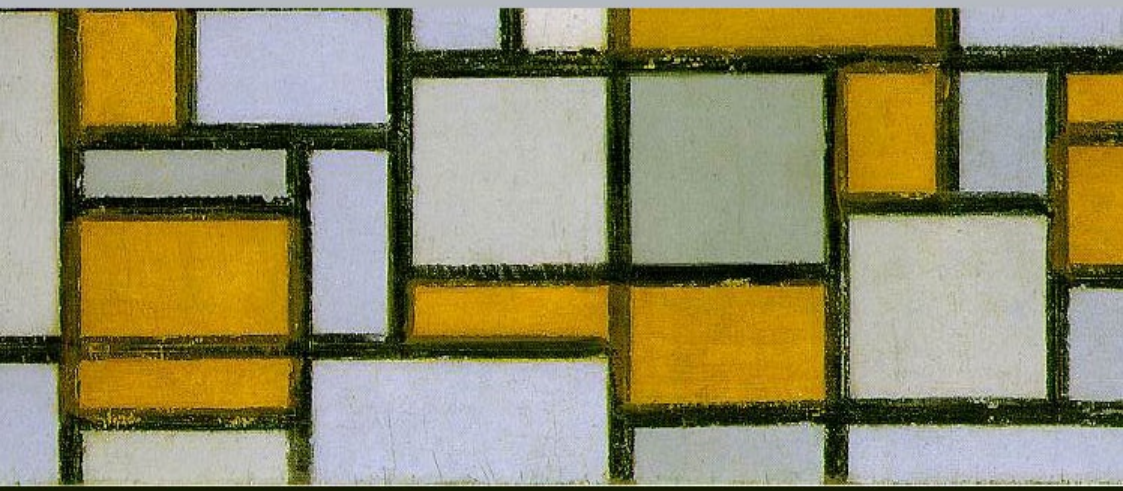
RACHEL DUNAWAY COX

The Concept of Psychological Maturity



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The Concept Of Psychological Maturity

Rachel Dunaway Cox

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The Meaning of Maturity

Since the early 1950's maturity as a term and a concept has come into widespread use in psychiatry, psychology, social work, and education. Its facile employment in both formal presentations and informal discussions might suggest that the parameters of maturity have been systematically, unambiguously established. Actually this is by no means the case; although the state of maturity, often assumed to be synonymous with psychological health, is described in a growing body of literature, the number of empirical studies is still relatively small.

Psychological maturity is, in fact, a difficult subject for scientific inquiry and scholarly discourse. The hazard in treating it stems in no small measure from the tacit assumption that everybody—professional and lay people alike—knows what is meant by the term. The seeming general agreement about meaning may well arise out of the vagueness of the concept itself and the looseness of the way it is discussed. The inexactness and hence the slipperiness of the ideas clustering around psychological maturity is no doubt characteristic of any emerging concept and its lexicon, which will in time give way to greater precision. Meanwhile, the usefulness of the notion of psychological maturity is matched, perhaps exceeded, by its opposite—

immaturity. Both concepts have come into rapid currency because they seem to describe aptly an important unitary something about persons. The great serviceability of the idea and the terminology has thus led to an accretion of meaning that makes for a certain level of communication. Indeed, maturity has become an allpurpose word, vague enough to fit into any context where a desirable, healthy, balanced commendable state is implied. Helen Lynd perceptively points out an unacknowledged but implicit meaning that the term has come to carry—a meaning that nonjudgmental professionals would probably disclaim in referring to attitudes and behavior. The words "good" and "bad," she says, "have been replaced by mature and immature, productive and unproductive, socially adjusted and maladjusted. And when these words are used by the teacher, counselor or therapist they carry the same weight of approbation and disapprobation as the earlier good and bad," and constitute a code as specific as that they have replaced. If she is right, certain moral overtones have crept unbidden into estimates of maturity and immaturity.

In the field of education the concept is also found serviceable. Unhappily, teachers sometimes resort to the term "immature" when they either feel it is inadvisable to tell parents the hard truth or are themselves very unclear about what ails a failing or near failing pupil. In this situation confusion rather than understanding is communicated. Only one thing is certain when a teacher tells a parent her child is immature. This is that the teacher regards the child as unsatisfactory. In what ways and to what degree

and with what hope of change for the better are often obscure to teacher and parent alike.

A frontal approach by research on psychological maturity or, to use the interchangeable name, psychological health has been long delayed. Preoccupied with pathology, psychiatry has until quite recently directed its attention away from health. Committed to precision of methodology and narrowly defined variables, academic psychology has explored isolated bands of behavior in experimental settings or limited itself to infinitely detailed and thorough descriptions of child growth. The Early Childhood Education movement, borrowing freely from both psychoanalysis and academic child psychology, has historically reached a more profound understanding than any other branch of psychology of how body, intellect, emotion, and social interaction meet and fuse with environmental opportunity to produce successive levels of maturity. In their close association with young children developing at a very rapid pace, nursery school teachers long ago saw that growth must be understood as a holistic phenomenon, indivisible into its separate components. Important and perceptive as its work has been, Early Childhood Education has remained for the most part a self-contained applied field. So-called basic research and theory building has been on the whole left to other branches of the discipline.

Thus for a variety of reasons the systematic exploration of the concept

and status now known as psychological maturity has only fairly recently become a topic to be researched. Heath who has produced one of the more thorough studies, acknowledges that the construct "maturity" has been criticized by psychologists impatient with inexact and subjective evaluations. He insists, however, that the results of his research on college men show *how* persons subjectively judged mature differ from those judged immature. In fact, the findings, not only of Heath but also of the body of empirical research on psychological maturity —scant though that research is—are in substantial agreement about the manifest traits and behavior of the so-called psychologically healthy person. This general unanimity points toward what Heath calls an underlying psychological reality.

Even while the loose and sometimes confused use of the terminology of maturity has gained momentum, research, theory, and expository discussion have produced a stimulating and significant, if numerically limited, literature. Many streams of thought mingle in present-day conceptualizations of psychological maturity. Contributions from the mental measurement movement, from the psychology of cognition, from sociology, anthropology, and social psychology, from both psychoanalytic and academic personality theory can be discerned in most scholarly and workaday references to the idea and the terminology. The significant point is that in its present use psychological maturity is a concept relatively new to science. While it unquestionably has a legacy from moral philosophy and religion, that rigor is

softened by known facts about how development is rooted in genetic potential interacting with environmental offerings sometimes generous, sometimes niggardly. The concept includes the idea that physical soundness supports the totality of growth, but does not accept the notion that poor health forecloses the possibility of mature personality. The quality has been studied almost exclusively by using subjects who are intellectually well endowed, highly educated, and well above the poverty line economically; but the certainty remains in the minds of expert and laity alike that many individuals only moderately bright, poorly educated, and in the lower ranges of income actually do acquit themselves exceedingly well.

What, then, is psychological maturity? A consensus of experts on human behavior coincides reasonably well with the popular use of the term. This holds that mature persons are clearly aware of reality and that they do not run head on to violate it, though they do what they can to shape it to positive ends. Reaching out in trust and warmth to other persons, they are able to give and accept affiliation. Being essentially at peace with themselves, they are attentive to the needs, joys, and griefs of others. Enjoying productivity, they work in accordance with their gifts and tend to grow steadily toward higher levels of competence. These characteristics are attainable at any time of life by individuals of any status. They constitute what might be called the invariants of maturity.

It may be that the aptitude to achieve the somatic, psychic, social unity required has a genetic core. This is a question as yet scarcely formulated. It cannot be denied that good intellect, a basic minimum of economic wellbeing, social and vocational opportunity that protects against intolerable frustration, and, most critically, good physical health are circumstances most often associated with psychological maturity in researched groups. Yet the possibility of an overall effective level of being that satisfies the criteria of the reality-oriented, productive, and loving way of life is achieved by persons who have relatively little to work with. How such individuals cope with their situations, preserve their intactness as persons, and keep to a steady course is a research area as yet wholly unexplored. Locating and getting the cooperation of subjects and the choice of feasible methodology present problems so formidable that the hurdles in work with the highly endowed are child's play by comparison. Nevertheless, it is to be hoped that qualified investigators will make the attempt. Meanwhile, the overview of the field undertaken in this chapter must perforce deal with the research and discussion now available.

Work dealing specifically with psychological maturity has concentrated almost exclusively upon adult subjects, most of them in their twenties and thirties when full biological and social maturation has presumably been attained. Important early work was carried on by Murray and by a group under medical auspices at Harvard (Hooton, Heath) before World War II. The

years following the war brought a succession of studies (Barron, Bond, Brown Cox Sanford Terman), all of them beamed upon the adult years. On exploring what was essentially uncharted territory, these investigations had to adapt old or invent new methodologies that the individual researcher believed would produce relevant data. As publication dates show, much of this work was carried on simultaneously, each project having slightly different if similar aims and its own theoretical basis. As a result most of these investigations seem to begin *de novo.* It is captious to complain that studies did not at this early stage build one upon another. Timing and differences in research situations and resources as well as various aims made replication either impossible or inadvisable. The more significant fact is that work independently pursued and from different starting points came out with pictures of the psychologically healthy young adult that are in essential agreement from study to study. Furthermore, though the findings of the empirical work have given added dimension to the description of personality at its healthiest proposed by theorists and clinicians, they rarely contradicted it. Longitudinal studies did reveal some surprises. This had to do with the severity of the stresses encountered by presumably mature young subjects in their later experience. Some of the stresses were environmental and could be said to be of the "act of God" variety. Others were psychological and developed out of conflicts and pain unique to the individual's psychic organization. Nevertheless, one of the most consistently appearing trends in

the psychologically mature subject was the ability to recover from stress. Faced with disappointment or loss or disillusion that shakes him profoundly, he regains his equilibrium as if by some inner "righting mechanism" and resumes his course. (Note especially Barron, Cox, and Heath).

The steps by which the "righting" comes about are of particular interest. Cox, for example, found that continuing in an accepted role was supportive as was the less tangible framework implicit in a self-ideal. Ruff's work with the astronauts revealed that their command of specific skills that gave them a range of appropriate ideas of what steps might correct a system failure enabled them to control anxiety in space flights.

