



Editorial

Advance in clinical psychology, on a firm scientific basis in personality theory and social psychology has been distinctly less than one might expect from the tens of thousands laboring to contribute. To anyone familiar with the history of science, however, it is not hard to recognize the symptoms of a characteristically difficult development phase or to diagnose certain causes.

Personality and clinical psychology, indeed, share certain growing pains of psychology as a whole. They arise in part from a postponement of attention to taxonomy and measurement, and to the mathematical requirements of scientific laws. Minorities of keen researchers, such as those in the Psychonomic Society and the Society for Multivariate Experimental Psychology have implied--the former society by its very name--that psychology is in the midst of so fundamental a transition as occurred between astrology and astronomy. Without accepting that we are as far back as that, we may yet recognize parallels to chemistry in the seventeenth and eighteenth centuries, when the weighing and measuring by men like Cavendish, Dalton and Lavoisier finished the transition from alchemy to chemistry. And since our interest is substantially in the clinical side of psychology it is informative to note parallels also to medicine, as clinical work passed from a basis of qualitative observation to one of supplementation by experiment, systematic taxonomy and laboratory measurement.

Personality theory, and the treatment of behavioral pathology which rests upon it, consisted largely in the last generation of the contending views of Freud, Jung, Adler, Rogers and many others. Research psychologists are agreed that it has to move forward to a more exact and testable body of theory, but hesitation and doubt prevail as to the experimental methods best fitted to usher in the new levels of

conceptualization. The relatively mechanical application of the classical, bivariate experimental designs has left leaders in clinical psychology unenthusiastic. For the atomistic character of the variables and relations has failed to connect with laws about the integrated organism. There is still, for example, a chasm between the successful treatment of specific symptoms by reflexological behavior therapy, and those subtle and complex relations in the adjustment of the total personality which psychoanalysis recognized, even if it could not handle them with positive scientific control. The new approach we advocate combines the objectivity and precision of the former with the more complex, multivariate formulations of the latter. Incidentally, we need waste no time with the cultist fads, neither in one system nor the other, which have arisen in the doldrums between the two systems, in which clinical psychologists have trimmed their sails to every feeble, erratic breeze of hunch and myth.

The strong new impulse now initiating genuine movement actually has its origin in fresh thinking on scientific method itself. This examination of fundamentals has suggested that psychology--and indeed the life sciences generally--are in need of multivariate experimental designs, and of concepts of functional unity, causal action and integration which cannot be effectively pursued by the classical, bivariate manipulative stereotype of an experiment. An imaginative reconstruction of the meaning of "experiment" is needed to respond to the challenge of the most complex entity man has yet studied: the human mind. This whole revolutionary issue was given an airing with the appearance seven years ago of the **Handbook of Multivariate Experimental Psychology**, where the reader may pursue it further than is possible here. Both the multivariate research instrument itself, and its vindication by break-throughs in personality, learning and clinical and social psychology, are there illuminated by such writers as Anderson, Burt, Cattell, Cohen, Fruchter, Guttman, Hake, Horn, Horst, Nesselrode, Pawlik, Royce, Sells, Tucker and others.

From the discussions and illustrations by these leaders in the field three main principles emerge offering guidance to the present journal. First, that measurement, which is the basis of science, needs to be, in the life sciences, **structured measurement**. Psychology is faced with an infinity of possible arbitrary, subjectively choosable behavioral measures. Advance in the discovery of laws had followed new possibilities of measurement, e.g., with the telescope, the voltmeter, the microscope, but especially of significant variables, which, in psychology, has usually meant demonstrated functionally unitary concepts. Secondly, experiment must be conceived more broadly as the **recording of a planned, ordered set of observations, with or without manipulation followed by appropriate statistical analysis according to a mathematical model**. Manipulative and bivariate designs are only part of the possibilities, and, especially with research on human behavior, more sophis-

ticated multivariate analyses are often needed to establish causal connections where manipulation is ethically and practically impossible. Thirdly, the good strategist will recognize that a two handed use of bivariate and multivariate approaches, each at an appropriate time, is better than keeping in the rut of one. Most frequently a thorough examination of structural realities by factor analysis is a necessary foundation for bivariate designs using the factors as dependent or independent variables. For example, studies on the inheritance of primary abilities are misleading unless the unitary abilities are first precisely factorially located, and studies of the effect of anxiety or arousal on various performances yield ambiguous and inconsistent results if the separation and unitary patterns of these states have not first been factor analytically established.

