generationism, analogous to racism, whereby the persons of one generation regard themselves as superior, fail to see their own inadequacies, and treat their own excesses as reasonable. A concept of this kind certainly seems to describe some of the posturing of both the activist youth and the Establishment of the 1960's. If it can be accepted that the latter were in some instances grievously and morally wrong, then the violence and policies of violence directed against parts of the established society may also be accepted as a justifiable effort, mounted by reasonable activists, to resist genuine evil. The verdict of history has yet to be handed down on this charge.

Lipset (8) has argued from historical

and sociological analyses that youth activism mainly reflects the policies of the society at large, and that students as a group, relative to most other groups, tend to be more aware of social malaise and to have better opportunities for mounting social action to deal with it. He argues, "In periods in which belief in accepted verities of a society begins to break down, in which events undermine the stability and even the legitimacy of a society's socio-economic arrangements, in which drastic social change occurs, or in which the political elite becomes sharply divided about the direction of policy, there should be a sharp increase in student activism. In societies in which rapid change, instability, or weak legitimacy of political institutions is prevalent, there appears to be almost constant turmoil among students" (8, p. 677).

This suggests that there is no inconsistency in the seemingly discrepant pictures of the personalities and the public behavior of activist youth: activism is a compound that is formed when a requisite number of sound student personalities are mixed with a requisite amount of social malaise. It should be added that sound personalities reacting to genuine social sickness with programs mounted upon reasonable bases may still do more harm than good. Lipset suggests that, particularly if programs require chaos and anarchy as a precondition for constructive change, the result is as likely to be expanded repression as expanded freedom. The record of revolutions would appear to support this position.

Feuer (41) has expressed a theory about activism which is similar in some respects to that of Lipset. From studies based on history, Feuer concludes that revolt of the young against the old is, to some degree, inevitable and will become violent whenever the older generation loses its mantle of authority in the eyes of the young. For example, if the ruling elders make a mistake that has major shameful consequences, they are likely to be regarded by the alert young as having lost their authority. This perception then fans the usual coals of generational revolt into flames of open hostility.

Keniston (24) has advanced the thesis that some of the violent and unliberal behavior associated with activism can be understood in terms of an asynchronism in moral-ethical development and development of other elements of personality. He accepts the Block, Haan, and Smith results which indicate that activist youth frequently reach one of the highest stages of moral-ethical development described in Kohlberg's theory. But, he argues, if this moral maturity is accompanied by asceticism and a lack of the humility, compassion, empathic identification, and love for fellow persons that arise through rewarding interpersonal relations, then the result is likely to be a kind of moral zealotry that leads to violence and a disregard for the feelings of others. This would seem to be particularly likely if the belief structure were of the kind described by Kohlberg as the second stage of the third level, for this is an individualistic morality that enables one to reject the binding force of such principles as those derived from the social contract or the categorical imperative. One might justify almost any action which seemed consistent with one's own incompletely worked philosophy.

Keniston (11) describes three major conditions that produce postconventional moral development:

1) Disengagement of youth from adult society. (This includes both freedom from many of the constraints imposed by the family of origin or by assuming the roles of breadwinner and parent, and lack of a role or function in the major institutions of society, not excluding the tertiary educational institutions.)

2) Confrontation with alternative moral-ethical viewpoints (in general, exposure to the kind of relativism which is advanced by tertiary education).

3) Exposure to corruption, especially in those from whom one learned the concepts of conventional morality, and especially if accompanied by debunking and evidences that promote cynicism.

One can conclude from Keniston's analyses that personalities which are prone to activism will be developed to the extent that we continue with, and expand, higher education (as represented in conditions 1 and 2 above) and maintain a flow of examples of corruption. This activism will become dangerous zealotry, however, only insofar as we fail to develop opportunities for rewarding interpersonal relations. It is particularly worthwhile to note Blackburn's (40) and Bronfenbrenner's (42) emphasis on developing community supports to encourage interaction among persons of different generations.

Conclusion

In all, then, we see in the young activist a person of many strengths and commendable characteristics. This is cause for optimism. But the person we see is truly young: he has little practical experience and little of the wisdom that experience can produce. As Horn (43) has noted, "To expect working solutions for massive social problems from this person is hardly less naive than to suppose that the idealism, enthusiasm and creativity of this person will go for nought. Clearly the young activist of the 1960's has served best to delineate problems, not solve them—to dramatize inconsistencies and inequalities, not propose procedures that would eliminate these" (43, p. 20). Yet it seems likely that, to some extent at least, it is this young person who, when older, will be called upon to solve some of the massive social problems of the future. It is important, therefore, to consider how he will attempt solutions and how well he will be equipped for this task. One possibility is that he will follow the dicta of the philosophers and social theorists who are developing guiding concepts for a counterculture to be separate from, and in competition with, the dominant culture. Another possibility is that he will attempt to work from within the dominant culture, using its machinery to bring about the new politics, the new ethic, the new charter for man. Probably most members of the present Establishment who have thought about these issues regard the latter course as the one most likely to succeed and, because it is based on rational change, the most desirable. If this represents the hope of the present Establishment, however, it seems evident that it can be realized only if the young activist becomes less jaundiced in his thinking about the Establishment. He must come to recognize more clearly the difference between failing to solve a complex problem and desiring to retain the problem, and he must gain a much better understanding of the virtues of the workings of the present system. For this to occur, it seems that there must be notable increases in youth involvement in the system—improvement in the apprenticeship training for work in the system. But this would require the Establishment generation to assume much more responsibility for bringing activist youth into the system and acquainting them with the intricacies of its workings. Should the Estab-