From all the in-depth research on criterion groups comes evidence that mature people are sensitively aware of the persons and events around them and recognize and accept the claim of others upon them. The mature individual is usually in harmony with people and with the basic institutions of his society; but if his own value system and his own clear sense of what he is and what he wants to become run counter to the ideas and events he confronts in persons or in society, this tranquility may be disturbed but not fatally disrupted. His work, as expected, is well suited to his capabilities and is pursued with satisfaction to himself and for the enrichment of his society.

The strong and resilient people who have been subjects are given

various descriptive names or descriptive phrases by the investigators who studied them. They appear in the literature as self-actualizing, sound, psychologically healthy, or normal more often than as specifically mature. The different titles or names appear to carry essentially the same content and will be treated here as bearing on the same psychological phenomenon. In actual fact the subjects of this particular part of the literature have been biologically and socially adult.

Although the major research efforts have not denied the possibility that there is such a thing as psychological maturity before and after the blossoming of the early adult years, they have either not entertained the idea or have given it only passing mention. However, the present-day widespread use of the term and the idea of mature and immature levels of development in the growing years make imperative the recognition that there is not one but many levels of maturity—each appropriate to particular points in the life cycle.

Long before specific studies of psychological maturity under various labels began to appear, research in developmental psychology had produced a vast body of information about infants and young and school age children who were functioning in accord with their good potential. Terman and Hollingworth, Witty and others studied gifted youngsters and revealed a complex of desirable personality traits as well as excellent physical

endowment accompanying remarkable intellectual gifts. These researches did not set out to delineate psychological maturity as an entity in the latency years, but one of the significant by-products was just that. Contrary to belief current at the time that highly intelligent individuals were physically puny, socially withdrawn, and emotionally unstable, the gifted children were found as a group to be superior in every way, enjoying robust health, well-coordinated physically, socially well-adjusted and acceptable to their peers. Their behavior and personal qualities would seem to be precursors of the modes that much more recent research has found in adults who meet criteria of being notably well- functioning persons.

In numerous intensive cross-sectional and longitudinal studies of children appear evidences of individuals whose level of behavior reflects unusual capability in dealing with the experiences of their time of life. Retrospectively it seems clear that these children were working and loving in a way appropriately sensitive, complex, and effective as well as intellectually appropriate for their chronological age. Follow-up studies found them after infancy and earliest childhood maintaining not only their high I.Q.'s but, more significantly, their competent way of life. These findings suggest that psychic maturity can be validly viewed as a process, a continuously evolving state that can be attained early in life but that moves unceasingly toward later revisions as changing tasks and circumstances require. I shall have more to say presently of the concept of the norm from which this idea of psychological

maturity derives.

Over the last four or five decades two threads of psychological investigation, following different theoretical paths and employing entirely different methodology, have simultaneously made important contributions to the concept of maturity. On the one hand, psychoanalysis, and the elaboration of its theory in ego psychology, has traced affective and intellectual growth toward full stature. On the other hand, more recently the psychology of cognition in children has become a powerful influence on the way maturity is conceptualized. Its single most significant thrust has been its explication of the orderly progress of the genetically rich but cognitively naive infant toward the extraordinary complexity of abstract thought in the adolescent. These two approaches to the maturation process have been, and in large measure remain, separate despite the urgent need on the part of psychiatry, psychology, and education for a synthesis. Such a synthesis is by no means in the immediate offing, but the theories, empirical investigation, and expository statements of the analytic and the cognitive approaches seem to be moving together into much greater harmony.

Leading the way for psychoanalysis, Hartman, as early as 1939, declared for an autonomous ego, active in "conflict-free" spheres of memory, imagination, and maturity. "I think," he wrote again in 1964, "we have the right to assume that there are, in man, inborn apparatuses which I have called

primary autonomy, and that these primary autonomous apparatuses of the ego and their maturation constitute one foundation of the relation to reality. Among these factors originating in the hereditary core of the ego, there are those which serve postponement of discharge, that is, which are of an inhibitory nature." He goes on to say that although the inhibitory functions derive from the conflicts between the ego and id, not all ego activities are devoted to such struggles. The ego is able to achieve on its own strength and to secure those achievements against reversibility.

The significant difference made in analytic theory by the postulation of an autonomous ego has only gradually been realized in the precincts of educational and descriptive child psychology where for so long psychoanalysis has been either rejected or disregarded. The revision, nevertheless, makes an incalculable difference in the acceptability of analytic theory in those circles and may eventually make synthesis possible. It is, however, Erik Erikson's particular interpretation of psychoanalysis that has created a climate in which nonanalytic physicians, teachers, and academic child psychologists can approach the theory with lessened wariness. Erikson accepts the psychosexual stages of historical psychoanalysis and traces progress from the orality of infancy to full genitality at the dawn of adult life. When the individual falters on one step in the process, all that follows is in some degree compromised. The developmental sequence by which the ego eventually is able to deal effectively with the id and superego, and at the same

time attain mastery of relevant actualities of existence, constitutes, he says, the history of maturation. Implicit in Erikson's view is the possibility of personal growth that can match the exigencies of unfolding experience, moving ahead unceasingly through early, middle, and declining years. He sees polarities of achievement and failure in succeeding epochs of the individual life cycle. These polarities state the central problem whose solution at each particular stage is necessary for the continuing development and health.

The polarity of basic trust versus basic mistrust in the early months of life is followed by autonomy versus shame and doubt in early childhood. In turn, the polarities of industry versus inferiority, identity versus diffusion, intimacy versus isolation, generativity versus stagnation lead on to the final stage in advanced age of integrity versus despair. Recognizing learning as related to these steps in growth, and weaving into his theoretical fabric a consideration of social identity, Erikson speaks with a persuasive voice to many schools of thought and has done much to lower the barriers that have so long compartmentalized descriptive, experimental, and learning psychology from the psychoanalytic and clinical. The massive resurgence in the last decade of the experimental impulse in child psychology and the rise of the conditioning therapies take the science in a direction that seems for the moment to negate the rapprochement of recent years. Yet neither experimental nor neo-Pavlovian work has remained immune to what Erikson and like-minded psychologists have been doing. The new research differs

markedly from the laboratory work with infants and children before the publications of Ribble, Goldfarb, and Provence, among many others.

Maturity of Cognitive Processes

The contributions of the psychology of cognition to the concept of psychological maturity are of a different order. Beginning in the early 1950s research and theory building directed toward the discovery of ways of knowing in infancy, childhood, and adolescence took a vigorous leap forward in America. This was due in large part to the impact of the work of Jean Piaget.[1] His prolific publications have continued to appear in a steady stream since the late 1920's, when his interest was first aroused by the ways in which children's comprehension of the world differs from the adult mode. He pointed out—and his observations and researches over half a century support his conclusion—that many fundamental ways of thinking usually assumed to be part of inborn human equipment are actually the upshot of maturation, of discovery and learning on the part of the infant and young child.[2] Equally important for both theory and practical affairs is his demonstration that cognitive mastery awaits both the biological maturation coming with the passage of time and the assimilation of experiences made accessible to the developing organism by its own maturing structures and the offerings from the environment.

The somewhat cool reception accorded Piaget's early work in the United States seems to have been due to his overreliance upon verbal responses from child subjects whose ideation, American psychologists believed, was far

more sophisticated than their language could express. Piaget himself now concedes the point. The further fact that most of his work was available only in French limited his hearing in America. His later studies, now translated, on his own three young children and his ingenious experiments with larger groups of different ages have aroused enormous enthusiasm here, as elsewhere, and stirred a growing company of psychologists to replicate and extend his approach and methods. In general, his ideas about the stages of cognitive development have been supported by investigations in Europe and America (Elkind, Smedslund, Wohlwill). These stages will be described in more detail later in this chapter.

He describes the development of intellect as taking place through the processes of assimilating experience and accommodating the existing structures or schemata to the unfamiliar information. This, in turn, creates increased readiness for assimilating new incoming experience and the elaboration of schemata to the new state of affairs.

This formulation actually constitutes a fresh statement of the vexing nature-nurture problem that reached stalemate some 30 years ago. As such it speaks with particular relevance to whole societies as well as to professionals concerned with maximizing human potential. In this context maturation is seen as an open- ended proposition dependent neither wholly upon genetic constitution nor upon socially proffered nurture, but upon some as yet

loosely defined, dynamic interweaving of their respective contributions. Concurrent evidence from animal laboratories showing how early deprivation stunts and distorts a wide variety of growth patterns has provided an extension of data from the experimental sector.

The importance of Piaget's work for therapy, teaching, and social policy can scarcely be overstated. There are, of course, levels of deficit that no amount of skill in the helping process or enrichment of nurturance can overcome, but the necessity of continual provision of stimulation, highlighted by Piaget's work, as a requisite to further growth provides solid theoretical foundation for invigorated social and individual efforts on behalf of the socially deprived as well as the meagerly endowed. His work has also given additional urgency to social planning for early childhood since he stresses that later abstract levels of thinking rest upon foundations of schemata developed in early successive stages of growth. The critical importance of the capacity for abstract thought in developing a citizenry capable of democratic self-government is not actually stressed by Piaget, but it is of vital concern to American educators and is likely to be influential in shaping teacher education in the last quarter of the century.

Although firm in his view that the sequence of steps in intellectual maturation is invariant, Piaget is less positive about what happens in the long run when there is a time lag in attaining any given level of growth. He

surmises, however, that there is an optimal rate of progress from stage to stage. If the organism is delayed in a new phase, the ability to achieve the next level organization of experience may be unfavorably affected since the "new organizations cannot be indefinitely postponed . . . since they would lose their power of internal combination."

Piaget is, of course, concerned with the theory of cognition, but the principles and the stages he delineates also have applicability to treatment situations. The capacity to think, transpose, understand, and generalize can be, and indeed are, fruitfully adapted to the affective sphere. Thinking abstractly is supportive of the reorganization not only of cognition but also of behavior and emotion. The almost universal reluctance to make psychotherapy available to mentally retarded individuals has some justification in the fact that such patients, being handicapped in abstract thought, make little progress in the usual type of psychotherapy.[3]

A concern, which Piaget sees as typically American, with whether intellectual maturation might be accelerated in extremely bright children by "forced feeding" appears to him ill- considered, and he sounds a warning on what the upper limit of expectation had better be.

