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# The Behavioral Sciences, Stability, and Change

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# II. Social Adjustment: Resources and Responsibility

## The Behavioral Sciences, Stability, and Change

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Estimation of the potential contribution of behavioral research to social stability and social change may be attempted only in oversimplified terms. The necessary simplification here will be accomplished by considering the core behavioral sciences alone, by taking the position that social stability and change are two aspects of a single social process, by assuming that the problem is not whether behavioral research can contribute to understanding of that process but how the contribution best may be made, and by limiting illustrative references mainly to the medical and legal fields.

The range of behavioral research is well suggested in the following quotation from a report of the Behavioral Sciences Subpanel of the President's Science Advisory Committee:

> Perhaps the first impression one has of behavioral science is the enormous scope and variety of its problems and its methods. At one extreme, some psychologists combine biochemical and behavioral techniques to study the brain. At the other, sociologists and anthropologists deal with institutions and cultures. Social psychology studies the relation of the individual to his social and cultural experience. The domain of the behavioral sciences is vast and heterogeneous. The current division into academic fields—psychology, anthropology, sociology, economics, political science, linguistics—is subject to continual revision and amendment.[1]

To this list some would add human geography, much of history, and various additional fragments of other disciplines usually classified as within the humanities or the biological sciences. Present focus will be on sociology and those portions of psychology and anthropology justifying modification by the adjective "social."[2]

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1. LIFE SCIENCES PANEL, PRESIDENT'S SCIENCE ADVISORY COMMITTEE, STRENGTHENING THE BEHAVIORAL SCIENCES 2 (1962).

2. The nature and rate of growth of the core behavioral sciences is suggested by developments in recent decades at Harvard University, where they are combined in one department, the Department of Social Relations. President Nathan M. Pusey has

The antithetical association of the concepts of social stability and social change in the subject of this symposium seemingly presents a conflict defying logical solution. On first thought, compromise in the form of continuing adjustment to change through abandonment or modification of bits and pieces of the social system appears to be the indicated uneasy prospect in store for mankind until some ultimate but presently inconceivable lasting social pattern is imposed. Any such prospect happily is an illusion resulting from misunderstanding of stability both as a word and as a common human goal.

Stability does not necessarily mean the absence of change. If we bear in mind that "steady" is a synonym for "stable" it is perhaps easier to think of a stable society as one which may be changing, albeit not capriciously. A child is not regarded as unstable just because he is passing from infancy to adulthood. A series of numbers or events showing orderly predictable continuity in increase or decrease has stability as well as one which shows no change at all. We do not hesitate to speak of a steady rate of growth or a steady rate of decline, nor should we consider communities or even nations undergoing either kind of change unstable solely by virtue of that fact.

People the world over have a similar concept of stability as including orderly anticipated change. Regardless of the undoubtedly high proportion of individuals who might be content if their social world stood still, the values and social systems of the peoples of all continents, and particularly of North America, emphasize a desire for social progress, another term for steady social change toward a desired goal. With the social values presently prevailing in the United States and as we in this country are now culturally conditioned, most of us would find life very dull and unsatisfying indeed if forced to live in an unvarying social system.

The problem with which we are confronted thus is not fundamentally one of reluctant compromise and forced adjustment in reconciliation of opposing forces of stability and change, although temporizing procedures are and probably must remain common practical expedients in a dynamic society. In the longer and more fundamental view the problem facing us is the achievement of a stable order and rate of

summarized this growth as follows: "Also whole new areas have been brought into the curriculum. For example, the two full courses and seven half-courses given in Social Ethics in 1923-24 have now been supplanted by the offerings of the new Department of Social Relations which in 1961-62 taught eleven full courses and 66 half-courses in a rich variety of offerings in such articulated fields within the discipline as comparative cultures, institutions and group behavior, the psychological foundations of social behavior, communication and interaction, and social control and deviance." HARVARD UNIVERSITY, PRESIDENT'S REPORT, 1961-1962, at 2 (1962).

For a general review in nontechnical language of the current range and status of the behavioral sciences, see THE BEHAVIORAL SCIENCES TODAY (Berelson ed. 1963).

change in consonance with our human capacities and social goals and within environmental limits. This distinction may become clearer if it is thought of as similar to the difference between arriving at a decision by antagonistic bargaining with opposing goals and achieving a common objective through cooperative action.

Regardless of whether we view the problem before us as one of adjustment between competitive goals and processes or as one of contributing to an integrated social process leading to dynamic social stability, valid generalizations about social behavior are required if the process is to be understood or guided. There is no need to argue for the feasibility of establishing social generalizations before an audience concerned with legal education. Law is based on belief in the predictability and modifiability of human behavior, and so to some extent is every other practicing profession and even much of individual behavior. The storekeeper through generalization predicts the future wants of his customers, the politician predicts the behavior of voters, the schoolteacher generalizes about her students' learning and behavior. Everyone demonstrates daily by his ordinary actions that it can be done. The question is how may it be done most effectively.

