American Handbook of Psychiatry

THE STUDY OF LANGUAGE IN PSYCHIATRY

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The Comparative Developmental Approach and Its Application to Symbolization and Language in Psychopathology

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Since there has been but a limited number of distinct generative ideas in the history of thought, it is not surprising that some kind of comparative developmental orientation has been with us from the beginnings of Western reflection. Wherever investigators have been struck by different modes of adjustment to the environment—whether between species, within a species, or even within a single individual under diverse conditions—and have sought some criterion for stratifying these variegated modes of being-in-the-world, a comparative developmental approach has been operative, at least in rudimentary form.

The approaches to comparative developmental phenomena by such men as Freud, Piaget, Wallon, and Werner have much in common when contrasted with those of self-styled "behavior theorists" and others whose orientations are essentially agenetic and noncomparative; nevertheless, there

are basic divergences in presuppositions among the above-mentioned developmental positions, and these differences preclude either a syncretism or a treatment of any one of the positions as if it were interchangeable with any of the others. For various reasons the comparative-developmental approach of Heinz Werner has been chosen for exposition here. This choice rests on a number of considerations: at least in the United States, Werner is the one most generally identified with comparative developmental psychology; Werner has been the one most directed toward a comparative and developmental analysis of the formal aspects of pathological symbolization and linguistic expression vis-a-vis representation and expression in normal individuals; finally, the author, having worked closely with Werner for more than fifteen years, is most familiar with and most competent to present his position and its application to problems of symbolization and language in pathology.

Werner's Comparative Developmental Approach

Every key "catchword," A. O. Lovejoy reminds and warns us, has been invested with multiple and sometimes antithetical meanings —not merely in the writings of different thinkers, but also in the works of the same thinker at different times. The terms "comparative" and "developmental" are clearly such catchwords. Encrusted with multiple connotations deriving from their use in a variety of disciplines, and further compromised by their diverse

employments within a single discipline, they are each likely, exposed to the kind of analysis for which Lovejoy was justly famous, to unfurl at least a dozen different meanings, including a number at odds with each other. It is not germane to attempt to lay bare these multiple meanings here. What is relevant is that different conceptions may underlie the usage of a key term, even in the writings of the same thinker. In the latter case, this is sometimes due to a lack of differentiation, a fusion of a number of distinguishable conceptions; sometimes, to a development from an initially diffuse to a later more articulated notion; sometimes, to "regression" or dedifferentiation. Often a change ensues as one becomes clearer about one's subject matter. Sometimes, under the pressure of criticism or of questioning from without, the thinker seeks to maintain the legitimacy of his enterprise by modifying his concepts to remedy defects, remove inconsistencies, or clarify obscurities.

Wemer used some key terms, particularly "development" and its derivatives, in several different ways; some of the usages diverged considerably from the more customary ones; and some of these divergences were explicitly intended to maintain the legitimacy of the Wernerian undertaking: the establishment of a comprehensive developmental approach to all life phenomena, unsullied by questionable and obsolescent presuppositions that had undermined earlier attempts at such an enterprise, that continued to vitiate kindred contemporary points of view, and that had partly infected Werner's early writings, despite his explicit rejection of them.

Ingredient in these observations is the warning that one must not regard Werner's comparative developmental approach as if it had sprung forth, fully formed and immutable, at a particular time, or as if it had not since undergone modification. Furthermore, the position as advanced in Werner's classic work *Comparative Psychology of Mental Development* is not identical with that taken, jointly with the present author, in *Symbol Formation;* nor is the position sketched in that work identical with the one toward which we were working at the time of Werner's death. The approach changed over time; hopefully, it also developed. Although space precludes the tracing of all of the vicissitudes, the main outlines of the shift in conceptualization may be briefly presented.

Early Formulation of the Concept of Development

Initially, in Werner's writings the status of the concept of development was unclear. Although the meaning of the term was relatively unambiguous —*"an increasing differentiation of parts* and *an increasing subordination or hierarchization"*—it was uncertain whether it was to be taken as designating an "empirical law," a generalization derived from an unbiased analysis of the character of changes actually manifested in a wide variety of processes, or as an heuristic principle, a way of looking at phenomena in the "interest of reason."

In a context in which there was a general belief in a cosmic law of "progressive development," immanent and efficacious in the actual course of history,""" an acceptance of a law of "orthogenesis," ingredient in the emergence of new species over time, and an affirmation of a law of "recapitulation," governing sequential changes in human ontogenesis, such a conflation of usages would probably have gone unchallenged, and perhaps even unnoticed. However, in the light of historical, biological, anthropological and epistemological criticism, it became obvious that if "development" were to retain its connotation of sequential changes in a system, yielding novel increments both in structure and mode of operation, it would have to be elevated to an ideal status and be distinguished from actual history or evolution. One could not presume that historical, evolutionary, or, by extension, any kind of change over time, for example, change with age, was, by the fact itself, developmental.

One had to posit what one meant by development, take a thus-defined developmental progression as a standard or "ideal of natural order," and then determine to what extent and through what factors or means historical, evolutionary, ontogenetic, and other changes conformed to or deviated from such an ideal progression. With this way of regarding development, one could introduce an *ortho genetic principle,* without being bedeviled by biologists, anthropologists, and others proclaiming censoriously that neither evolution nor culture change necessarily reveals such an orthogenesis.