A review of the range of work on psychological maturity reveals that the cognitive factor is a critical issue. As Heath points out, "A theme that weaves

through most developmental theories is the centrality of man's maturing cognitive processes in assisting his adaptation." Both ego and cognitive psychology recognize this. The development by the two separate theoretical systems of the concept of stages— each resting upon that which goes before and laying the foundation of what is to follow—suggests that both schools of thought discern currents of growth that proceed along similar developmental paths. The fact that one system has addressed itself primarily to the affective sphere and the other to the cognitive makes the parallelism the more interesting.

As the foregoing discussion indicates, psychoanalytic, developmental, and clinical psychologies espouse quite similar assumptions about an interacting somatic, psychic, social indivisibility with predictable and stable sequences related in a general way to the sequences of life experience. Two other lines of investigation are of special importance to an understanding of the nature of maturity. The first of these is the concept of age-appropriate development. This idea has grown out of the mental measurement movement. Originating early in the twentieth century, mental measurement now finds many of its assumptions taken for granted in lay as well as in professional thinking. Perhaps the most important of its working postulates is the use of the norm or central tendency as the reference point in evaluating performance and attitudes of many kinds. The second line of investigation derives from the self-psychology of academic personality theory.

The ideas, the methodology, and the extensive testing programs associated with mental measurement and normative research have always been strongly practical, even though important theories about the nature of ability based upon statistical manipulation of test scores have been a notable spin-off. Self-psychology, on the other hand, has been very largely theoretical and speculative, buttressed by both clinical experience and insight. The literatures of the two fields overlap chiefly where empirical studies of personality employ psychological tests. It is true also that the notion of the norm is implicit, even when unexpressed, in most evaluative approaches to living organisms. In the field of measurement the existence of an underlying integrating unity in persons, a major concern for self-psychology, is taken for granted. Ways to measure ego strength, which in many discussions seems to be used interchangeably with personal integration or self-stability, is of interest to theorists and clinicians alike. Personality inventories such as the MMPI and several of the projective techniques have been used by self, or ego, researchers sufficiently sophisticated in these methods to use them effectively. (See especially Barron, Heath). It is probably not unduly pessimistic to say, however, that the clear delineation of norms for overall psychological maturity, and the measurement of self or ego strength, are still in the pioneering stage.

Age-Appropriate Maturity

Early in this century Alfred Binet developed the seemingly simple, but extraordinarily seminal, idea of age-appropriate mental development. Binet's very practical application to educational purposes of Cattel's earlier work on individual differences is based upon the recognition that a child's relative brightness must be judged by relating what he is able to do to his own chronological age, and that within broad limits his performance at any given age must be evaluated by comparing it with that of other children of the same life age. This device, later extended, with certain technical modifications by other workers, to adult subjects (Wechsler, and the testing programs of the armed services in World War I and World War II), has led to the elaboration of a vast and varied structure of norms in the form of quantitative statements of expectable, average performance on tests of scholastic aptitude and achievement, manual skills, attitudes and states of emotional health.

The age-appropriate idea leads at once to the proposition that the status called psychological maturity—that is, the ability to deal effectively and resiliency with experience—cannot be conceptualized as a state achieved only in biological and sociological maturity, coextensive with the early and middle years of adult life. It is true, of course, that almost without exception the specific research on so-called psychological maturity has been done on adult subjects. This is probably so because intensive study of normal and

supernormal persons has only fairly recently attracted research talent. It can be argued, nevertheless, that there are as many levels of psychological maturity as there are steps in the life cycle.

The point of view advanced in this chapter is that for each age span certain developmental tasks are implicit, and that psychological maturity is attained when these undertakings are accomplished in phase with chronological age and, in some degree of synchrony, with the expectations of the society of which the individual is a member. In infancy and childhood the rapid growth of the biological basis of the person increases and elaborates the requirements of age-appropriate maturity at dizzy speed. With every widening of the visual field, every extension of physical mobility, every proliferation of human contacts, every possibility for responding to social incitement, the complexity of required attainment increases. Thus, to maintain a once achieved relative level of psychological maturity, the individual must undertake continued revision.

At no time of life is static maturity possible since new situations demand new adaptation. Furthermore, at certain critical junctures accelerated alterations of overt behavior and inner growth are required. Separation experiences occurring in new contexts at different points in the life cycle, the taking on of new roles and heavier responsibilities, the elaboration of human relationships as extension of the social network calls for increased subtlety

and sensitive responses to hierarchies of loyalty— these and countless other passages change the constellation comprising mature feeling, thought, and action. Similarly in the decades following the middle years, receding physical resilience, the withdrawal in retirement of the social consensus concerning the individual's meaning and worth, and the loss of significant others make unprecedented demands.

As Scott has aptly said, "Maturation is more than ripening or growing older; it involves organization and differentiation as well." Of psychological maturity this is especially true. Equally true is the fact that only if reorganization proceeds unceasingly can equilibrium be maintained.

Psychological Maturity in Infancy and Childhood

To be in phase with appropriate overall maturation in the earliest days of life depends in major proportion upon sound biological equipment capable of advancing through normative processes of organic growth, myelination, and differentiation. This is not to say that individuals born with crippled bodies or damaged nervous systems cannot possibly achieve integrated and effective lives. Evidence provided by occasional remarkable personalities shows that fully flowering personalities can develop in tragically damaged bodies. Nevertheless, very early somatic deviations, especially those involving the central nervous system, will slow and run great danger of permanently

compromising healthy personality. Since manifestations of psychological adequacy in infancy are both experienced and expressed in somatic terms, being in phase with chronological age at that time of life depends upon soundness of body. This is especially true in the early stages of extrauterine life when the infant's grasp upon his world can be secured only by his contact with the space, sounds, touch, smells, and temperature of that world.

The interaction of the growing infant with his milieu in reaching toward comprehension of his world has been richly documented over the last hundred years by students of childhood as diverse as Darwin, Preyer, Shinn, Pratt, Carmichael, McGraw, Gesell, Bayley, Buhler, Escalona, Kessen, to name but a few from an innumerable list. The most favored approach to the study of maturation in the growing years has been the naturalistic or genetic one. Using longitudinal methods with fairly small groups, and cross-sectional approaches with much larger numbers, developmental psychology has minutely catalogued somatic structure, speech, ideation, social behavior, and the like from birth through adolescence. Norms of growth have been identified at closely spaced points along the continuum of chronological age with a competence that will probably never be excelled. From the normative picture of different age levels, the characteristics and features of outstandingly effective functioning in the growing years can be spelled out.

As noted above, Jean Piaget has infused the genetic approach with new

vitality. He cannot really be classified as concerned with norms in the usual sense, because his commitment to exploring the epistemology of cognition gives his work a theoretical and philosophic depth and breadth scarcely found in descriptive accounts of growth. Nevertheless, in setting out a sequence and in giving the steps approximate time boundaries, he does contribute to the notion of age-appropriate cognitive development.

The importance of the infancy and early childhood work for our understanding of the maturation of the total person can scarcely be overstated. From the earliest baby biographies down to the present, these researches throw into bold relief the basic interrelatedness of physical, emotional, and intellectual factors. Since World War II a series of studies have highlighted the blighting effect upon the growing organism where resources for wholesome growth are not available. The benchmark studies of Ribble and Spitz were followed by numerous investigations that sustained the early finding that infants deprived of ongoing contact with supportive emotional and social nurturance fall behind on all dimensions of development—including alimentation, neuromuscular coordination, cognitive and social learning. The vehement critics of the Ribble and Spitz work have tended to fall silent as evidence has accumulated sustaining the central theses of their reports. The meticulously documented studies of Provence and Lipton demonstrate how lack of development merges into pathology—the marked opposite of a robustly normal state. More recently Rheingold has focused

attention on the springs of language acquisition in the preverbal interchanges between the infant and his caretaker. Acting as a mother surrogate with a small group of institutionalized infants for a period of weeks, she offered them opportunities for vocal exchange such as mothers carry on with their own babies. Later evaluators, uninfluenced by knowledge of which infants had received social-vocal stimulation and which belonged to a control group, found the experimental infants notably more socially reactive and, indeed, somewhat more competent on baby tests than the controls. Rheingold's finding is in line with that of others who report that language acquisition is especially retarded by the absence of stimulation. Her experiment gives, however, the positive side of the coin in demonstrating that the introduction of preverbal stimulation makes a significant difference in the infant's own preverbal outreach.

Tracing the progress of age-appropriate affect has been the special province of psychoanalysis. According to that theory, the neonate is—and must be—an oral being, since to fail in the task of sucking, as some newborns with seriously impaired nervous systems do, is to incur grave hazard to life itself. Rut as Erikson has pointed out, the infant takes in much more than physical nurture in this oral stage. He knows the world and interprets it in accordance with his oral experience. According to Erikson, the basic emotional achievement at this stage is the development of a belief in the readiness of his world to care about and for him. At three, or thereabouts, he

will have come to terms with society's initial interference with his reflexive and instinctual life and begun to channel and control his intense loves and hatreds.

The ego of the psychologically mature child has gathered considerable strength by the time he is of school age. The conquest of his oedipal strivings has laid the foundations for identification and social feeling. His control of his own body, his command of information and skills, his growing awareness of the "rules" and expectations of society, as well as his capacity for satisfaction in knowing those rules and rising to those expectations, are impressive. At this point his faith in the world and his confidence in his own powers ready him for the further complications of life beyond the reach of his mother's arm.

Latency, as postulated by traditional psychoanalysis, is relatively free of the somatic and emotional struggle around sexuality, although Kinsey's retrospective reports on childhood showed that the years from six to twelve are by no means asexual and that interest in sex and sporadic sexual activity are neither perverse nor abnormally precocious. However, the most telling indicator of psychological maturity at this stage is the style and energy with which the child gets on with the expansion of scope and skill in the ego apparatuses. Erik- son's depiction of the latency period as characterized, in emotional health, by industry speaks most congenially to developmental, social, and educational psychology. The industry that he proposes as the

central enterprise of normal latency is expected to undertake school learning, to confirm a biologically suitable sexual identity, and to come to identify the self as a member of small and larger social groups. The opposed polarity, inferiority, is expressed in failure to achieve these goals. As teachers know, lag in the mastery of the various forms of symbolic learning does not merely constitute inconvenient deficits in the tools of school work. Such lacks are felt by the child and the society as deficits in the individual himself. The shock waves of these failures, reverberating into every aspect of the child's life, damage even the most tender social relationships, undermine self-esteem, and deteriorate self-image. This being so, it is inevitable that concern be keen that the young person "keep up" and remain close to suitably advanced school achievement.