Thus far in history man has depended on "common sense" for his understanding of the behavior of his fellows. Common-sense generalizations are those in harmony with the social habits and value system of what the sociologists call the relevant reference group. This may be either a community or larger population or a selection of persons accepted as the controlling model chosen on some such basis as social class, education, income, profession, ethnic origin, or political outlook. Any particular common-sense generalization may be derived from traditional folk wisdom, from the experience of contemporaries, or from an individual's own observations. Usually all three sources are involved. There also may be amateur trial and error experiments to supplement or test common-sense principles, as when the grocer experiments with consumer preferences, the schoolteacher tries a variety of sanctions to obtain obedience, or the politician uses trial balloons instead of a sample survey to gauge public opinion. Needless to say, the common-sense and homespun trial and error methods must have a remarkable degree of validity; otherwise it is doubtful that we would be here today.

Common sense, folk wisdom, and amateur experimentation have indeed served society well. Major dependence for guidance both in individual and in community action will of necessity continue to be so based. Yet there are weaknesses in such informally derived generalizations which require more attention than they have been receiving.

Because any principle derived from common sense has its roots in a traditional value system and loosely generalized undefined experience, there is a very good chance that whatever validity it may possess has relevance to some other time, place, social system, or purpose than the one immediately at issue. Industrial development and agricultural decline, population growth and concentration, and the unprecedented advance of the scientific frontier contribute to the growing obsolescence of traditional folk wisdom. Attendant physical and social mobility and resulting changes in institutional and community structure and personal interaction have increased the difficulty of comprehensive, penetrating individual observation and amateur experimentation. What now is necessary is a more orderly and reliable system for observation and analysis of social behavior by which previously adequate but presently unsatisfactory generalizing procedures may be not replaced but checked and supplemented.[3]

Concurrent with the growth of this need for more reliable observation and interpretation of behavior has been a manifold increase in the number and variety of social scientists, a greater emphasis on, and outstanding methodological improvement in, empirical social research, and widespread employment of social science personnel, methods, and materials in practical affairs, particularly in government, industry, the health services, welfare, and education. Skepticism concerning behavioral research remains but seems to have shifted its base. The old needling definition of social science as the verbal elaboration of the obvious has been replaced by the charge of statistical demonstration of the trivial. The quarrels today both with and between social scientists mostly concern concepts, techniques, and objectives rather than inherent feasibility and potential utility. After all, it is diffieult in our research-oriented society logically to deny the desirability of assembling and analyzing data relevant to problems of social behavior by whatever procedure seems most likely to be productive, provided the entire procedure can be understood and precisely repeated for verification by others. This is essentially all there is to behavioral research or any other kind of research. Seminal ideas about social behavior may and do come from random sources in great profusion. The function of the behavioral scientist is to change them from hypotheses into actuarial generalizations, or to destroy them. This is the contribution properly to be expected from social research to the maintenance of dynamic social stability.

There is a pervasive belief, possibly a variant of the popular con-

3. A most effective demonstration of the inherent dangers of reliance on common sense and casual experience may be found in Lazarsfeld, *The American Soldier—An Expository Review*, 13 PUBLIC OPINION Q. 378 (1949).

viction that truth must prevail, that useful knowledge will not fail to find its uses. Even so, how long will it take to get the results of social research into use if they are stored in manuscript and concealed in professional journals? May the process be both rationalized and speeded to social advantage? What are the alternatives to *laissez faire* in the social utilization of the products of behavioral research?

One widely accepted alternative to trusting to providence is to assign a practitioner role as well as a research role to the behavioral scientist or to the practitioner concerned with social problems. There are individuals who perform well in both roles. It would be regrettable if such persons were denied the opportunity. Nevertheless it must be recognized that differing drives and skills are required for these two roles and that they are found only rarely of equal strength and quality in one person. The practitioner requires as a basis for decision a blending of information perhaps from the physical and biological sciences as well as from several of the behavioral sciences. He certainly needs familiarity with material and organizational potentialities at the time and place of action. The existing practicing professions rather than research specialists suggest themselves as the most suitable agencies for this blending process.

The learned practicing professions, particularly those concerned with health, welfare, education, law, business and public administration, and the ministry, together include within their range of acknowledged responsibilities every conceivable kind of social problem and service. There are social elements in everything they do. Every practicing speciality is concerned with socially conditioned individuals who require help in attaining an objective which must be socially permissible, as must also be the means for achievement. Cooperation is required not only between practitioner and client but quite likely also with professional colleagues and employees, and with the client's family and associates. Commonly it may be desirable to modify the values and behavior patterns of the client and others involved in the problem requiring professional aid. It does not seem possible to imagine a physician-patient, lawyer-client, management-employee, teacher-student, welfare worker-client, or minister-parishioner relationship where most, if not all, of these social elements may not have significance. In view of the fact that the practicing professions are so clearly and deeply concerned with social phenomena both in setting and in responsibility, it cannot be said that there is either need or room for any new profession of generalized social science practitioner.

If, as is here argued, there is such urgent need for better understanding of social order and social change, if behavioral research offers

a way to such understanding, and if the learned practicing professions in turn offer a proper means for putting the findings of behavioral research to use, the question may be raised why so little professional concern for behavioral science is evident.