To reflect this changed status of the concept of development, it was re-formulated not only so that it entailed orthogenesis, but also so that its empirical applicability was left bracketed: *Insofar as development occurs in a process under consideration, there is a progression from a state of relative undifferentiatedness to one of increasing differentiation and hierarchic integration.* Such a formulation did not commit one to the view that any process was exclusively or predominantly a developmental one; at the same time, it allowed one to examine every process to determine the extent to which it revealed features of increasing differentiation and of hierarchic integration over time. Furthermore, by omitting references to a particular time-scale, and hence, allowing for different time-scales for different processes, it permitted one to apply developmental conceptualization to culture history, to the individual's life career, and to the "microgenesis" of a particular percept or thought.

Recent Modifications of the Concept of Development

Recently even the new formulation of the concept of development was seen as too time-bound for the comprehensive comparative psychology of mental development such as Werner had envisaged and had taken initial steps to realize. It still did not seem to permit a comparison and developmental ordering of the behavior of groups who were contemporaneous (contemporary scientific man and nonliterate man)

without invoking the palpably unwarranted assumption that one of these types of mentality was arrested at an earlier period in actual history or was a throwback to such an earlier period in a curiously conceived anthropogenesis. It precluded a comparison and developmental ordering of child and psychotic behavior without invoking the palpably absurd thesis that the psychotic had regressed to an earlier phase in the ontogenetic process, that he had become a child once again. It still seemed to bar a comparison and developmental ordering of the modes of functioning of higher primates, of adult members of nonliterate societies, and of children in a technologically advanced society without invoking the palpably untenable Meckel-Haeckel "biogenetic law" and its even more unwarranted codicil "recapitulation theory." Finally, it did not permit a comparison and developmental ordering of the modes of functioning of adult human beings in the different worlds that they inhabit (for example, the dream world, the fantasy world, the everyday practical world, the aesthetic world, the scientific-theoretical world) without assuming that these worlds had emerged successively in time, in a curiously conceived evolution of consciousness.

To justify the comparative developmental approach, it appeared that one had, paradoxically, to formulate the concept of development so that it would not be limited to processes unfolding in a particular entity over time, but would also apply to the atemporal relationship of one pattern of organization or mode of functioning to others. Development had to be

conceived in terms of an ideal sequence of organizations, of systems of transaction, and of modes of adaptation, irrespective of their actual locus in our unilinear time scheme. Only in this way, it appeared, was it possible to encompass the range of phenomena Werner sought to encompass, without lapsing into questionable or untenable assumptions.

Such an idealization or "essentializing" of development does not mean that the concept is rendered inapplicable to a single system taken as changing over time. The main consequence of the progressive attempt to render the concept of development context-free is that *development* becomes a manner of looking at phenomena, a new way of representing phenomena, rather than merely a particular phenomenon in itself. Or perhaps more clearly stated, the consequence is that it leads one to see everything in terms of "development": development (increasing differentiation and hierarchic integration) is looked for not only in the formation of personality, but also in the formation of a percept; not only with regard to the conception of self, but also with regard to conceptions of space, time, number, and causality; not only with regard to individual behavior, but also with regard to cultures taken as organic unities; not only with respect to time-bound series, but also with respect to patterns of organization or to modes of functioning, regardless of time of occurrence.

A comparative developmental approach pertains to any and all aspects of behavior susceptible to analysis and ordering in terms of the very general

concepts of differentiation and integration, concepts that require specification in the diverse contexts to which they were applied. It pertains to whatever can be construed as a functional whole, a system, an organized totality, whatever can be viewed in terms of part-whole and means-end relationships. Its range extends from functional subsystems within an organism to transpersonal patterns of objectified mind, for example, linguistic systems, technologies, and so on. Assuming a developmental progression as in Toulmin's terms, "an ideal or natural order," developmental psychology focuses throughout on the immanent rules, the modes of operation, revealed in the functioning of actual systems. Its aims are to articulate and distinguish systems, to which Werner sometimes referred as "genetic levels," in terms of their specific principles of organization, to order such systems according to the degree to which they reveal differentiated and hierarchically integrated functioning, and to determine the conditions or constraints that militate for or against the realization of ideal development.

Explication of Some Major Concepts

Having characterized the status of the concept of development and of its defining "or- thogenetic principle," one may introduce some ancillary notions further to specify the concept of development and to clarify its application.

Primitivity

The much-abused concept of "primitivity" is often employed in developmental analysis. It should be recognized that to the degree that the concept of development is logically disentangled from chronology, so too is the concept of "primitivity" freed from its bondage to time. Just as the developmental status of a mode of functioning is determined not by its time of occurrence, but by organizational characteristics ingredient in it, so also the primitivity of a mode of functioning is determined formally rather than temporally. Moreover, it should be emphasized that the developmental status of a mode of functioning, primitive or advanced, is a relative matter, depending upon the other systems with which it is compared and contrasted. Thus to speak of the mentality of a young child as primitive vis-a-vis that of an adult, to characterize the mentality of a psychotic as primitive contrasted with that of a normally adapted individual, to describe the functioning of a member of a nonliterate group as primitive compared with that of a scientifically imbued member of a Western society, or to assess the mode of functioning typical of the dream state as primitive relative to that of the alert, waking state, in no way entails an identification of infantile, psychotic, nonliterate, and oneiric mentation. Nor does it imply that the same causes or motives underlie the diverse forms of primitive mentation.