Criteria of psychological maturity in middle childhood thus must include adequate progress in classroom learning. In deciding what is adequately "mature" in such matters for any child at a particular point in time, educators lean upon age and grade norms where these are available, as they are for most school subjects. The dangers inherent in the rigid use of norm tables in dealing with individuals who differ markedly from the majority of schoolchildren in cultural nurture or personal idiosyncrasy is fortunately well known today. At the same time humane use of norms as guidelines for teaching, and occasional and judicious resort to them as a motivating force, can be helpful to both the child and his mentors. They serve

to keep the realities of the child's school situation in view. School learning is, after all, a pressing reality for the child.

In the more subtle matter of becoming the sort of person the family, the school, and the society demand, landmarks are far more vague. There are no quantified norms for being an acceptable boy or girl, a normative son or daughter, a good team member. Although rarely spelled out, standards are nonetheless communicated constantly and are correctly understood by the latency child to be fairly unbending. He learns by apprenticeship, as it were, how to act and what roles to carry out. The histories of adults studied as notably mature reveal that these men and women were capable schoolchildren, not only successful in school learning but also in the varied and more inclusive roles and functions of their personal lives. There is little solid evidence on whether children who fail badly over an extended period in the tasks of latency can later achieve a high level of personal integration. We do know that adults who have been studied in criterion groups have not been failures in the past. Research on the psychological status of grown-ups who were earlier diagnosed as dyslexic or otherwise severely out of phase in school learning might throw much needed light on the question.

Psychological Maturity at Adolescence

As childhood draws to a close, changes associated with puberty

accelerate changes in psychological status. Intensifying demands of school curricula enforce decisions entailing long-range consequences. Educational choices made at this point are, happily, more reversible in the United States than in most societies, but even here the child must begin to think with a time perspective he has hardly known before. What he does—or more stringently, what he does not do—in his school tasks can be recouped only by unusual exertion. In his acceptance of these hard facts he expresses his developmental maturity. As to sex role, the individual has, of course, never had a choice, and awareness of his correct role has been emphasized since early childhood. In Western cultures, however, equalizing of opportunities and diversification in sociological roles has in the last half century tended to focus attention upon the samenesses in being human at the expense of attention to sex differences. With puberty, however, the female, especially, is confronted inescapably by the physical aspects of her femininity along with all its implications for emotional and sociological specialization. While physical maturation is less likely to be viewed as a mixed blessing by the young male, the sociological challenge to his male aggressiveness, toughness, and responsibility is formidable.

Both male and female must now relinquish old certainties and accustomed protections. Erikson describes adolescence as a period of natural uprootedness. Part of the maturation process is the questioning of values until now taken for granted. As this evaluation goes on the youth retires into

his inmost self, questioning what he is really like and what he may become. This state of affairs is reflected in his Rorschach protocol, which now shows a decided swing toward introversion. This is surprising in view of the strong group orientation of teen-agers. But as Cox has pointed out, the teen-age clique serves as a kind of public relations agent for the adolescent while he, at his deepest levels, goes into executive session with himself. Meanwhile, observing the social scene, seeking clues about himself in the ways his fellows relate to him, trying out attitudes and roles in which he only half believes, he moves toward a revised individuality. So much is opening up for the adolescent that anything may seem possible to him. Fantasy and enthusiasm together with his newfound powers to entertain the hypothetical entice him at times beyond himself. The line between adolescent dreams and unreality may, even in the healthiest, sometimes become shadowy.

Erikson sees as the critical task the securing of the emerging identity against diffusion. In historical periods such as ours, rapid cultural change intensifies for all age groups beyond earliest childhood the problems of who one is and where he shall stand. For the adolescent whose self-revision is already creating so many inner uncertainties, the chaotic social scene presents almost intolerable confusion about values, means, and ends. Emotional balance at this difficult time is best maintained, so clinical work indicates, by individuals who are able to preserve continuity with the past self while reorganizing and revising standards and goals in terms compatible with

the realities of their present situation and with what the society beyond the family will expect of them and permit them to do and be.

With the upsurge of genital capacity young persons who have come through earlier phases of emotional growth and sex identification successfully now turn toward members of the opposite sex for recognition and confirmation of acceptability. The flowering of the capacity to love and to be loved by a sexually different being, and more especially to commit oneself unreservedly in trust to another, is the critical next step for the genitally mature. By the end of the adolescent years the emotionally mature man and woman are able to enter into faithfulness in love and the competence in work that can undergird the long-term relationship and the responsibility of nurturing a new generation.

Psychological Maturity in the Adult Years

Age-appropriate psychological maturity in the adult years has been more explicitly researched than that in any other period. The qualities of personality found in actual persons comprising criterion groups have been set forth in psychological test terms and in verbal descriptions by a number of investigators (Barron, Bond, Brown Cox, Golden, Heath, Hooten, Sanford, Maslow). Informed reflections, growing out of clinical work, teaching and other human encounters, about the personality of the mature adult are found

scattered through the literature of personality theory. (Note particularly Allport, Fromm, Lynd, Rogers, Schactel). The mature adult's qualities, as noted in the first section of this chapter, fully support Freud's surmise that in psychological health the individual would be able to love and to work.

Cox, taking functioning as an indicator of maturity, inquired into the adequacy of her subjects in the five spheres she deemed most important: preparation for vocational future, effectiveness in work, relationship to spouse and children, relationship to aging parents, and management of the practical realities of the home and money. Despite the generally effective functioning that this study revealed, her findings agree with Heath's that psychological maturity does not bring, even in these years of greatest emotional fulfillment, exemption from conflict and pain. The heightened awareness that their well-developed intellect and emotional comprehension bring, their openness to sensory impressions and intuitions, their essentially object-oriented approach in human relationships, and their sensitive involvement in the social issues of their time and place make them vulnerable. Their emotional health lies in their assimilation of these enriching experiences and their use of them to reach still higher levels of personality organization.

The capacity to love deeply is not, as we have seen, reserved to the span beyond adolescence. But during the adult years it takes on greater depth and

scope. The mature love experienced in lasting heterosexual commitments opens realms of feeling and action new even to those who have been able to love sincerely and securely in childhood and youth. Maslow found such relationships at their best to be singularly spontaneous, free of pretense and defensiveness, generously giving, seeking the comfort and enhancement of the beloved. Such a characterization is essentially that reported by the fairly limited number of other investigations that have inquired into the nature of love among adults in sound emotional health.[4]

Erikson, placing emphasis upon the production and care of a rising generation, gives to generativity the central role in emotional maturity of the adult years; and Saul sees the balance between receiving and giving to be more heavily weighted on the giving side.

Later Maturity and Old Age

The dimensions of psychological maturity in the last three decades of life have been explored very little by formal research. There is, of course, abundant evidence on the intellectual status of late adulthood and old age. In a long series of studies, beginning with the cross- sectional research of Jones and Conrad and culminating in the standardization of the Wechsler-Bellevue Test of Adult Intelligence, the curve of growth from childhood to late adult life has been exhaustively documented. When the summed scores on

standardized psychological tests are used to represent intellectual growth, the curve reaches its highest point in the early twenties, then enters upon a plateau that it maintains with relatively minor loss for two or three decades. Thereafter, the curve declines, reaching at length in the late sixties and early seventies the level attained by the average 14 year old. When the total score was analyzed and subtest scores scrutinized, it was found that the decline differs from one kind of ability to another. Verbal facility is maintained or increases right up to the onset of senility; tasks requiring completely new associations and those calling for rapid eye-hand coordination lose ground early and at a relatively rapid rate; abstract thinking, particularly as measured by dealings with spatial relations, occupies a middle range.

Later studies using longitudinal methods have thrown further, more optimistic light on the problem of aging. Intelligence tests repeated after 20 years on the same subjects did not yield falling scores. The earlier results seem to have been produced in part at least by an artifact of poorer schooling in older subjects. Yet when younger subjects today whose schooling is more recent and presumably more adequate are compared with older subjects, the young still outscore the older.

On the broader, more important, issue of emotional maturity unique to the closing years of life, there is very little solid evidence. Much is written and said about the unhappy plight of the very old—their loneliness, their sense of

being forgotten, their sense of disintegration as persons because there are so few messages of reassurance from the non-self world. It is true that individuals selected as outstandingly mature in their earlier lives enjoyed then remarkably good physical health, generous recognition in their work, and satisfaction in their close love relationships. Does it follow that if and when these supports are withdrawn, as they inevitably are for most of the aging, there is no possibility for further growth or even for maintenance of already achieved levels of psychological maturity? Or is it reasonable to hope that in the presence of an intact central nervous system, the values, the manner of relationship, and the certainty of what matters, developed over a lifetime, can sustain and carry the individual onward to some hitherto unattained upland? Few psychological and social questions press so urgently for an answer. In this cause it is important that longitudinal studies already in progress be extended into the later lives of the criterion subjects.

Meanwhile, gerontology is discovering that not only in late maturity but also in advanced age, men and women can be restored and maintained in health by a vigor of physical activity once thought to be surely lethal.[5] The productivity of unusually endowed persons into their eighties suggests that continued work spurred by expectations on the part of the community supports emotional health and, indeed, the totality of the person.[6]

Erikson believes that the later years offer the opportunity for the fully

developed person to affirm the worthwhileness of the human enterprise and his own particular part in it. In rounding out this final phase of his growth, the individual may arrive at wisdom that maintains and conveys the integrity of experience despite the decline of bodily and mental functions. He concludes: "Potency, performance and adaptability decline, but if vigor of mind combines with the gift of responsible renunciation, some old people can envisage human problems in their entirety." Such old people can, he says, "represent to the coming generation a living example of the 'closure' of a style of life." Such acceptance and responsibility might well challenge human beings to further levels of maturity until the very end of life.