First it must be noted that the professions are showing more interest in the social disciplines than ordinarily is assumed. An important part of this interest is unwitting. The concepts, techniques, and results of behavior research already are diffused in varying degree throughout the learned professions. Acceptance of behavioral science offerings extends beyond the professions to a goodly sector of the general population, as is suggested in the following quotation:

> The impact of the behavioral sciences on our society is far greater than most people realize. At one level they are providing technical solutions for important human problems. But at a deeper level they are changing the conception of human nature—our fundamental ideas about human desires and human possibilities. When such conceptions change, society changes.
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> In the past few generations, many beliefs about such diverse matters as intelligence, child rearing, delinquency, sex, public opinion, and the management of organizations have been greatly modified by the results of filtering scientific fact and theory through numerous layers of popularizing translation. The casual way in which behavioral hypotheses often find widespread acceptance underscores the importance of strengthening and deepening the behavioral sciences and of securing better public understanding of what they are and what they are not.[4]

Concepts such as culture, status, role, social stratification, minority groups, marginality, and others which have been given their technical meaning and professional utility by social research may now be found in any educated man's vocabulary and are not rare in professional literature. The increased professional emphasis in recent decades on the behavioral significance of specific elements in the social environment, an emphasis which has profoundly modified the practice of all helping professions, largely may be attributed to social research. Such ideological infiltration is perhaps the ultimate form of contribution which may be desired by any scientist, but it is too general and attenuated to achieve maximum utility or even to survive in the absence of more sharply focused interdisciplinary communication and cooperation.

Planned cooperation between behavioral scientists and professional practitioners in research and instruction varies widely between professions, as between commonality in medicine and rarity in law, for example, but is not entirely absent from any. It varies greatly within any single profession from one professional school or operating agency

4. LIFE SCIENCES PANEL, PRESIDENT'S SCIENCE ADVISORY COMMITTEE, STRENGTHENING THE BEHAVIORAL SCIENCES 2 (1962).

to another, ranging from the commonplace as in a selection of schools of education, social work, business, medicine, public health and, surprisingly enough, several military agencies to none at all in other institutions with identical stated objectives. There are significant numbers of behavioral scientists concentrating their work on data and problems of every profession, there are monographs and textbooks by behavioral scientists demonstrating the relevance of their discipline for every profession, and there are courses devoted in whole or in part to relevant behavioral science in the curricula of leading schools of every learned helping profession. A good start has been made.

Nevertheless not anywhere near complete advantage of behavioral science techniques and knowledge already in store is being taken by any of the helping professions. The frequent apology that behavioral science is still in its early youth and that there has not yet been time to prove its worth or develop channels for cooperation has a fair element of validity but does not tell nearly the whole story. Similarly, the excuse that there is a shortage of suitable personnel, although true, seems feeble when it is observed that efforts to increase the supply of such personnel are negligible. There must be and there are more fundamental factors in the situation.

The problem is one of professional intercommunication. The factors underlying the limited use of behavioral research in the practicing professions are in essence the barriers to communication consequent to the unavoidable fact that each distinct profession has a social system and a correlative subculture of its own. The performance of specialized tasks requires specialized knowledge and ways of working. A private professional language, defensively referred to by those who do not speak it as jargon, invariably develops for the expression of specialized concepts with brevity and precision. The difficulty in communication, however, is much more than a matter of choice of words.

Inadequate communication is also much more than a consequence of interprofessional antagonism, jealousy, and self-seeking, as has been alleged. It must be granted, of course, that unfriendly interprofessional attitudes and actions are common. Not only does each profession at any time and place have a tendency to develop a model pattern of work all its own but it also is likely to develop defenses against skeptics and competitors. The architect is understandably sensitive about contractors who assure the prospective home builder that he needs no professional guidance. The lawyer and the accountant, the psychiatrist and the clinical psychologist, or the social worker and the uncertified dispenser of aid to the indigent do not always see eye to eye about their relative merits and jurisdictions. There is little

profit in attempting to estimate the relative weights of self-interest and client interest in the defensive measures which are found in all professions. The point is that there is strong pressure to professional self-segregation which must be taken into account in any program of interprofessional cooperation.

Professional self-segregation in consequence of divergencies in social systems and defensive measures may perhaps best be seen in perspective through comparative summaries of selected dominant features of the core behavioral sciences and of the major practicing professions. As already indicated, present consideration of the behavioral sciences is restricted to sociology, social anthropology, and social psychology. Brief subcultural characterization is a sufficiently hazardous task without going beyond these three core disciplines. The characterizations here attempted give emphasis to just a few seriously conflicting values and behavior patterns found generally in the behavioral sciences and practicing professions, selected because of probable importance in any program for the relation between behavioral scientists and practitioners.

The prime objective of the behavioral sciences by definition is advancement of understanding of social behavior. Most behavioral scientists are attached to educational institutions where they have been assigned a variety of tasks, of which the main one has been undergraduate instruction. Their contribution as teachers, however, has been less the instruction of students in behavioral sciences as science, that is, as chemists usually teach chemistry, than it has been the provision of a social problem-oriented, liberalizing element in the curriculum. Those successfully engaged in research achieve prestige, but so do those prominent in community improvement or commercial operations. Adequate provision for getting the findings of behavioral research into use has never been developed. The distinction between the research and helping roles of behavioral science remains unclear. A high proportion of behavioral scientists have entered the field with moralistic as well as, if not rather than, scholarly motives. Both institutional recognition and the applause of colleagues in behavioral science follow either research achievement or a direct contribution to social improvement. Nevertheless the formal and explicit behavioral science value system in theory accords higher appreciation for research accomplishment.