lishment generation do this? If so, how could such a policy be instituted? These are questions that scientists, no less than others, should seriously consider.

References and Notes

1. The term "youth activism" is used in a general and somewhat ambiguous way to refer to demonstrations of a variety of kinds that were carried out primarily by college and university students, but not always at an educational institution. For example, the march-for-peace demonstration in Washington, D.C., in 1962 is regarded as an instance of youth activism. Most (but not all) of these demonstrators were students, but their protests were not directed at their colleges or universities. In contrast, the "flower children" demonstrations in California in 1967 and 1968 are not treated as instances of youth activism. We have no systematic studies of the people who took part in these demonstrations: it is believed that most of them were not students. For reasons that will become clearer as we go along, the activism represented by the hippie movement is contrasted—rather than identified—with the youth activism that is the principal focus of this article.
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28. An interesting finding in the Flacks study (*13*) suggests a source of conflict between activists and their parents: whereas 97 percent of activists favored use of civil disobedience in civil rights protests, only 57 percent of the fathers of activists accepted this position. The comparable figures for nonactivist students and fathers were 28 and 23. Similarly, the proportions of activists who reported support for items relating to socialistic economic and social policy (that is, socialization of industry and medical services) was considerably above the comparable proportions for the fathers, but the proportions for the latter were notably larger than the comparable proportions for both nonactivist students and their fathers.
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32. Although a good marker test for one of two major forms of intelligence, it is hasty generalization in the extreme, although very common, to treat vocabulary as if it alone measures intelligence. In fact, the verbal comprehension primary factor (of which vocabulary is the prime marker) appears to correlate only about .70 with crystallized intelligence and less than .20 with fluid intelligence. For review of this evidence see J. L. Horn, *Psychol. Rev.* **75**, 242 (1968); and in *Life-Span Developmental Psychology*, L. R. Goulet and P. B. Baltes, Eds. (Academic Press, New York, 1970), pp. 423–466.
33. A variation on this theme, which may be comforting to scientists who accept the "empiricism first, theory second" philosophy of science (in contrast to a hypothesis–deductive view), is Laing's statement, widely concurred in by activist youth, "We do not need theories so much as the experience that is the source of theory." R. D. Laing, *The Politics of Experience and the Bird of Paradise* (Penguin Books, London, 1967), p. 119.
34. In evaluating Bettelheim's (*6*) characterizations of activists, it is important to remember that most of his conclusions are based upon observations of disturbed individuals who were seeking the help of a psychologist. There is no evidence that a major portion of the activist leaders, much less the rank and file, seek such help.
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44. We thank Peter Benson and one of the referees who reviewed this article for *Science* for suggestions and criticisms. To a considerable extent this article is based upon work done in a seminar on the psychology of student activism, which was given by J.L.H. at Casper College, Casper, Wyo.

NEWS AND COMMENT

Unemployment: What Nixon Is/Isn't Doing to Help Jobless Scientists

The plight of some 60,000 unemployed scientists and engineers received high-level attention in Washington last week, but there was no indication that the Nixon Administration intends to launch a major program to put the jobless professionals back to work.

Top federal officials held a day-long working conference on 3 March with leaders from professional societies, industry, and the universities to discuss plans for alleviating the unemployment crisis caused by cutbacks in the aerospace and defense industries. The only new announcement made at the meeting was that the Departments of Housing and Urban Development and of Labor will conduct a $1.2-million pilot program to put some 400 to 600 unemployed scientists and technicians to work on urban problems. If the program is successful, it will be expanded to serve upward of 2000 persons.

President Nixon himself was scheduled at one point to drop in on the conference, but this manifestation of high-level concern fell through at the last minute. Nevertheless, there were enough top administrators on hand to satisfy most participants. The conference was chaired by Edward E. David, Jr., the President's science adviser, and it was opened by Secretary of Labor James Hodgson. Late in the afternoon David and another key participant—Malcolm J. Lovell, Jr., assistant secretary of labor for manpower—were whisked over to the White House to summarize the thrust of the conference at the daily 4 p.m. briefing for White House correspondents. Judging by the lack of coverage accorded the matter in some of the nation's top papers, the press corps was not greatly excited by the story. But David sought to underline the Administration's de-