In sum then, the presence or absence in any individual of the quality of maturity is expressed by the way he bears himself in the tasks and roles of his particular time of life.

The Mature Self

The question of how an organism develops a style peculiarly its own, while keeping within the biological template of its species, continues to challenge science. Genetic endowment and the stage of physical and cognitive growth, together with the input from the environment, set limits. The level of actual achieved maturity is, however, better conceived as the outcome of the ways in which these contributing components are marshaled in the service of the needs and purposes of the total organism. The synthesizing of resources, the selective responding, the directing of energy, and the harmonizing of many levels of thought and action in their totality are known as integration. The tendency or entity that makes integration possible appears to have its origins early in the life process. Since it unquestionably makes its appearance soon after birth and since its mode of relating to experience shows a certain consistency even then, it is surmised that this embryonic tendency toward a unique style may have an hereditary core. This entity, which becomes clearer cut and more individualized as experiences and the memories of them accumulate, is referred to by some theorists as the self. Others call it the ego. Although the terms are not synonymous, both designate a central, powerful aspect of human personality—its capacity to behave as a coherent unity over time, in a wide range of situations. A substantial portion of the theoretical and empirical literature on psychological maturity is devoted directly or indirectly to the nature of this unifier and undertakes to spell out its dimensions and the

conditions of its development.

The present-day interest of academic psychology in the self represents a significant return to a topic that the science largely abandoned after 1890 or thereabouts. Some psychologists believe that the revitalized interest in the self is evidence of a maturing process in the science itself since the trend means that there is in some quarters less disposition than formerly to treat as nonexistent an issue for which current conceptualizations and methods were inappropriate or inadequate. Historically, when psychology broke away from philosophy late in the nineteenth century, the notion of a unifier became increasingly uncongenial. William James suggested that there was no need for what might be called a supervising entity. For him the self was only the sum total of experience. “Each moment of consciousness,” he said, “appropriates each previous moment and the knower is thus embedded in what is known. The thoughts themselves are the thinker” (Allport). A few psychologists resisted this view, insisting that a unifying principle held the parts together and was the overriding phenomenon (Allport), but they fought a losing battle. Uneasiness among the proponents of the new theory and methodology may have arisen, Allport surmises, out of their fear that psychology would excuse itself from its chosen tasks by assigning what was not readily understood in psychic behavior to “a mysterious central agency.”

Psychoanalysis, however, going its separate way, never relinquished its

interest in a unifier. Indeed, as Allport points out, “Freud played a leading, if unintentional, role in preserving the concept of ego from total obliteration throughout two generations of strenuous positivism” in psychological science. Freud’s own ideas about the ego shifted over time and the concept has been further elaborated by Anna Freud. The ego psychologists, as indicated above, introduced into psychoanalytic theory important modifications, giving the ego its own autonomy from the instinctual drive sources postulated by analytic theory.

Meanwhile, the turn of the wheel in academic psychology brought into being a point of view and a body of research that bears directly upon the idea and meaning of psychological maturity. This relatively recent development makes it possible to entertain the notion that there is such a psychic phenomenon as the self and to ask what a mature self is like. In his 1955 account of the renewed interest in the self by academic psychology, Allport said that many psychologists “had commenced to embrace what two decades ago would have been considered a heresy. They have reintroduced self and ego unashamedly and, as if to make up for lost time, have employed ancillary concepts, such as self image, self actualization, self affirmation, phenomenal ego, ego involvement, ego striving and many other hyphenated elaborations which to experimental positivists still have a slight flavor of scientific obscenity.” A rising generation of psychologists has been less bound by the self- imposed restrictions of their predecessors and have been able to assert

that an indispensable something was missing from the positivists' account of the human psyche. Whether the new work on the self takes theory beyond the point where the road forked in the nineteenth century remains to be seen. What is crucial, however, is that when some members of the psychological community turned away from the molecular approach, they returned to the field, as it were, and thus may be in a position to make progress in the understanding of the self.

Relevant to our discussion of psychological maturity is the fact that in most treatments of maturity the idea of the self is recurrent. The notion that the psychologically healthy person has a solid sense of himself that he effortlessly affirms most of the time is substantiated by research and informed discussion. Like so many aspects of health, the robustness of the self is taken for granted unless it is belatedly or imperfectly established, or, having been partially developed, becomes unsteady. Then its keystone position in personality structure is unmistakable.

Of course, a unifying biological principle is operating in every living organism; but at the human level it masters extraordinary complexity, with the psyche not only maintaining its own consistency, capable of planning activities and developing values, but also standing apart from and regarding itself. It is symptomatic of the profound disturbance of the present era that uncertainty about the self is so widespread. It may well be, as Erikson has

suggested, that uncertainty about identity is endemic in our time. On every hand are heard reports of young people who are vague and bewildered. They "do not know who they are" or what they are all about. The drug culture appears to be one of the malignant symptoms of the confusion. In the idiom of academic personality theory the unhappy state results from a poorly developed self. In psychoanalytic terms the egos of these individuals are weak, brittle, shaky.

Psychological maturity, on the other hand, is characterized by a sense of inner cohesion that makes it unnecessary for the individual to question who he is. Except at natural choice points—as in career and mate selection—he is pretty clear about where he wants to go and about how his gifts are matched to the journey. Very early he develops a life style that he maintains over time, undertaking those inner revisions and those manipulations of milieu that enable him to realize his own potential and to use environmental givens fruitfully. In this vein Maslow describes self-actualizing persons. Fromm says that "the mature and productive individual derives his feeling of identity from the experience of himself as the agent who is one with his powers." Lecky insists that self-consistency is a necessary component of health. Heath, writing of the mature person whom he uses as coordinate with the term "mature self," finds him to be stably organized, able to resist disturbing information, well-integrated, allocentrie in his thought and feeling, and notably accurate in his self-image. Barron describes ego strength, a significant

characteristic of the mature self, as a function of intelligence since, he says, the ability to comprehend experience, to store it in memory, and use it in positive ways depends upon the quality of the brain. He goes on to say, however, that intelligence alone does not account for ego strength. No less important are flexible controls that use repression selectively but at the same time keep the person "optimally open to experience." On the basis of his data on personal soundness in a criterion group of graduate students, he concludes that within that population of subjects of ordinary physical and psychological integrity, soundness is by no means exclusively determined by circumstances but may be considered in the nature of an unintended—perhaps largely unconscious—personal achievement. Of his subjects, he said, "They are sound largely because they bear with their anxieties, hew to a stable course and maintain some sense of the ultimate worthwhileness of their lives." Through these descriptions of psychological maturity runs the thread of a clearly defined, well-maintained, purposive self moving toward judgmentally selected goals.

To recognize and even to describe the mature self is not the same as understanding it or divining its secret. Research on groups of mature persons gives an account of the nature of maturity and its antecedent circumstances: adequate intellect, stable childhood home, at least minimal economic provision, parents devoted to the child's welfare, educational and vocational opportunity. These favorable factors show high positive correlation with

judgments of maturity in selfhood. Yet most of the studies also report that exceptional individuals become psychologically mature in the absence of one or several of these supports (Barron, Bond, Cox, Heath). Cox found that, in general, the more numerous the misfortunes and deprivations the greater the likelihood of loss of the personal equilibrium established at an earlier time. This agrees with the findings of the large sample study of Langner and Michael, but Cox insists, as does Barron, that this trend is contravened in some subjects who grow to full stature despite difficulty.

Thus, the possibility that maturation may actually be accelerated and confirmed by felt difficulty is indicated by empirical research. Psychoanalysis long ago proposed that the ego grows through frustration and denial. Nagera, following the path laid out by Sigmund and Anna Freud, asserts that "some aspects of human development are due to frustration of primary needs of the newborn infant. Such frustrations," he adds, "are inevitable even in the presence of ideal conditions and ideal mothering." He adds that disturbance of the basic homeostatic equilibrium acts as a spur toward recovery of the equilibrium and concludes that "complete satisfaction would have made development from the original state unnecessary." This statement of the dynamics of ego growth recalls the growth of cognitive processes as Piaget outlines it. The development of cognition comes about when assimilation of new information demands accommodation of existing structures. This, in turn, facilitates the development of more complex schemata. The beneficent

effects of stress are, of course, circumscribed by the capacity of the individual to absorb it, and if, as in the case of institutionalized infants, the deprivation is extreme, development is blocked.

Some years ago Claparede inquired where subjects felt the self to reside: in the right hand, in the viscera, in the center of the forehead, behind the eyes, and so forth. This somewhat whimsical approach no longer engages psychology. The notion of body image, however, is influential in clinical practice and has inspired substantial research (Albee and Hamlin, Berman, Elkisch, Machover, Modell). Drawing of a person, whether designated as a self-portrait or simply as a man (or as a woman for female subjects), is believed to be an expression of the total self, with the inner sense of one's special strengths, weaknesses, and one's unique style expressed in line quality, relationship of parts to whole, size of drawing, and placement on the page. The self can, the clinician believes, be read from the body image expressed in the drawing. Whether this is true remains controversial, but there is enough supporting evidence to lead clinicians to use the drawings as one of several personality instruments.

Allport proposes what he calls the "proprium" to include all the regions of our life that we regard as peculiarly ours and reviews those aspects of personality that make for inward unity. In his eightfold schema of the proprium[7] he gives special priority to the bodily sense. The centrality of the

body in psychological health is affirmed by all investigators. If psychological maturity is conceived—as we do here—to be expressed by the relationship between chronological age and psychic development, the bodily basis for the self is especially important. During the growing years rapid and continuous revisions of the body might be expected to challenge integration. Rarely, however, does healthy physical change disturb the self. On the contrary, increasing strength and stature, improved neuromuscular control, the development of bodily skills, quite as much as the growth of cognition, extend and elaborate the infant self. During the latency years the self is supported and spelled out significantly in bodily terms.