Behavioral scientists are sensitive about their status both in academia and in society at large for the cogent reason that it is uncertain and insecure. As newcomers in the scholarly world they must still prove their right to membership rather than rely comfortably on having it taken for granted, as do mathematicians, classicists, and their

other predecessors. A complication is that they are asked to prove their right to full academic citizenship to the satisfaction of physical and biological scientists and also to humanists, on divergent and competitive measures of performance. The campus bickering between self-appointed representatives of science and the humanities has pulled behavioral scientists in opposing directions. They have struggled for at least the tolerance if not the full approval of both camps, with consequent lack of full attention to unique requirements of their own fields. It is interesting to speculate on how much the current emphasis on the construction of mathematical models and the use of electronic computers has been stimulated by the natural science ideal and to what extent it is the logical response to the nature of behavioral problems and available data. To complicate matters further, there is anxiety for recognition on yet a third scale of achievement, that of practical utility in application as defined by the lay public and by the practicing professions. A sense of self-doubt and insecurity, defensiveness, overclaiming of worth, and retreat to the ivory tower are understandable reactions of many behavioral scientists to this thrice confirmed second-class citizenship in the intellectual world. These are not qualities normally desired in colleagues. Fortunately there are also quite a few who react more positively to the attribution of low status or even fail to pay attention to its existence.

Most behavioral scientists today stress social environment in the analysis of social behavior to the practical exclusion of any biological component. The current emphasis on empirical research and the relative ease of assembling data concerning external influences on the individual and on social groups, in comparison with the problems involved in relating specific behavior to specific inherited characteristics, have made this emphasis inevitable. Whether or not this practically exclusive concern with social environment has gone so far as to be properly termed a bias, it is the most significant general feature of the core behavioral sciences subcultures.

Behavioral scientists resist hierarchical relations and recourse to authority as bases for cooperation with others. Their ideal concept of a research team permits leadership and differential responsibilities on the basis of skill but resists priorities derived from authoritarian position. Their concern with individual independence extends beyond relations between colleagues to their view of the proper relation of the individual and society. The anti-authoritarian, individualistic, democratic personal value system in general characteristic of behavioral scientists is of relevance to interprofessional cooperation in two respects. With regard to social outlook, it reflects a bias in favor of socially disadvantaged individuals and groups. With regard to in-

terprofessional collaboration, it limits the employment of behavioral scientists by professional schools and agencies if assignment must be to a professionally subordinate status or role.

The subcultures of the several practicing professions vary almost beyond hope of generalization. However, with due warning about great variations between the subcultures of the practicing professions, comparisons may be made with respect to the four more or less common characteristics of the core behavioral sciences to which attention has just been directed, that is, the advancement of understanding as the declared dominant goal, sensitivity to uncertainty of status, environmental orientation, and strong anti-authoritarian bias.

The action orientation of the practicing professions is, of course, a fundamental source of misunderstanding with the learning-oriented behavioral sciences. Concern for those in need of help creates impatience with colleagues who seem only to want to study trivia and irrelevancies. The force of the helping orientation is evident in practitioners' efforts to protect their clients. Social workers resist research involving their clients for fear of interference with therapy. Lawyers and others talk about invasion of privacy by research. Physicians who turn to research confess a feeling of discomfort or guilt because of indoctrination that a patient is someone to be helped and only secondarily a source of data. It is immaterial for our present purpose whether there actually is any of the alleged danger to the helping process. It is the conflict in priority between research and practice that matters.

As behavioral scientists refuse to be restricted to their scientific function and extend their role to social action, so every practicing profession includes research as an important if secondary concern. Indeed, the health professions have gone so far that recognition follows research achievement more promptly and surely than it does skill in practice. Schools of education, of social work, and of business and public administration emphasize instruction in their respective arts but also give attention to the development of the research base of their teaching. Architecture combines aesthetics with engineering. The ministry depends on the humanities rather than on science for its intellectual foundation. Law seems to be the most self-contained practitioner-oriented of the learned professions in that law faculties consist almost exclusively of lawyers trained for practice and that minimal provision is made for advanced training for teaching and research. It is apparent that such differences in conception of the intellectual base for practice reflect and produce variations in subcultures which require specialization in interprofessional collaboration. Individuals and individual institutions, of course, are found in any

profession able and eager to attempt research or action tasks jointly with behavioral scientists. It is on such exceptional ventures that we must depend for leadership.