Formal Parallelism

The "law of recapitulation," advanced by Haeckel and Stanley Hall, and

adopted by Freud, is repudiated by the Wernerian comparative developmental approach. In its place the concept of formal parallelism is introduced. This concept suggests a comparability (with regard to general organizational features) of different domains or theoretically constructed series. Indeed, this notion follows from the application of developmental conceptualization to diverse domains. In the domain of animal life, in the career of the human being, in the realm of socio-cultural organization, and so on, one would expect that forms of life, modes of being-in-the-world, types of consciousness, or patterns of organization would lend themselves to an ordering in terms of degree of differentiation and hierarchic integration. Therefore, the value of the concept of formal parallelism is heuristic: alerting one to material, situational, and efficient- causal differences in the various domains, it nevertheless suggests similarities in organization and prompts one to look in one domain for analogues to phenomena in other domains.

Polarities in Orthogenesis

In comparing, contrasting, and ordering modes of organization, developmental theorists have found it useful to particularize the orthogenetic principle, and abstractly, to distinguish within a circumscribed organism-environment system the ends of the organism or the functions toward which it is directed, the means by which it executes its functions, the consequent structure of its transactions with its surrounds, and its capacity to maintain

its integrity and to adapt itself to internal and external vicissitudes. With regard to these various aspects, prescinded from the total organism-environment transaction, pairs of polar concepts are employed to specify particular developmental progressions. Thus, a developmental progression with respect to *functions* or ends may be characterized as a movement from *interfused* to *subordinated;* in the former, ends or goals, susceptible to being distinguished, are not sharply differentiated, and in the latter, functions are differentiated and hierarchized, with drives and momentary motives subordinated to more central, long-range goals. The progression in *means* is characterized as a movement from *relative syncresis* to *discreteness;* for example, in the former such means of coping with the environment as perceiving and remembering, wishing and acting, and so forth are more or less undifferentiated from each other (as in the dream state), and in the latter, they are distinguished and "freely combinable." With regard to the *structure* of a behavioral act or to the outcome of an organism-environment transaction (for example, a drawing, a tool, an utterance) one may speak of a progression from *diffuse* to *articulate;* genetically primitive acts or act-products are relatively global, with little internal articulation, and developmen- tally advanced acts or products are segmented, with clearcut parts subordinated to the goal or unity of action. Concerning the capacity of the organism to maintain its integrity and to adapt itself to inner and outer vicissitudes, one may use the complementary polarities: *rigid-flexible* and *labile-stable;* a rigid

mode of organization, and hence a genetically more primitive one, is one in which the organism is incapable of altering or modifying its response despite marked changes in the environment demanding such alteration or modification; a flexible system is one in which the capacity for such modification is present. Correspondingly, a labile system is one in which the organism is pulled from its course or goal by minor variations in its surroundings or by slight disruptions within, and a stable system is one in which the organism has the capacity to retain its integrity and adaptation despite such variations or disruptions.

In sum, a more primitive mode of organismic functioning, irrespective of the factors that may be invoked to account for its manifestation (for example, neurological immaturity, brain damage, extreme anxiety), is one that may be characterized as showing a greater interfusion of functions, a greater syncresis of means or operations, a more diffuse structurization of acts or act-products, and a greater rigidity and lability in relation to changing inner and outer conditions.

Multiple Modes of Functioning and Levels of Organization

The concepts of multiple modes of functioning and levels of organization are related. Although the comparative-developmental theorist takes as his initial tasks, methodologically, the description of theoretically

isolated modes of functioning ("ideal types") and the ordering of these modes in terms of the orthogenetic principle, he has the additional aim of utilizing these abstracted modes of functioning to describe changes in organization in the course of a life career or in varied circumstances at any one period in the life career. Individuals observed in the course of human ontogenesis do not manifest a single mode of functioning, but rather reveal multiple modes of functioning, ranging from quite primitive to more advanced. Empirically, changes in organization as a function of age are at least up to early adulthood, consonant with the orthogenetic principle; that is, there is a developmental progression in ontogenesis. This, however, should not lead one to believe that higher modes of functioning simply replace lower or more primitive ones. The biologically mature organism is characteristically constituted by different levels of organization and will under varied circumstances (for example, drowsiness, intoxication, anxiety, impoverishment of the environment) reveal more primitive modes of adjustment, although capable of higher levels of functioning. These concepts may enable one to clear up a widespread misunderstanding, mainly by anthropologists, of the developmental position. This misunderstanding has been due, partly, to infelicitous formulations by developmentally oriented psychologists and psychopathologists. Developmental theorists do not distinguish types of men, but rather distinguish multiple modes of functioning. There is on normal man capable only of primitive mentation. Likewise, there is on man incapable of primitive

mentation. However, the actual conditions of existence, the society into which an individual is born, and so on, may promote primitive levels of organization or may allow advanced ones as customary ways of being. Developmental theorists fully accept the doctrine of "the psychic unity of mankind." However, they do not confuse unity with homogeneity or capability with actuality.