This journal has adopted the above principles because radical thinking suggests that they should be more prominent and explicit than they have yet been in many journals in the personality, social and clinical fields, which have catered more to the habits of the reader than the progress of the subject. To ensure that these principles are interpreted in a comprehensive and illuminating way it has, fortunately, secured the guidance of an editorial Policy Board of four psychologists eminent for contributions in this field--Professors Cattell, Eysenck, Guilford and Meehl--and a substantial group of editorial consultants among young psychologists already with cardinal contributions of their own. Anyone familiar with the work of these men will recognize their pioneer contributions, often tackling necessary multivariate approaches before the facilities of the electronic computer made them as computationally easy as they now are. More notably, they carried out basic research bringing structure into the chaos of ability and personality traits not only without big computers but also without the support and understanding of the majority of their fellow psychologists, who regarded the new methods as recondite and strange. Unabashed, they pursued these methods into the motivational fields largely abandoned to the medical psychoanalyst, the novelist or the mystic.

Unless such journals as that created here are successful in putting the pack of eager researchers on some new scents clinical psychology may yet have to wait half a century for these new methods and their still newer harvest of concepts to bring proper understanding and control in the complicated areas of human motivation and emotional expression. Change is generally both rewarding and terrifying. To those whose chief security lies in the comfort of the past change comes with the roar and flashing lights of a runaway train. To those who are fortunate enough to work in research, and to have some hand in guiding the future, these are exciting times in which to be alive, to be creative, to help the emergence of beneficent powers.

As this issue goes to press we learn that J. P. Guilford is busy writing up his revised views of intelligence and creativity. Cattell has completed a comprehensive volume on the theory and practice of personality measurement by questionnaire, and is brewing some new ideas on personality change in his model of structure learning theory. Meehl tells us he is taking a breather, between two distinct directions of effort. Eysenck is in the midst of a substantial attack on the vexed questions of inheritance of abilities and personality traits. The intriguing variety of directions in which our editorial consultants are busy may be illustrated in part by the present issue (Kline captures the quintessence of our theme, by his combination of measurement and clinical observation in repeated measures on a single case) and, we can promise, by much due to appear in later issues.

The editorial policy is to encourage variety of subject matter and approach within the area of personality theory and clinical psychology and with appropriate methodological standards. As every researcher in this area and by these methods realizes, there has been an unfortunate tendency of editors of personality, clinical and psychiatric journals to aver that topics in these areas handled by more complex techniques are too difficult for their readers and should be relegated to mathematical-statistical journals. This shielding from new techniques and concepts is the worst possible service to the reader's education and the advance of the subject fields. On the other hand, our readers have a right to get the essential methods and conclusions clearly stated without being lost in the mere mathematical-statistical technicalities. Our aim will be to preserve this balance, while insisting that the mathematical-statistical foundation be sound. Our policy will also be to allow more expression of opinion, and the healthy give and take of debate on contested issues than has frequently been allowed. Needless to say, perhaps, we nevertheless have no time, space or editorial stomach for bickering, one-upmanship or ad hominem attacks. Letters and short communications will also be encouraged, and books centrally in the field will be reviewed by invitation.

As to the physical location of the journal publication, under Professor Pierson and Warren Strycker, the reader may recognize on the cover the lighthouse at Bandon-by-the-Sea, in Oregon. With Murchison's journals originally (and still) issued from the tip of Cape Cod, and the present journal from virtually the westernmost point of the U. S. mainland, psychology may indeed be said at last to have spanned the continent. We hope that in the years ahead this journal will live up to the cover symbol we have adopted in our lighthouse. Meanwhile, let us express our editorial appreciation of the wise guidance given by the Editorial Board, the keenness of the consultants and the widening circle of competent contributors--all indispensable to the birth of a journal of character.