In the beginning, as work with infants shows, the bodily self is learned. The way in which the young child discovers that the boundaries of his body have special relevance to all the rest of him and establishes his physical dimensions was vividly chronicled by Wilhelm Preyer in 1882. He recounted how his infant son learned by biting his fingers painfully that they belonged to the nearer parts of him. Later when the baby was standing in his crib, Preyer asked him to "give the shoe"—which lay on the crib beside the child. The little son complied. A moment later, Preyer, preparing to put the shoe on the child, requested, "Give me the foot." The child's response was to stoop and tug at his own foot in the same way he had reached for and lifted the shoe. At this point the knowledge that the foot belonged to the self in a way quite different from the shoe had not been mastered.[8] Preyer reported a series of explorations

the little boy made discovering the outlines of his own head, the difference between his hand and the tray of his high chair. Fifty-five years later, Piaget's published studies of his three young children gave an account of the emergence of the idea of the object as a continuing entity apart from the perceiver. He concludes that the notion of the self as an object among objects was one of the achievements of the sensorimotor period.

The awareness that oneself is not merely one other object but has a special status is also attained in the early months of life. The toddler recognizes his own reflection in a mirror as a baby to whom he responds with interest as if to another child. By the time he reaches 18 months, however, he gives clear indication that the baby in the mirror is himself. This may come before he has enough language to express his understanding verbally, but his self-conscious little smile and his gestures make his meaning unmistakable. Thus, for a child even as young as this, one of the most complicated phenomena of psychic life has come into being (Stutzman). For a child at this time of life this demonstrates the maturation of self.

Recent research has inquired into the very earliest appearance of the style that will become the self. Mahler traces the gradual emergence of the individual from the autistic shell by which the newborn has been sheltered from excessive stimulation into "a protective but also receptive and selective positively cathected stimulus shield" that envelops a child-mother unity in the

early normal symbiosis. After the healthful and necessary symbiotic stage is past, the infant gradually becomes aware, from two to nine months old, of the world outside the protecting shell and can attend increasingly to the world about him. The "holding behavior" of the mother, so indispensable for the protection of the neonate and young infant, can now loosen as the infant becomes ready to "hatch" from the symbiotic orbit smoothly and gradually without undue strain on his own resources. During the early infancy period a circular interaction of cues goes on between the infant and mother in which the child gradually alters his behavior in a characteristic way. His emergent mode, Mahler writes, grows out of his own endowment and the mother-child relationship. Already "certain overall qualities of the child's personality" are discernible. What we seem to see here is the birth of the child as an individual. In the mutual cuing of mother and child the groundwork is laid for the "infant's becoming the child of his particular mother."

Mahler recounts the processes of separation and individuation, noting periods of heightened vulnerability. Optimal maturation will bring the young child to readiness for both physical and psychic distance from the mother. This stage is reached when ego functions have reached a fairly advanced stage and, equally important, when he has attained the level of object constancy in which the object is intrapsychically available. His memory of the mother, his cognitively held assurance of her existence and availability even when she is physically invisible, sustains him in his separateness. Clearly the

timing of this maturation cannot be dated precisely, for the intricate network of competencies that enable the child, or older person, to exist without panic is made up of many strands and can be weakened by the failure of any one of them. Yet some children exhibit very early in life—even in infancy—an unusually strong thrust toward mastery. Mahler's reference to innate endowment is well-taken, for a characteristic level of directed energy is immediately interactive with environmental circumstances. This is apparently an original given. A strong core of self thus seems present almost at birth.

Before nursery school age individual differences in the strength and clarity of self are apparent. The three year old with a firmly developed self can tolerate brief separation from his mother without great anxiety and, in achieved inner cohesiveness, is able to grasp the opportunities offered by the nursery school. As he advances into the school years, his life style is elaborated and his mold as a person is more firmly established. His achievements and failures, his acceptances and rejections are assimilated. The psychologically mature self during latency, building upon an already developed identity, is modified to include awareness that the self has at its command both a range of capabilities and the power to master increasing difficulty and scope as occasions require.

With each epoch in the growth cycle, changing biological structures,

functions, and social roles call for reorganization of the existing self. Evidence on adult life for periods as long as 15 to 20 years indicates that the level of relative maturity and the trajectory of purpose is maintained. The extent to which life style remains essentially unchanged over the entire life span is still to be determined, but the evidence from longitudinal work encourages the hypothesis that those who have over the years been mature personalities will be so to the end (Cox)

The concepts and terms clustering around the self have generated research and stirred extensive discussion. Particularly germane to our purposes here are the ideas expressed by self- or ego identity, self-esteem, and self- or ego ideal.

The Self Known to Itself

The establishment of an identity recognizable to and accepted by the self as its own is a facet of the development of all persons and is not a property of only the psychologically mature. As in so many other facets of his makeup, the notably healthy individual is clearer about his identity and maintains it more steadfastly than the immature one does. Heath experimentally induced mild uncertainty about self- image in his immature and mature subjects and found the mature better able to withstand disturbing evidence.

Identity, nonexistent at birth, evolves as the infant defines himself in terms of his genetic idiom and also in terms of the responses he gets from others. Soon after extrauterine life begins the child identifies the self as male or female, and later still as a good or poor game participant, as a quick or slow learner. Similarly he understands his meaning in belonging to a particular family, race, social and national group. Only much later does he grow into his basic identity as a member of the family of man.

To be sure, there are certain normal and inevitable crises in the life cycle that shake identity. These are known to be associated with puberty, childbirth, and the climacteric as well as the socially produced trauma of vocational retirement and the dislocations following revolutions and wars. In such experiences complex supports of identity change drastically or are lost. One of the tests of maturity is the way the assurance of what one really is holds up.

A distinction is drawn in some of the research between the private and the social self.[9] In health the self is not wholly dependent upon the way one is conceptualized by others, but there is evidence that in the mature person there is congruencc between what one feels himself to be and how he believes others view him. Furthermore, he is pretty accurate in his estimate of the way he appears to others (Heath). Here both integration and realism operate.

Self-Esteem

Capacity to love unreservedly in the most intimate relationships and readiness to turn outward in disinterested generosity to the whole range of human relationships is said to have its roots in love of self. This sentiment is given various names by personality theorists: self-esteem, self-regard, self-love. It is necessary, of course, to be clear that self-love is not the same as selfishness or self-centeredness. Fromm has been at some pains to make this distinction. Maslow found self-love to be "synergic with rather than antagonistic to love of others." Beneath the outreach to others that psychologically mature persons without exception show, we find a basic peace with the self (Cox, Fromm, Heath, Maslow). Pride in achievement, conviction of one's worth, and confidence that one is worthy of love enable the individual to extend the largesse of his disinterested care beyond the bounds of his own particular concerns. To entertain these feelings about oneself does not go hand-in- hand with smugness. Rather this attitude might be likened to that of the good strict parent described by Susan Isaacs—accepting and warm but not uncritical nor negligent about responsibility and future growth. In sum, the psychologically mature are found to be favorably disposed and cherishing toward the totality of what the self has been able to make of its quantum of life.

Self-Ideal

The significance of the self-ideal as a magnetizing force in moving the person toward as yet unachieved goals and levels of being is emphasized by various theorists. Lynd is especially clear about the place of this dynamic in personality: "It is readily apparent that the ideal of who one might or desires to be or become has important bearing on one's feeling about who one is." The self-ideal by definition reaches outside of and beyond the achieved state or self-image but is included in the sense of who one is. To aspire to excellence, to strength, to saintliness is to claim kinship with these qualities and to borrow some of their effulgence. At the same time, unless there is intention and effort toward bringing the ideal self to reality, the ideal can become a substitute for striving. We see this in poorly integrated children who, when asked to set a goal, place it so far beyond anything they could possibly attain that they neutralize the pull of the goal (Cox). However, in realistic and responsible persons, from childhood onward the idea of what one wishes and tries to become exercises significant influence and is, indeed, an inalienable part of self.

The Mature Person

In the course of change and in the maintenance of stability, certain characteristics mark the psychologically mature individual, distinguishing him from the immature. Although the list of characteristics could be indefinitely extended, I would like to suggest the following trends or themes

as most nearly universal and timeless: firm anchorage in reality, warmth and caring for other persons from an increasingly giving posture, productivity in work suited to ability, responsibility toward the small and the large social group, secure sense of self, development of a value system, and resilience under stress.

Bibliography

Ackerman, N. W., *The Psychodynamics of Family Life,* Basic Books, New York, 1958.

Albee, G. W., and Hamlin, B. M., "Judgment of Adjustment from Drawings: the Application of Rating Scale Methods," *J. Clin. Psychol.,* 6:363-365, 1950.

Allport, G. W., *Becoming: Basic Considerations for a Psychology of Personality,* Yale University Press, New Haven, 1955.

_____, "The Ego in Contemporary Psychology," *Psychol. Rev.,* 50:451-478, 1943.

_____, *The Individual and His Religion,* Macmillan, New York, 1950.

_____, *Pattern and Growth in Personality,* Holt, Rinehart and Winston, New York, 1961.

_____, *Personality and Social Encounter,* Beacon, Boston, 1960.

Anastasi, A., *Psychological Testing,* 3rd ed., Macmillan, New York, 1963.

Anderson, H. H. (Ed.), *Creativity and Its Cultivation,* Harper & Row, New York, 1959.

Anderson, T. B., and Olsen, L., "Ideal Self and Occupational Choices," *Personnel & Guidance J., 44:*171-176, 1965.

Arieti, S. (Ed.), *American Handbook of Psychiatry,* 3 vols., Basic Books, New York, 1959, 1966.

Barron, F., *Creativity and Psychological Health,* Van Nostrand, New York, 1963.

_____, *Personal Soundness in University Graduate Students: An Experimental Study of Young Men in the Sciences and Professions,* University of California Publications Personality Assessment and Research, No. 1, 1954.

_____, "What Is Psychological Health?" *California Monog., 68:*22-55, 1957.

Bayley, N., "Development of Mental Abilities," in Mussen, P. H. (Ed.), *Carmichael's Manual of Child*

Psychology, Vol. 1, John Wiley, New York, 1970.

Bennett, V. D., "Combinations of Figure Drawing Characteristics Related to the Drawer's Self Concept," *J. Projective Techniques Personality Assessment,* 30.192-196, 1966.