The status sensitivity of the behavioral scientists described earlier handicaps collaboration with any prestigious practitioner group. There is also, of course, some status sensitivity on the part of the practitioners in relations with behavioral scientists, for there is an element of criticism in the notion that services could be improved by outsider help. Nor can it be ignored that the concept of research now is inseparably linked with development and practice in the public mind, so that tribute which should be paid to scientific application is often ascribed to science. Also, in spite of high ranking on the scale of public esteem, practitioners become sensitive in situations where the reference group by which they are measured shifts from colleague specialists to a community of research scientists, as it frequently does for all, both because of need for information from the basic sciences and also because professional schools are a part of, but not the heart of, the universities to which they are attached. Everyone has second-class status when judged by a subculture not his own.

Behavioral science ventures by the practicing professions cannot help being disturbing to practitioners who have been doing quite well with other intellectual foundations. The client and his problems have not been traditionally thought of as products of society and subject to social science analysis. Depending on the profession, the problems presented are regarded as requiring for solution biological, physical, or moralistic expertise. One of these is always the main stated qualification for practice, with perhaps a supplementary trace of one or both of the others. Research-derived knowledge of the total social environment has thus far not been a main source of intellectual strength of any professional practice. This is as should be expected in the engineering specialties and one is justified in being surprised by the amount of attention now being paid behavioral science in leading professional schools of engineering both as preparation for life and as a component of technical training. The tremendous advances in the health services in the past century through the aid of biological and physical science must long overshadow behavioral science in the medical fields, with the possible exception of public health and the organizational aspects of medical care. The central questions of the other practicing professions are so obviously involved in the social environment that one may be curious about their continued neglect or minor interest in the social research approach. It is understandable that in earlier days dependency was on informal interpretations of experience and moralistic convictions about what men ought to like

and be like, but today firmer underpinnings are available. Evidently it takes time for patterns and values to grow into harmony with intellectual advances.

Patterns of work, as well as professional theory and techniques, vary appreciably between professional subcultures. An authoritarian attitude absent from the core behavioral sciences is characteristic of the practicing professions. Because of their superior specialized knowledge and because service to others is their avowed business, practitioners are continuously in a superior advisory relation to others seeking help. It is an easy transition from helping a client move toward his objective to giving advice on the propriety of the objective and to dictation of the objectives as well as the means of accomplishment, with short shrift for the client's original purpose and procedural preferences. Because long and healthy life is so universally desired, the physician is rarely challenged for playing God in the lives of his patients without being asked to do so. Laymen and society are no less than partners with educators in deciding what shall be taught and even how; with the generals on if, where, and how a war will be fought; with the social worker on who will receive what kind of aid; and even with artists on what kind of graphic and performing arts will receive the sanction of support. Professional expertise in helping individuals, institutions, the community, or nation too often leads to the assumption of dictatorial authority extending well beyond either mandate or competence. An exception is the legal profession, which seems to be the least of all authoritarian in relations with clients, a circumstance which may be related to traditional confidence in the amateur resolution of substantive problems, the adversary system, and reliance for final decision on legislature, judge, and jury. The question of authority with relation to clients remains unpatterned in the behavioral sciences because the behavioral scientist has no well-established clientele unless it be students for whom the pattern long since has been established by senior colleagues.

An acceptable pattern of collaboration is essential to legitimize necessary hierarchical relationships, overcome sensitivities, and offset the previously mentioned tendency of professions toward self-segregation to protect their clients and to guard against encroachment, if interprofessional collaboration is to flourish. The importance of the established form for collaboration with underlying research disciplines and with practitioners in other specialties may be illustrated by comparison of professions at the extremes of authoritarianism and individual independence, those of medicine and law.

The great advances in the medical arts over the past century have been in chemical therapy and surgical skill directed at the physical

factors in illness and health. The social factors only recently have come into prominence in medical research and education as elements subject to scientific analysis and management. In the words of Dean George Packer Berry of the Faculty of Medicine in Harvard University,

> Faced with the increasing complexities of psychological and social factors in giving the best kind of medical care to the patient, the modern physician can no longer deal with these factors on an intuitive basis any more than he can deal on an intuitive basis with physical factors. Fortunately, this need in medicine for understanding social and cultural factors has coincided with the coming of age as scientific disciplines of psychology, sociology, and cultural anthropology. Nevertheless, too few physicians are yet aware of the contributions that the behavioral sciences are making today, and will be making even more significantly tomorrow, to the optimal care of patients. This lag arises from the fact that most of today's physicians pursued their formal professional educations before the coming of age of these disciplines and their introduction into medicine on a scientific basis.[5]

Dr. Berry's words may perhaps convey too rosy an impression of the current state of understanding of the relation between medical practice and behavioral science, but it is a fact that there are several hundred behavioral scientists engaged in medical research and education in association with medical schools, hospitals, and other health agencies. This is largely a post-World War II development. What are the impelling and restraining forces within the subcultures involved?

Physicians and surgeons learned with some reluctance in the earlier part of this century that their art is dependent for advance on the basic sciences as well as on clinical research and experience. This made necessary the development of devices and channels both for drawing on the findings of research in the biological and physical sciences not obviously related to medicine in any direct manner and for stimulating and guiding research with intentional direct bearing on matters of health maintenance. This was accomplished by adding research personnel to medical faculties where they served as connecting links with their specialty colleagues elsewhere and also conducted research of likely medical significance within their several fields. At the same time medical personnel became increasingly research minded and many individuals chose and qualified for research careers in medical schools, hospitals, and institutes. The existence of provision for collaboration of Ph.D.'s in the biological and physical fields with M.D.'s as colleagues rather than employed assistants has been a crucial condition favoring the introduction of the behavioral scientists into the preclinical family of medical education and research.