Psychopathology

In dealing with psychopathology, as with actual ontogenesis, a comparative-developmental approach does not focus indiscriminately on the multiplicity of changes that occur; its concern with formal or organizational features of functioning leads it, rather, to concentrate on part-whole, structure-function, and/or means-end relationships. On the assumption that pathology entails some degree of "primitivization of mentality," it expects to find, in pathological individuals, a *dedifferentiation* and *disintegration* of functioning. It is preferable to speak of disintegration rather than delamination ("peeling off of layers"), because in actual ontogenesis higher levels of activity, as they emerge, are not merely grafted on lower levels, but also modify lower levels of functioning; hence lower level integrative mechanisms may be dissolved or transvalued and may not recoup their earlier status or potency, if released from higher level regulation and control.

In studying psychopathology, one is oriented toward the interfusion of

ends or goals. Ends, distinguished in the normal individual or in the patient, premorbidly, would be expected to merge, with each activity being overdetermined; for example, the goal of securing esteem or love may not be distinguished from the goal of securing nutrition. One is oriented toward the syncresis of means distinguished at higher levels of organization; the differentiation of desiring, imagining, remembering, perceiving, judging, overt acting, so important for establishing the cardinal distinction between self and nonself and for separating the different "spheres of reality" in which the normal is capable of living, would be expected to collapse. One would also look for a diffuseness in acts or act-products, relative to the normal or premorbid condition, that is, a failure to distinguish parts and wholes, things and attributes, container and contained, the literal and the metaphorical, and so on. Finally one would be oriented in psychopathology toward manifestations of the loss of hierarchic integration, the rigidity and lability of the organism vis-a-vis its environment, revealed in such phenomena as stereotype, perseveration, stimulus-boundedness, sudden shifts from one sphere of reality to another (for example, from the communal Lebenswelt to the autistic fantasy); the complete segregation of activities and subsystems, each operating with unchecked local autonomy; the unregulated and uncontrolled incursion of activities into domains from which they had been excluded through higher level controls, for example, personforming activities intruding into the domain of object-formation, with the consequent

personification of things, or, conversely, object-forming activities intruding into the domain of person-formation, with the consequent apprehension of persons as manipulable things; and, most important, the *loss of ideality,* the inability to sustain ideal relations, or the tendency to concretize the abstract, to collapse similarity into identity, to confuse the symbol and the referent, and so on.

All of these phenomena of dedifferentiation and disintegration, variously explained, have been observed as characteristic of psychopathology by psychiatrists of all persuasions. The loss of ideality is at the core of what Goldstein'" has described as "the loss of the abstract attitude" and what Arieti has described in terms of "Von Domains' principle."" Since the mode of analysis characterizing the comparative developmental approach to psychopathology is discussed and exemplified by Arieti elsewhere in this series of volumes, the reader is referred there. Other discussions and applications of this approach, or closely related ones, may be found in the following. (For a masterful general exposition of the absence of ideality in primitive thought the reader is referred to Cassirer.)

One may cite the following remarks by the psychiatrist, Harold Searles: "From a phenomenological viewpoint, schizophrenia can be seen to consist essentially in an impairment of both integration and differentiation which . . . are but opposite faces of a unitary process. From a psychodynamic viewpoint

as well, this malfunctioning of integration-differentiation seems pivotal to all the bewilderingly complex and varied manifestations of schizophrenia, and basic to the writings on schizophrenia by Bleuler, Federn, Sullivan, Fromm-Reiehman, Hill, and other authorities in the field" (p. 261). There is only one modification that may be made in Searles's statement: for a developmental psychologist, his remarks would apply to other forms of psychopathology as well as to schizophrenia.

Symbolization and Language

A persistent doctrine in Western thought, reinforced greatly in biology and psychology by Darwinism, has been the "law of continuity." This law, dogmatically rather than methodologically maintained, has led some psychologists explicitly to deny or implicitly to ignore fundamental differences among species and, a fortiori, any basic differences as to modes of functioning within a species or an individual. In many instances, it has been tacitly assumed that one mode of functioning could be reduced to another if the former could, in some way, be "derived" from the latter.

As essential feature of the comparative developmental approach, as has been noted above, is its emphasis on multiple modes of functioning and on different levels of organization, not only with regard to different species, but also with regard to the domain of human behavior. Different forms of life have

different modes of transaction with the selfsame physical environment, irrespective of how these differences have come about. This is also the case for the human being, not only in the course of ontogenesis, but also in the adult form, under various conditions.

One may grossly distinguish three general modes of transaction, each entailing different "worlds," *"Umwelten"* or "behavioral environments" for the organisms engaged in them. These are: (1) reflex-reaction to physical energies; (2) practical goal-directed action upon or toward presentations qua signals; (3) reflective or detached knowing about objects and events. The human being is capable of existing in all of these worlds. However, his distinctive world is the last one. Living in this world is rendered possible by the distinctive capacity for symbolization, which is among the human being's biological endowments, and the pervasive presence of one or more forms of that universal instrumentality, language, which is an essential feature of the human being's normal (social) environment.

Explication of Concepts

Since "symbolization" and "language" are among those catchwords about whose protean character Lovejoy has warned us, it is important to clarify how these terms are to be used in the present context. Sometimes identified, and even when distinguished often treated as co-ordinate,

symbolization and language are here taken to belong to different categories: hence the distinction between symbolization as a capacity or activity and language as an instrumentality. This distinction permits one to highlight the following: As an activity, symbolization may exploit a number of instrumentalities, of which language is only one; as an instrumentality, language may enter into a number of distinguishable activities of which symbolization is only one (pp. 264ff.).