Berman, S., and Laffal, J., "Body Type and Figure Drawing," J. *Clin. Psychol.,* .9-368-370, 1953.

Bond, E. D., "The Student Council Study: A Preliminary Report," *Am. J. Psychiat., 107:*271-273, 1950.

_____, "The Student Council Study: An Approach to the Normal," *Am. J. Psychiat.,* 109: 11-16, 1952.

Bowlby, J., *Attachment and Loss,* Vol. 1, Basic Books, New York, 1969.

_____, *Child Care and the Growth of Love,* 2nd ed., Penguin Books, Harmondsworth, England, 1968.

Brown, D. R., "Non-Intellecting Qualities and the Perception of the Ideal Student by College Faculty," *J. Educ. Sociol.,* 33:269-278, 1960.

_____, "Personality, College Environment, and Academic Productivity," in Sanford, N. (Ed.), *The American College,* John Wiley, New York, 1961.

Buhler, C., *The First Year of Life,* John Day, New York, 1930.

Butler, R. N., "Aspects of Survival and Adaptation in Human Ageing," *Am. J. Psychiat., 123.*; 1233-1243, 1967.

Cabak, V., and Najdanvic, R., "Effects of Undernourishment in Early Life on Physical and Mental Development," *Arch. Dis. in Childhood,* 40:532-534,

Carmichael, L., "The Onset of Early Development of Behaviour," in Mussen, P. H. (Ed.), *Carmichael's Manual of Child Psychology,* Vol. 1, John Wiley, New York, 1970.

Casler, L., "The Effects of Extra Tactile Stimulation on a Group of Institutionalized Infants," *Genet. Psychol. Monog., 71:* 137-175, 1965.

Claparede, E., *"Note sur la localisation du Moi," Arch, of Psychol., 19:* 172-182, 1924.

Coopersmith, S., *Antecedents of Self Esteem,* W. H. Freeman, San Francisco, 1967.

Cox, R. D., "The Normal Personality: An Analysis of Rorschach and Thematic Apperception Test Responses of a Group of College Students," *J. Projective Techniques, 20:*70-77, 1956.

_____, "Verbal Expression of Level of Aspiration as a Defense Against Anxiety," Unpublished case study of Robert.

_____, *Youth into Maturity,* Mental Health Materials Center, New York, 1970.

Darwin, C., "Biographical Sketch of an Infant," *Mind,* 2:285-294, 1877.

Dunn, H. L., "Dynamic Maturity for Purposeful Living," *Geriatrics, 21:*205-208, 1966.

Elkind, D., *Children and Adolescents*: *Interpretative Essays on Jean Piaget,* Oxford University Press, New York, 1970.

Elkisch, P., "Children's Drawings in a Projective Technique," *Psychol. Monog.,* 58, 1945.

Erb, E. D., and Hooker, D., *The Psychology of the Emerging Self: An Integrated Interpretation of Goal-Directed Behaviour,* F. A. Davis, Philadelphia, 1967.

Erikson, E., *Childhood and Society,* 2nd ed., Norton, New York, 1963.

_____, *Growth and Crisis in Healthy Personality,* Monograph 1, Vol. 1, Psychological Issues, International Universities Press, New York, 1959.

_____, *Insight and Responsibility,* Norton, New York, 1964.

Escalona, S. K., "Emotional Development in the First Year of Life," in Senn, M. J. E. (Ed.), *Problems of Infancy and Childhood,* Josiah Macey, Jr., Foundation, New York, 1953.

Flavell, J. H., *The Developmental Psychology of Jean Piaget,* Van Nostrand, Princeton, 1963.

Freud, A., "The Concept of Developmental Lines," in *The Psychoanalytic Study of the Child,* Vol. 18, pp. 245-265, International Universities Press, New York, 1946.

_____, *The Ego and the Mechanisms of Defense,* International Universities Press, New York, 1946.

Freud, S. (1923), *The Ego and the Id,* Norton, New York, 1960.

_____, *New Introductory Lectures on Psychoanalysis,* Norton, New York, 1933.

Fromm, E., *Man for Himself,* Rinehart & Co., New York, 1947.

Gesell, A. L., and Amatruda, C. S., *Developmental Diagnosis,* 2nd ed., Holber, New York, 1960.

Golden, J., Mandel, N., Glueck, B. C., Jr., and Feder, Z., "Summary Description of Fifty Normal White Males," in Haimowitz, M. L., and Haimowitz, N. (Eds.), *Human Development,* Thomas Crowell, New York, 1966.

Goldfarb, W., "Variations in Adolescent Adjustment of Institutionally Reared Children," *Am. J. Orthopsychiat., 17:* 449-457. 1947.

Gorney, J. E., and Tobin, S. S., "Experiencing among the Aged," *Proceedings of the 20th Annual Meeting of the Gerontological Society, 34,* 1967.

Greenacre, P., "Early Physical Determinants in the Development of the Sense of Identity," *J. Am. Phychoanal.* A., 6: 612-627, 1958.

Gurin, G., Veroff, J., and Feld, S., *Americans View Their Mental Health,* Basic Books, New York, 1960.

Harris, D. B., *Childrens Drawings as Measures of Intellectual Maturity,* Harcourt Brace World, New York, 1963.

Hartman, H., "Comments on the Psychoanalytic Theory of the Ego," in *The Psychoanalytic Study of the Child,* Vol. 5, pp. 74–96, International Universities Press, New York, 1950.

_____ (1939). *Ego Psychology and the Problem of Adaptation,* International Universities Press, New

York, 1958.

_____, *Essays on Ego Psychology: Selected Problems in Psychoanalytic Theory,* International Universities Press, New York, 1964.

_____, "Psychoanalysis and Developmental Psychology," in *The Psychoanalytic Study of the Child,* Vol. 5, pp. 7-17, International Universities Press, New York, 1950.

Havighurst, R. J., *Developmental Tasks and Education,* 2nd ed., David McKay, New York, 1952.

_____, *Human Development in Education,* Longman Green, London, 1953.

Heath, C. W., *What People Are: A Study of Normal Young Men,* Harvard University Press, Cambridge, 1946.

Heath, D., *Explorations of Maturity,* Appleton-Century-Crofts, New York, 1965.

Hollingworth, L., *Children above 180 IQ. Stanford Binet,* World, New York, 1942.

Hooten, E., *Young Man, You Are Normal: Findings from a Study of Students,* G. P. Putnam's Sons, New York, 1945.

Inhelder, B., and Piaget, J., *The Growth of Logical Thinking from Childhood to Adolescence,* Basic Books, New York, 1958.

Jahoda, M., *Current Concepts of Positive Mental Health,* Basic Books, New York, 1958.

Jones, M. C., "Psychological Correlates of Somatic Development," *Child Dev., 36:* 899-911, 1965.

Kessen, W., *The Child,* John Wiley, New York, 1965.

Kohlberg, L., and Kramer, R., "Continuities and Discontinuities in Childhood and Adult Moral Development," *Human Dev., 1*2.93-120, 1969.

Kotkov, B., and Goodman, M., "The Draw-a-Person Tests of Obese Women," *J. Clin. Psychol.,* ,9:362-364, 1953.

Langer, J., "Werner's Theory of Development," in Mussen, P. H. (Ed.), *Carmichael's Manual of Child Psychology,* John Wiley, New York, 1970.

Langner, T. S., and Michael, S. T., *Life Stress and Mental Health: The Midtown Manhattan Study,* Vol. 2, Free Press, Glencoe, 1963.

Lidz, T., *The Person: His Development throughout the Life Cycle,* Basic Books, New York, 1968.

Lorber, N. M., "Concomitants of Social Acceptance: A Review of Research," *Psychology,* 6:53-59, 1969.

Lynd, H. M., *On Shame and the Search for Identity,* Science Editions, New York, 1961.

Maccoby, E. E. (Ed.), *The Development of Sex Differences,* Stanford Studies in Psychology, Tavistock, London, 1967.

McGraw, M. B., *Growth: A Study of Johnny and Jummy,* Appleton Century, New York, 1935.

Machover, K., "Drawing of the Human Figure: A Method of Personality Investigation," in Anderson, H. H., and Anderson, G. L. (Eds.), *An Introduction to Projective Techniques,* Pp. 341-369, Prentice-Hall, New York, 1951.

_____, *Personality Projection in the Drawing of the Human Figure* Charles C Thomas, Springfield, Ill., 1949.

MacKinnon, D. W., "The Highly Effective Individual," *Teachers College Record,* 61:367-378, 1960.

Maddox, G. L., "Disengagement Theory: A Critical Evaluation," *The Gerontologist, 4:*80-82, 103, 1964.

_____, "Fact and Artifact: Evidence Bearing on Disengagement Theory from Duke Geriatrics Project," *Human Dev.,* 8*:*117-130, 1965.

Mahler, M. S., *On Human Symbiosis and the Vicissitudes of Individuation,* Vol. 1, International Universities Press, New York, 1968.

Marmor, J., "The Crisis of Middle-age," *Am. J. Orthopsychiat., 37:*336-337, 1967.

Maslow, A. H., *Motivation and Personality,* Harper & Row, New York, 1954.

_____, "Self-actualizing People: A Study of Psychological Health," *Personality,* Symposium No. 1, 11-34, 1950.

_____, *Toward a Psychology of Being,* 2nd ed., Van Nostrand Reinhold, New York, 1968.

Modell, A. H., "Changes in Human Figure Drawings by Patients Who Recover from Regressed States," *Am. J. Orthopsychiat.,* 21:584-596, 1951.

Murray, H. A., *Explorations in Personality: A Clinical and Experimental Study of Fifty Men of College Age,* Oxford University Press, New York, 1938.

Mussen, P. H., Conger, J. J., and Kagan, J., *Child Development and Personality,* 3rd ed., Harper & Row, New York, 1969.

Nagera, H., *Early Childhood Disturbances, The Infantile Neuroses and Adulthood Disturbances,* Monograph Series of the Psychoanalytic Study of the Child, International Universities Press, New York, 1966.

Nass, M. L., "The Superego and Moral Development in the Theories of Freud and Piaget," in *The Psychoanalytic Study of the Child,* Vol. 21, pp. 51-68, International Universities Press, New York, 1966.