5. Berry, *Preface* to KING, PERCEPTIONS OF ILLNESS AND MEDICAL PRACTICE 6 (1962).

It must not be assumed from the fact that there has been appreciable collaboration by medical personnel with behavioral scientists that traditional prime dependence on the physical and biological sciences and on clinical training has been adequately supplemented. The still unmet need has been well indicated in an article concerned with comprehensive medical care by the Assistant Secretary for Health and Medical Affairs of the United States Department of Health, Education, and Welfare:

> The undergraduate curriculum in our medical schools has been divided into two main parts since the reform movement of 1910. The first is concentrated on anatomy, physiology, biochemistry, bacteriology and pathology, subjects now termed 'the basic medical sciences.' The second part, clinical training, is devoted to technical skills in diagnosis and therapy, again divided into two main fields, surgery and medicine.
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> Somewhere in the 4-year course, there is some exposure to preventive medicine and psychiatry. The student is rarely exposed, however, to the sciences basic to community medicine and psychiatry, the social and behavioral sciences. Moreover, his premedical training usually is so overwhelmed with the physical sciences and biology that he reaches medical school with nothing more than a high school view of the society he is to work in and the people whom he is to treat.
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> In most medical schools, the curriculum has been adjusted to permit early introduction of the students to patients. The older, well-established basic medical sciences, however, offer stiff competition for precious curriculum time. A few schools also are offering curriculums which permit a student to break away from clinical medicine and pursue a doctorate in laboratory research. Nowhere, however, is there an opportunity for a young person attracted to medicine as a social institution to come out of his training as a doctor of medical economics or of community medicine. Should the premedical qualifications be modified to require early instruction in the basic concepts of sociology, economics, and psyehology? Or should the preclinical medical curriculum be modified to balance instruction in the basic medical, social, and behavioral sciences? Should a choice be offered at the end of the second year in medical school to obtain a doctorate in medical research, clinical medicine, psychiatry, or community medicine? Medical education as a whole has not faced these questions in earnest.
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> Regardless of whether a physician is to devote his career to the medical needs of individuals or to community needs, he cannot function in modern medicine without some knowledge of the social action needed to cope with disease.[6]

The relevance of the thought in this quotation to other learned professions such as the ministry, social work, or law is not difficult to grasp.[7]

6. Stewart, *Community Medicine: An American Concept of Comprehensive Care,* 78 PUBLIC HEALTH REPORTS 99 (1963).

7. For a well-balanced assembly of articles by behavioral scientists analyzing the problems of providing adequate health services in a changing society and demonstrating the difficulties and mutual advantages of behavioral science-medical practice collaboration, see *Medicine and Society,* 346 ANNALS (special issue, Clausen & Straus eds. 1963).

In contrast to the health services, the far less authoritarian legal profession with its strictly social duties practices self-segregation to such an extent that collaboration by behavioral or other scientists is difficult and unattractive. With very few, but noteworthy, exceptions full faculty status is unavailable to individuals without a law degree and experience in legal practice. If information from some research discipline is desired, the usual procedure is for the law professor or practitioner to search it out for himself, to employ someone to prepare a summary report, or perhaps depend on briefing and testimony by a specialist called as a witness. The pattern of collaboration with equal-status nonlegal specialists technically qualified to perform a liaison function with other disciplines and conduct independent research in underlying disciplines, as found in all medical schools, is practically absent and actually on occasion has been prohibited by faculty action as well as custom. Legal research training is almost exclusively for searching the law with consequent implicit reliance on amateurism for any searching of facts which may be necessary. The principle that all practicing professions must be alert and prepared to seek out and integrate factual and theoretical contributions from other relevant applied and research fields has little practical recognition in legal education. There is no present acceptable place for behavioral scientists in legal education and research except as temporary associates or assistants on special projects.[8]

Because the legal profession is the one charged by society with responsibility for maintenance of justice in the social order, the prevailing indifference to the potential contributions of the behavioral sciences severely limits their use in efforts to achieve dynamic social stability. There are strong indications, however, of a rising determination on the part of leading legal educators and members of the bar to reduce the traditional barriers to cooperation. Exceptional ventures in the behavioral sciences were undertaken several decades ago, notably at the Yale University School of Law. More recently initiated projects involving behavioral scientists at the law schools of Columbia, Chicago, Wisconsin, and California (Berkeley) are well known in the profession. The view that these projects and others, including a number still on the drawing board, are not sporadic examples of deviant professorial behavior but evidence of a trend is supported by the statement of research needs to be found in the most recent annual report of the American Bar Foundation:

> First of all, it has become ever so apparent that the development of the

8. For a well-balanced discussion of the factors limiting collaboration between lawyers and behavioral scientists, see Riesman, *Law and Sociology: Recruitment, Training, and Colleagueship*, in LAW AND SOCIOLOGY (Evan ed. 1962).