Symbolization

One of the difficulties in discussing symbolization in a work directed mainly toward psychiatrists and clinical psychologists is that the activity of symbolization has often been taken in their literature as a manifestation of primitivity among the young and of pathology among the old. Due mainly to an acceptance of the "dogma of immaculate perception," and its corollary, a copy theory of knowledge, symbolization has implied "distortion," or a failure to designate things as they are. With the increasing recognition that all knowing transcends the so-called sensory given has come the realization that symbolization is requisite for all of the higher manifestations of man's nature and, in fact, enters into the very constitution of his world of objects."

The essence of the activity of symbolization—and this core is clearest when advanced manifestations of that activity are in play—is representation,

in a relatively circumscribed medium, of some organismic experience that would otherwise be ineffable and incogitable. Thus, in the sense that "metaphor" ultimately signifies the use of some aspect of experience to represent something other than itself, symbolization at any level involves "radical metaphorizing."

As in the case with other human activities, symbolization must be posited as syncretically fused with other acts at lower levels of functioning; at such levels, there is no sharp separation among such activities as desiring, doing, perceiving, imagining, remembering, representing, and so on. It is an anachronistic misnomer to designate any of these activities as they operate in the global gruel of primordial functioning by the same discrete designations which they only half-legitimately warrant even at more advanced levels of functioning.

Due to this syncresis characterizing primitive levels of functioning, all the phenomena that are recognized as intangible, ideal, or "subjective" at higher levels are immersed in and experienced on the same plane as the concretely "objective" products of perceptual-motor action. In Cassirer's terms the "law of concrescence" operates with ideal significations like the part-whole relationship, relationship of resemblance, and so on, not yet emergent from or collapsed into material and efficacious identity; that is, part equals whole, what is "like" is identical to, and so forth (pp. 64ff.). What would

at higher levels be in a symbolizing relationship to something else does not represent but *is* that something else.

At higher levels of functioning, with the individuation and articulation of distinct activities and with the correlative stabilization of the domains of the subjective and objective, symbolizing becomes relatively autonomous, and the self becomes aware of its symbolic activity. The individual is capable of a distinction between vehicle and referent and can recognize the differences between the activity of symbolizing, the work of symbol-formation, and the outcome of the activity and the work—the symbol.

Language

As is the case with any other socially shared instrumentality, a language possesses functional potentialities and structural complexities that are fully apprehended and articulated by the individual only in the later phases of ontogenesis and only as they are practically exploited by the individual in the course of his vital and intellectual activities. As is the case with other instrumentalities, the functional structures of a language are grasped in use before they are articulated for and by reflective thought. Like other instrumentalities, a language is not only influenced by the activities which it subserves, but it also shapes those activities. Finally, as other instrumentalities, a language, capable of the most refined uses, may be only

grossly exploited or aberrantly employed. It will be clear that in this conception of language, speech and language are not equivalent terms. Speech is an activity that may occur without the use of language; language, on the other hand, is an instrumentality that may be understood and used without the activity of speech.

It should be reasonably clear from this sketch why symbolizing is here regarded as independent of the instrumentality of language, although the individual subsequently appropriates and exploits this socially shared instrumentality as the principal means of representing, and hence objectifying and communicating, his thinking and feelings. This is not to overlook the above-mentioned fact that the instrumentality exploited by an individual in carrying out an activity is not only shaped and guided, but also shapes and guides, that activity, and the agent who executes it.

From an individual point of view, the immediate functions or usages of language are the individual's activities and tendencies which language may subserve. To be sure, there is on clear consensus as to what these are; their number and kind seem to vary with the investigator and his principal area of inquiry, as well as with his penchant for specification; but one may follow the aphasiologist, A. Ombredane, and distinguish the affective, the ludic (play), the practical, the representational, and the dialectical (pp. 264ff.).

These usages are increasingly social in character, increasingly detached from the exigencies of practical life, increasingly entail the distinctive features of the linguistic instrumentality to the exclusion of other means of realization.

Affective Usage. One using language *affectively,* an activity which must be sharply distinguished from referring to affective states representatively, uses principally intonational and rhythmic features of the linguistic instrumentality. He may use also exclamations, interjections, and curses, denuded of lexical significance. Insofar as he uses words having a circumscribed significance in the social code, he uses them without regard for their customary meaning and mainly to exhibit his feelings. Such words may then suffer what Arieti has designated as a "reduction of connotation power" and a corresponding increase in "verbalization" (pp. 211, 215). The same verbal sign may be applied to quite different situations by virtue of an affective equivalence among the situations. The lack of concern for the linguistic code reveals itself in forms of utterance that are agrammatical and approximate jargon, in the extreme. As Ombredane puts it: "Distinctions of declension and conjugation are effaced, the sentence is simplified in the extreme, rejoining in its structure the eminently elliptical infantile sentence, where the copulas, the morphemes are omitted, where juxtaposition is substituted for subordination, where words follow each other in the psychological order of the ideas rather than in the grammatical order of the language" (p. 268). In this usage, one scarcely requires an interlocutor and is

not concerned with an object of reference.