Neugarten, B. (Ed.), *Personality in Middle and Late Life,* University of Chicago Press, Chicago, 1968.

Olim, E., "The Self-Actualizing Person in the Fully Functioning Family: A Humanistic Viewpoint," *Family Co-ordinator, 17:*141-148, 1968.

Piaget, J. (1937), *The Construction of Reality in the Child,* Basic Books, New York, 1954.

_____ (1936), *The Origins of Intelligence in Children,* International Universities Press, New York, 1952.

_____, "Piaget's Theory," in Mussen, P. H. (Ed.), *Carmichael's Manual of Child Psychology,* Vol. 1, John Wiley, New York, 1970.

_____ (1947), *The Psychology of Intelligence,* Harcourt Brace World, New York, 1950.

Pratt, K. C., "The Organization of Behaviour in the New Born Infant," *Psychol. Rev., 44:*470-490, 1937.

Preyer, W., *The Mind of the Child,* Pt. I, *The Senses and the Will,* Appleton, New York, 1888.

_____, *The Mind of the Child,* Pt. II., *The Development of the Intellect,* Appleton, New York, 1893.

Provence, S., and Lipton, R. C., *Infants in Institutions,* International Universities Press, New York, 1962.

Rabinowitz, M., "The Relationship of Self Regard to the Effectiveness of Life Experiences," *J. Counsel. Psychol.,* 13:139–143, 1966.

Rheingold, H. L., "The Effects of Environmental Stimulation upon Social and Exploratory Behaviour in the Human Infant," in Foss, B. M. (Ed.), *Determinants of Infant Behaviour,* Pp. 143-171, John Wiley, New York, 1961.

Rheingold, H. L., Gewirtz, J. L., and Ross, H. W., "Social Conditioning of Vocalization in the Infant," *J. Comp. Physiol. Psychol.,* 52:68-73, 1959.

Rhudick, P. J., and Gordon, C., "Test-Retest I.Q. Changes in Bright Ageing Individuals," *Proceedings of the 20th Annual Meeting of the Gerontological Society,* 34, 1967.

Ribble, M. A., "Infantile Experience in Relation to Personality Development," in Hunt, J. McV. (Ed.), *Personality and the Behaviour Disorders,* Ronald, New York, 1944.

_____, *The Personality of the Young Child,* Columbia University Press, New York, 1955.

Rogers, C. R., *On Becoming a Person,* Houghton Mifflin, Boston, 1961.

_____, "Toward a Theory of Creativity," in Anderson, H. H. (Ed.), *Creativity and Its Cultivation,*

Harper & Row, New York, 1959.

Rubin, I. M., "Increased Self-Acceptance: A Means of Reducing Prejudice," *J. Pers. & Soc. Psychol.,* 5:233-238, 1967.

Ruff, G., and Sheldon, J. K., "Adaptive Stress Behaviour," in Appleby M. H., and Trumbull, R. (Eds.), *Psychological Stress,* Appleton-Century-Crofts, New York, 1967.

Sanford, N. (Ed.), *College and Character,* John Wiley, New York, 1964.

_____, "Personality Development during the College Years," *J.* Soc. *Issues, 12:*1–70, 1956.

Santostefano, S., "Relating Self-Report and Overt Behaviour: The Concept of Levels of Modes for Expressing Motives," *Perceptual and Motor Skills, 21:* 940, 1965.

Saul, L., *Emotional Maturity,* 2nd ed., J. B. Lippincott, Philadelphia, 1960.

Schilder, P., *Image and Appearance of the Human Body,* Kegan Paul, London, 1935.

Scott, J. P., "The Genetic and Environmental Differentiation of Behaviour," in Harris, D. B. (Ed.), *The Concept of Development,* University of Minnesota Press, Minneapolis, 1957.

Shachtel, E., *Metamorphosis,* Basic Books, New York, 1959.

Shinn, W. M., *The Biography of a Baby,* Houghton Mifflin, New York, 1900.

Smedslund, J., "The Effect of Observation on Children's Representation of the Spatial Orientation of a Water Surface," *J. Genet. Psychol.,* 102.195-201, 1963.

Spence, D. L., "The Role of Futurity in Ageing," *Gerontologist, 8:*180-183, 1968.

Spitz, R. A., *The First Year of Life: A Psychoanalytic Study of Normal and Deviant Development of Object Relations,* International Universities Press, New York, 1965.

Smith, M. B., "Mental Health Reconsidered: A Special Case of the Problem of Values in Psychology," *Am. Psychol., 16:*299-306, 1961.

Srole, L., Langner, T., Michael, S. T., Opley, M. K., Marvin, R., and Thomas, A. C., *Mental Health in the Metropolis: The Midtown Manhattan Study,* Vol. 1, McGraw-Hill, New York, 1962.

Stewart, R. A., "Transcendence of Opposites," *Psychology, 6:*62-64, 1969.

Stutzman, R., *Mental Measurement of Preschool Children with a Guide for the Administration of the Merriel-Palmer Scale of Mental Tests,* World Book, Yonkerson-Hudson, N.Y., 1931.

Taft, J., *The Dynamics of Therapy in a Controlled Relationship,* Dover, New York, 1962.

Tanner, J. M., *Growth at Adolescence,* 2nd ed., Blackwell, Oxford, 1962.

_____, "Physical Growth," in Mussen, P. H. (Ed.), *Carmichael's Manual of Child Psychology,* Vol. 1, John Wiley, New York, 1970.

Terman, L. M., and Oden, M. H., *The Gifted Child Grows Up: 25-Year Follow- up of a Superior Group,* Stanford University Press, Stanford, 1948.

_____, *The Gifted Group in Mid-life: 35-Year Follow-up of the Gifted Child,* Stanford University Press, Stanford, 1960.

Tippet, J. S., and Silfer, E., "Autonomy of Self Esteem: An Experimental Approach," *Arch. Gen. Psychiat.,* 14:372- 385, 1966.

Van Den Deale, L., "A Developmental Study of the Ego Ideal," *Genet. Psychol. Monog.,* 18.191-256, 1968.

Vispo, R. H., "On Human Maturity," *Perspectives Biol, & Med.,* 9:586-602, 1966.

Wechsler, D., *The Measurement and Appraisal of Adult Intelligence,* 4th ed., Williams & Wilkins, Baltimore, 1958.

Werner, H., *Comparative Psychology of Mental Development,* International Universities Press, New York, 1948.

_____, "The Concept of Development from a Comparative and Organismic Point of View," in Harris,

D. B. (Ed.), *The Concept of Development,* University of Minnesota Press, Minneapolis, 1957.

White, S., "The Learning Theory Approach," in Mussen, P. H. (Ed.), *Carmichael's Manual of Child Psychology,* John Wiley, New York, 1970.

Witty, P., (Ed.), *The Gifted Child* (American Association for Gifted Children) Heath, Boston, 1951.

Wolff, K., "Personality Type and Reaction toward Ageing and Death: A Clinical Study," *Geriatrics,* 21.189–192, 1966.

Wohlwill, J. F., and Lowe, R. C., "An Experiment Analysis of the Development of the Conservation of Number," *J. Child Dev.,* 33.153-167, 1962.

Ziller, R. C., and Grossman, S. A., "A Developmental Study of the Self-Social Constructs of Normals and the Neurotic Personality," *J. Clin. Psychol.,* 23:15-21, 1967.

_____, _____, Hagey, J., Smith, M., and Long, B. H., "Self Esteem: A Self- Social Construct," *J. Consult.* & *Clin. Psychol.,* 33-84-95. 1967.

Bentz, V. J., "A Test-Rerest Experiment on the Relationship between Age and Mental Ability," *Am. Psychol. 8:*319-320, 1953.

Owens, W. A., "Age and Mental Abilities: A Longitudinal Study," *Genet. Psychol. Monog.,* 48:3-54. 1953.

Notes

[1] The work of Heinz Werner, though in many ways paralleling that of Piaget, has until recently been less well known. His theory of mental development evolved over 40 years ago into an abstract formulation in which he confronts the problem of stability in the presence of ongoing change. His teaching at Clark University profoundly influenced his students. Piaget's enormous impact on American psychology has in a sense made developmental psychologists more aware of Werner.

[2] Stimulus-response learning theory and methodology have produced a vast literature that bears a tangential relationship to cognitive psychology and through cognition to the holistic interpretation taken in our approach to psychological maturity. S-R learning work dealing with small bands of behavior emitted by subjects responding to strictly controlled stimuli stands, however, in sharp contrast to the genetic approach, which has proved more useful in the understanding of persons as functioning wholes. White's excellent review of the S-R learning theory tradition in relation to developmental psychology is illuminating.

Operant conditioning as a therapeutic method is, of course, an application of S-R learning theory, as is Skinner's contribution to education in machine teaching. These topics are dealt with more appropriately in another chapter of the handbook.

[3] The neglect of the retarded by psychiatry is currently being remedied to some degree by the implementation of comprehensive mental health programs. Public and private education and the multifaceted program of the National Association for Retarded Children have undertaken the habilitation—as distinct from rehabilitation—of this group and will probably continue to do so under comprehensive mental health care with more adequate support and overall coordination.

[4] Psychology as a science has shown marked reluctance to study tender, affiliative relationships. Allport notes that Ian Suttle sees this as a "flight from tenderness" spurred by the fear of seeming sentimentality. Despite the general taboo, investigators of psychological health have found love relationships to be a central theme in the lives of their subjects.

[5] Research on very vigorous physical exercise by subjects in their eighties has produced very promising results at the Lankenan Hospital, Philadelphia.

[6] Note particularly such people as Pablo Casals and Picasso in the arts, Hilda Smith in public service, and Lily Taylor in classical scholarship.

[7] Allport's eightfold schema for the proprium—or the self—includes the following: bodily sense, self-identity, ego enhancement, ego extension, rational agent, self-image, propriate striving, and the proprium as knower (pp. 41-62).

[8] A series of baby biographies and other less extensive reports touch upon these same phenomena, although few prior to Piaget have clone so with details as telling as Preyer's.

[9] Identity is regarded by some investigators to be so deeply related to social factors that it has no existence apart from them. They see it as a personal-social phenomenon. This would lead to the conclusion that there is no such thing as a private identity.