> legal framework of contemporary society is lagging far behind the development of technology, science, medicine and other human activities in the current scene.
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> . . . .
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> Library research for the preparation of artieles and treatises on the basis of existing written materials are most useful, but, more and more, the future of legal research is going to be devoted to actual observation of the operation of legal institutions in the field as they protect or impinge upon the rights and privileges of human beings.[9]

Similarly, the program of the Walter E. Meyer Research Institute of Law, actually a foundation in spite of its name, supports studies which it classifies under the titles "Law and the Common Man" and "Justice in the Big City." Ten of the twelve trustees, officers, and members of the Institute are professors of law at four distinguished schools of law. In their own words:

> They are especially interested in studies that press beyond conventional scholarly analysis of appellate decisions. Such studies may involve material from and collaboration between many disciplines. They may employ such devices as interviews, opinion surveys, statistical analysis, participant observations, clinical studies or controlled experiments.[10]

The considerable number of projects already sponsored by the American Bar Foundation and the Meyer Institute are evidence that the quoted statements are more than idealistic ambitions and that there is strong and wide support for them within the legal profession.

Turning again to across-the-board generalization about the practicing professions as consumers of behaviorial science, the contribution of the behavioral sciences to practice through research and education may be made at three focal points. First, they can contribute to the understanding of the social component in the problems brought to the practitioner and in the measures to be recommended for their resolution. Second, they can be a source for the improved understanding of the client and his milieu. Third, they can be charged with the study of the professions as social institutions, their function in the social order, and their values and several unique patterns of professional life and work. There is little dispute today by spokesmen for the professions concerning the desirability of further attention to such matters in professional education and research. The serious difference of opinion is about the locus of responsibility and the manner in which it should be met.

The means and prospect for improved behavioral science utilization

9. AMERICAN BAR FOUNDATION, 1962 ANNUAL REPORT 3.

10. WALTER E. MEYER RESEARCH INSTITUTE OF LAW, REPORT FOR THE PERIOD JULY 1, 1960-JUNE 30, 1962, at 8 (1962).

by the practicing professions depends primarily on the programs of the professional schools. True, social attitudes and to some extent the social component in the technical aspects of professional practice of already well-established practitioners are subject to modification by changes in the social milieu, but such influences are less subject to planned innovation than educational offerings.

All professional schools are obligated to transmit and expand knowledge which will increase the operational skill of students. Some schools assume that the behavioral science contribution to their profession should be an indirect one through the undergraduate college curriculum. This has been ineffective because the relevance of behavioral science to practice is not clear to students or faculty, nor has it been possible to develop courses at the undergraduate level with specific direct relation to students' career objectives in order to correct the situation. This would require the kind of rigid prescribed preprofessional curriculum which is no longer strongly favored. Furthermore, without reinforcement in the professional school, the potential benefits of behavioral science instruction in earlier years are rapidly lost in the process of professional orientation.

To be of maximum benefit the behavioral sciences must be brought directly into professional school instruction and research. To some extent this is being done by members of the faculty in applied or clinical fields alert to the social element in practice. Some have developed wisdom about behavioral factors out of years of experience. Others have conscientiously attempted to keep abreast of relevant behavioral science developments. Incidental wisdom, however, is difficult to verify or transmit. Secondary scientific interest has the defects of attenuation. Yet it is important that social wisdom and the behavioral science content of clinical and operational instruction and research be maintained and increased. It should, however, be supplemented by research and instruction by specialists in behavioral science. It is not unusual that such supplementation is provided by the part-time borrowing of behavioral scientists on the faculty of the associated liberal arts college. The difficulty with this procedure is that only rarely is there a man on the liberal arts faculty interested in or sufficiently familiar with the professional specialty to do more than offer a standard liberal arts approach with no apparent professional relevance beyond perhaps some attitudinal influence. If dependence must be on such borrowed personnel, maximum benefit may be expected only if research and teaching identification with the area of professional specialization is developed. Little benefit is derived from part-time borrowed behavioral science personnel when the arrangement is for a brief period, and virtually none when a series of such outsiders are

brought in for one or two sessions of instruction or research consultation each.

Ideally, instruction and research in the behavioral sciences in a professional school should be the responsibility of behavioral scientists specializing in some aspect of their basic field clearly related to the applied field. They should serve as orthodox members of the professional school staff on equal footing with colleagues of similar achievement and reputation. Unfortunately the number of behavioral scientists qualified for and interested in such assignments is much smaller than the opportunities now offered. There is insufficient awareness of these opportunities and too much doubt concerning their career suitability to provide the needed number of recruits. There is also inadequate provision for training, which is now mainly through hard experience on some research or teaching tasks in association with a professional school or agency. The learning-on-the-job method of training behavioral scientists for collaboration with practitioners will not be properly supplemented by the more logical and efficient provision of specialized programs in arts and science graduate schools until there is more assurance of suitable long run career opportunity in responsible association with professional schools and operating agencies.