Ludic Usage. One using language ludically is concerned primarily with the rhythmic and echoic features of the linguistic instrumentality. There is a play with sounds, words, and phrases, with relative or total disregard for the semantic values of these forms. Relationships of assonance and alliteration predominate over semantic relations. Here again, there is an absence of connotation power and an emphasis on verbalization. In engaging in the ludic usage, "the individual abandons himself to an unreflective and facile verbalization which can admit neither the constraints of meaning nor those of the grammatical code" (p. 269). "The successive moments of this verbalization are determined ... by the force of mechanical and musical connections: phonetic and verbal assimilations, alliterations, assonances, annominations, reduplications, etc., whence it results that ludic verbalization tends regularly to stereotypy" (p. 270). Here again, one scarcely requires an auditor and is not concerned with an object of reference.

Practical Usage. Language is used practically when it is employed to facilitate ongoing action and when it pre-eminently involves a primary face-to-face group. What characterizes the practical usage and distinguishes it most markedly from the representative usage is the centrality of a perceptually shared situation or of at least a situation presumed known to all. The primary goal is the prompt adaptation of action to circumstances when

the circumstances are present to the individuals involved. “It follows that practical language is characterized by the extreme reduction of representative elements and by the maximum development of suggestive, excitatory, or inhibitory elements” (p. 271). Such a use of language is quite elliptical, with a predominance of imperatives without any specification of the object. Characteristically, in this usage, an auditor, a particular one, is involved, and the semantic values of words and phrases do play some role, although, typically, much of the meaning is supplied by non-linguistic context.

Representative Usage. With the representative use of language, one is no longer bound to a perceptually shared context or to one that is presupposed by the interlocutors but is free to refer to absent and counterfactual states of affairs. It is with this usage that symbolization truly meets language. That which in the practical attitude is taken for granted is given a linguistic articulation through the grammatical and lexical resources of the linguistic code. Detached from contextual supports, one must create everything linguistically. “Hence the necessity of defining the setting, the persons, the relations of the actions in time, hence the necessity of marking presence or absence, indicating aim and instrument, explicating the chain of facts and the organization of reasons” (p. 273). In this usage, one cannot neglect the subtle grammatical features of the linguistic instrument. To use Sapir’s formulation, one seeks to give each of the elements in the flow of language “its very fullest conceptual value” (p. 14).

It must not be thought that representative usage entails literality or that it simply subserves the conveying of information. It also serves concretely to depict intangible or complex notions, to represent affective states, and so 011. It is with the representative usage that true metaphor comes into existence: that is, where the duality between what is literally stated and what is meant is clearly maintained.- It will be understood, in this connection, that it is with representative usage that the individual is capable of maintaining a "categorial attitude" toward objects and events. It is obvious that the representative usage of language is generally brought into play when there is an object of reference; it also entails an auditor, but now a more "generalized other."

Dialectical Usage. The dialectial usage involves an analytical attitude toward the linguistic instrumentality itself. It is oriented toward the discovery of the rules immanent in the language, and is further concerned with either shaping the ordinary language or constructing artificial languages for specific functions. Although this usage is customarily tied up with logical and scientific concerns, it may be regarded more generally as an orientation toward the rules involved in any employment of language. Hence, the student of poetry, seeking to make explicit the syntax of poetry, is also engaged in a dialectical activity.

As noted, the emergence and differentiation of these usages, and hence

the carving out of specialized means for actualizing them, go hand in hand with an increasing expropriation of previously untapped resources of the language. Linguistic features, unnecessary for the mere expression of pleasure or displeasure, are grasped and internalized (linked with symbolization and speech) in order to indicate why, and about what, one is emotionally exercised; in order to guide, with some precision, the behavior of others; in order to represent absent or ideal states of affairs to impersonal and remote addressees.

In this connection, it cannot be overemphasized that all of the usages coexist at higher levels of development: an "advanced usage" (for example, representation) does not simply replace an "inferior usage" (for example, practical handling of language). Rather, as each usage, or each "attitude," is manifested, it becomes progressively differentiated from the others, and then becomes integrated with them in the varied contexts of human functioning. As representation emerges, it becomes progressively distinguished from the other "inferior" usages in the means it employs, each attitude exploiting certain aspects of language for its distinctive actualization. In all usages, nonlinguistic activities (for example, body movements) and the contexts of utterance are also distinctively employed.

It is also important to emphasize that these usages are manifested on different levels of functioning: affectivity expressed in exclamations and in

curse words is quite different from affectivity expressed in sarcasm; the ludic handling of the linguistic medium in lallation is markedly different from that involved in a witty play on words; the representative activity of the young child is not on the same level as the representative activity of the poet.

Symbolization and Language Usage in Psychopathology

Prejudice and Approach

There are two prejudices that have often interfered with an adequate comparative developmental approach to symbolization and language usage in psychopathology; one of these prejudices is parochial and of relatively recent origin, the other more ancient and more pervasive.

The first prejudice is that advanced by a number of orthodox psychoanalysts who would limit what they call "true symbolism" to a process of unwitting realization of unconscious meanings in sensuous or tangible form. For this group, language used to represent states of affairs and to communicate information would not be symbolic; only language revealing the repressed wishes of the individual in disguised form would have that status. This prejudice is clearly ungrounded and has been recognized as baseless even by some Freudian theorists. One need not go to the opposite extreme, as some have suggested, and deny any symbolic status to such "distorted"

expressions of the unconscious. Instead of opting for one or another form of the activity of symbolization as the "true" one, a developmental orientation should lead one to recognize that symbolization is an activity occurring on different levels, ranging from the most primitive, where it is syncretically fused with perception and action, to the most advanced, where it comes into its own.

The second prejudice is a more subtle and insidious one and more difficult to uproot since it constitutes part and parcel of the Western rationalist-intellectual tradition. Indeed, it has played and continues to play an important role in many of the developmental theories advanced in Western societies, including, to some extent, early comparative-developmental theory. This prejudice, often implicit, would have it that the aim of development, whether in the social group or in the individual, is the pre-eminence of a scientific- technological orientation in every domain of human life. It is therefore led to assess all performances and to evaluate their "developmental status" in terms of this putative aim. Characteristically those who espouse this conception of development regard symbolic activity and language usages that do not subserve the communication of information in precise and exact linguistic symbols as, by the very nature of the case itself, primitive or pathological or, at the very least, "regressed in the service of the ego." For many of them, no matter how they mask it, art, play, poetry, and religious symbolism and language are either neurotic symptoms, emotional

expressions devoid of intellectual content, or embodiments of inferior forms of cognition, to be superseded in ontogenesis or societal evolution by fully articulated, unequivocal discourse, representing scientific conceptualization and impersonal communication of thought.

Once again, it is neither a fact of history nor an induction from the study of ontogenesis that the aim of social and individual change is a progression toward an exclusively scientific-literal orientation in all spheres of activity. It is an unacknowledged bias of considerable magnitude to assume that any individual, normal or psychotic, is seeking always to express himself with due regard for the rules of formal logic. Without denying the usefulness of such an assumption as a "fiction" of the investigator, introduced in the "interest of reason," one must strongly question any thesis that would attribute to a person a prelogical, paralogical, or paleological process of thought on the basis of stretching all behavioral products to the Procrustean bed of logical analysis.

The hazards of using a logical standard in reconstructing or attempting to explain the underlying processes of individuals from their behavioral products (linguistic and nonlinguistic) have been pointed out recently by a number of investigators, concerned mainly with establishing the non-inferiority and autonomy of poetry and play. These hazards have also been highlighted by the much-maligned Levy-Bruhl, the source and origin of the

notion of prelogical mentality. Levy-Bruhl early maintained that the behavior of nonliterate peoples could not be attributed to faults or defects in their logical processes, but was due to a different (namely, "affective")orientation toward experience from the one which governs Western man qua scientist. More recently, he stressed that the character of the thought processes of nonliterate man had been misrepresented by himself and others in that they had not distinguished clearly between physical impossibility and logical incompatibility; that someone believes that a thing which is A may also be B is not an indication of a defect in reasoning but is due to a different conception of reality; similarly, it is neither a logical fallacy nor a manifestation of primitive logic to believe in bilocation, although such a belief is untenable in the Western scientific conception of the physical world.

These points could be glossed over in the present context were it not for the fact that the same issue has arisen concerning the interpretation of pathological language usage. The problem has been well posed by one of the leading investigators of schizophrenic language, Maria Lorenz. She writes: "The evaluation of the thought processes of a patient through language when evidence is obtained from experimental situations . . . often appears at variance with the impression obtained from a spontaneous talk with the patient. . . . Certain kinds of demands, implicit in test situations, seem to precipitate reactions of irritability, frustration, defensiveness, which quickly lead to resistance, negativisms at times, and nearly always a stubborn clinging

to the individual's inflexible mode of viewing the world." She continues: ". . . quite a different form of language is utilized when expression of inwardly experienced states takes precedence over the communication of facts of judgment. . . . The whole area of expressive use of language, poetry, would appear in a sadly illogical, paralogical light if criticized on the basis of logic. To criticize poetry on the basis of logic misses the point of poetry. To criticize the thought of a schizophrenic patient on the basis of logic when he does not assume a reasoning attitude is often to miss completely the alternative meaning of his response. The pathology may lie less in an inability to think logically than in an overemphasis and inflexibility of other modes of thought (p. 608). Similar arguments have been advanced by one of the leading European investigators of pathological symbolization and language, Jean Bobon.

It is important to disentangle some of the points at issue here. There is no controversy concerning the radical gap that separates the psychotic's mode of being-in-the-world from that of the normal wide-awake individual. Nor need there be an argument over the possibility, or even limited usefulness, of using logico-linguistic norms for an analysis of a patient's performance, so long as one does not impute to the patient logical errors or mistakes when he is not oriented toward the logico-linguistic representation of thought. What is questioned here is the legitimacy of assuming that a patient is necessarily thinking paralogically or paleologically when he uses

tropes in his utterances. (Since, in the main, Lorenz' criticism seems to be directed toward Arieti's use of the Von Domarus principle, it is only fair to say that Arieti has typically shown himself to be aware of the need for caution in inferring underlying thought processes directly from isolated linguistic utterances.)