There are many basic questions of organization and relationship requiring further experimentation if increasing numbers of superior behavioral scientists are to be attracted to work in association with professional schools. The one most commonly raised by practitioners concerns the allotment of time in already crowded curricula. One need only look at a sample of the dozens of studies and revisions of professional school programs in recent years to realize that time-saving deletions could be made in any of them without loss except to tradition and vested interest. This is especially true if the purpose of the faculty is to prepare students for leadership in their profession as it will be ten, twenty, or more years later, rather than to supply all the detailed skills necessary for successful practice the day after graduation. There is also an opportunity for extending the school program beyond that needed to qualify graduates for practice in order to provide the additional and special training for those who plan to teach and conduct research, as well as for those who wish specialist practitioner training. Schools of social work are finding it rewarding to follow the curriculum leading to the practitioner degree of Master of Arts in Social Work with an advanced program emphasizing the underlying disciplines and research leading to the doctorate. It is increasingly common to encounter individuals holding the doctorate in medicine who have gone on to take a Ph.D., D.Sc., Dr.P.H., or other

degree. Law schools could readily develop their post-bachelor's programs, now regarded with considerable skepticism, to provide the special needs of potential teachers and specialists in research. It is unthinkable that financial as well as moral support could not be obtained for any number of experiments and demonstrations of time saving and extension for purposes of curricular revision.

A few other administrative questions may be raised without any attempt at complete coverage. May a behavioral scientist on the faculty of a professional school expect or be granted within a reasonable time the degree of freedom in teaching and research possessed by others on the faculty, or is the outlook one of long continuing subordination by junior status assignment to a department or project directed by a more traditionally trained colleague? Such disciplinary subordination is commonly expedient in the initial stages of a venture but discouraging to potential collaborators in the absence of some prospect of later disciplinary recognition. Is the proposed behavioral science venture dependent on "soft" foundation or government money, or does it have a sufficiently high priority in the plans of the administration to qualify for a promise of early commitment of "hard" institutional funds? Granted that no faculty may be expected to welcome an administrative or intellectual innovation unanimously, what measures may be taken to make certain that the climate in at least some area of the institution will be congenial? Should the behavioral scientist have the certification of a practitioner degree, or need he be prepared only to demonstrate familiarity with that fraction of the practice area essential for his particular research and instruction responsibilities? The answers to such questions as these are crucial in the determination of the number and qualities of behavioral scientist recruits attracted to professional institutions. The answers are, of course, also important in determining the number and kind of invitations that will be issued.

Inadequate attention to interprofessional collaboration in spite of its obvious need in a complex and evolving society here has been considered for the greater part to be a consequence of subcultural incompatibility. The fragmentary illustrations of differential values and work patterns from a selection of professional subcultures may be discouraging as well as confusing to those who assume reasonable rapport between intellectuals. They should be viewed, however, merely as suggesting the nature of the barriers to interprofessional communication and as indicating that they are not immutably inherent but are as subject to rational modification as any outworn habit of society. The social pressures against professional insularity, both from within and from without the professions, presently are sufficient to give assurance that specialty self-segregation will diminish with in-

creasing but properly deliberate speed. Tangible evidence of this may be seen in current trends both in the behavioral sciences and in the practicing professions.

On the part of the behavioral sciences there is growing recognition that the practicing professions offer otherwise unobtainably rich data for research, an opportunity to test findings through the cooperation of practitioner institutions, and career opportunities with good income, security, prestige, and gratification in accomplishments. It is also coming to be realized that basic as well as applied research—the difference between the two is less and less subject to debate—can profit by such association. As more and more behavioral scientists have gained experience as staff and associates of professional schools and agencies and have found satisfaction in research and teaching with reference to practitioner questions, opportunities for research support and employment of behavioral scientists at ease in a practitioner field have opened up with even greater rapidity.

Professional schools and their universities are drawing closer together intellectually and even physically, insofar as the existing distantly located buildings of some and expense of moving permit. The notion which prevailed in earlier years that schools of social work should be in or near the slums, law schools and schools of commerce as near as possible to centers of trade, and medical schools in large cities promising abundance of teaching material regardless of the location of the parent institution has given way to the conviction that the benefits of close association with a balanced intellectual community outweigh the inconveniences of otherwise arranging for student observation of prototypes of future clients, customers, or patients. It is today generally conceded that the candidate for admission to a learned profession must not miss the opportunity to live as a part of a balanced academic community and gain identification with it, as one means for reducing the risk of his becoming a tradesman in the later exercise of his talents. The current tendency to close association with the academic community is a sign of recognition that specialization can be maintained in intellectual isolation only so long as problems are not explored in depth. The specialist, whether it be in practice or research, who follows his problem beyond the superficial level of practiced routine and rote dexterity invariably soon finds himself concerned with some other fellow's specialty and in need of his help.

The inability of the true specialist to abide by man-made disciplinary barriers is the simple explanation of the current distaste for professional insularity. It is also the reason for confidence that the promising potential contribution of the behavioral sciences to the orderly and rational development of dynamic social stability will be

made through even closer collaboration with the practicing professions. As a guard against overoptimism, the final observation may be offered that it is nevertheless unlikely that any profession or human agency will be able precisely to anticipate social change or keep abreast with science and technology. This is no excuse for not attempting to narrow the gap in understanding and to guide the forces of change and the elements of stability as an integrated rather than a divisive social process.