Although Werner in practice was not entirely free of the rationalist prejudice, he generally recognized the error of interpreting primitive experience in terms of logico-linguistic schemata (p. 23). But even beyond that, it should be clear that the orthogenetic principle of current comparative developmental theory does not entail an exclusively scientific-technical orientation or any other orientation as an inherent and exclusive aim of a developmental process. From a developmental point of view, it is not the submergence of all but a single orientation that constitutes genetic advance, but rather the differentiation and perfection of all of the orientations, and their harmonious integration in the functioning of the individual.

One consequence of this conception is that one must be wary of speaking of primitivity or pathology of symbolic activity or of language usage solely on the basis of isolated productions of individuals. To make a determination of primitivity or pathology, one must include a consideration of the demands of the situation, the intentionality of the individual issuing the product, the relevance of the production to the individual's ends, and so on.

Specifically, no act or act-product removed from its functional context is primitive or pathological. Such terms ultimately refer to means-ends or form-function relationships, not to external forms taken in themselves. Neither the blurring of contours or distortion of perspective (in a painting), nor the play on words (in intended wit), nor the personification of time (in a sonnet) are primitive or pathological in themselves, no more so than the use of words for abstract thought is primitive or a "regression in the service of the ego," because such words were originally representative of undifferentiated concrete thinking. To beat swords into ploughshares is not primitive or aberrant unless one is still intent on waging war. This point is so important to stress because developmental theorists, Werner and I included, have occasionally written and sometimes also thought that a means or activity was primitive in itself, irrespective of the function for which it was deployed.

These considerations suggest that one must be extremely cautious in drawing conclusions as to the specific processes or mechanisms culminating in acts or act-products (bodily movements, actions, utterances, paintings, and so on) of individuals, normal or pathological. The same end-product may have a quite different meaning and mode of formation in different individuals or in the same individual at different times. For example, to consider an action by one of Bleuler's patients, an individual may make the movements of a shoemaker to represent to another what a shoemaker does, or to magically incarnate one's ancient lover, a shoemaker. To adapt an utterance by one of

Rosenfeld's patients, one may remark, "The Russians *were* our allies" (p. 459) to convey factual information, because one wishes to allude consciously to the dangers inherent in relying on the permanent friendship of anyone, or because one docs not distinguish in thought and experience between the "betrayal" of the allies by the Russians and the "betrayal" of oneself by a therapist. Inferences as to processes and mechanisms require a knowledge of the mental status of the individual, a knowledge of the orientation or attitude that the individual has adopted, an awareness of the context of the act, and so on.

It should be noted that the author, in citing illustrations from literature to exemplify the application of the comparative developmental approach to symbolization and language, has assumed the legitimacy of the descriptions and inferences drawn by the various investigators quoted. In any case, sincc the citations will be merely illustrative, they may serve their function even if the specific inferences are open to question.

Clarification, Elaborations, and Illustrations

When one seeks to characterize an activity amenable to realization in varied forms, it is generally preferable to describe it in terms of its more mature form than in terms of a rudimentary manifestation where its specific features are likely to be obscured. Symbolization has been characterized as

the capacity to represent, that is, the ability to take items of experience or to intend materials of the environment to exemplify or mean something other than themselves. As such, the ability to symbolize is purely formal; prescinded from its natural ties with one or another "posture of the mind" and one or another mode of giving form to the flux of impressions, the activity does not itself determine what is symbolized, what material is used as a symbol, or the manner in which the symbol and its significate are related for the symbolizer. These aspects of symbolic activity are determined in great measure by the "posture of the mind," attitudes, orientations, and modes of organizing experience.

In order to discuss symbolic activity in psychopathology one has first to consider those attitudes and ways of forming a world that one finds in schizophrenia and in related disorders. Before turning in this direction, however, one may note that there are pathological cases in which it can perhaps be said that it is primarily the activity of symbolization or is at least the work of symbol formation that is disturbed and impaired; by symbol formation is here meant a specialization of symbolic activity in which one takes or shapes properties of a particular medium (for example, sounds, lines, body movements; later, objects and word-forms) to represent something other than themselves (for example, objects, concepts, propositions). Without going into details or without introducing the requisite refined distinctions and qualifications, one may regard some of the aphasias, apraxias, and

agnosias as reflecting such a relatively direct impairment of symbolization. Thus, one may find the inability to transform heard sounds into words, although the patient can still entertain concepts; or one may find that a patient is capable of getting the wordform but is unable to go from it to the concept it normally represents; again, one may find patients who are capable of prepositional thought but who are unable to re-present their thoughts in language, producing paraphasic and asyntactic utterances, and so on.

Such cases clearly reflect the dedifferentiation and disintegration of functioning that characterizes all pathological primitivization. In an essay of broader scope, they would have to be included—for their own sake, as well as for purposes of comparison and contrast— with phenomena of psychopathology proper. Important as they are, however, they cannot be considered here. The reader is referred to the writings of some of the aphasiologists. One might also call attention here to works by psychologists, philosophers, and linguists who have approached the problems of aphasia and kindred disorders from other perspectives.

In returning to disturbances of symbolization in psychopathology proper, one need not dwell on a point which every serious student of such phenomena has emphasized; that is, disturbances of symbolization in psychiatric cases are not simply consequences of an impairment in the capacity to represent per se, but are, rather, part and parcel of a more

profound and pervasive disruption of the sentiments, attitudes, and ways of giving form to experience that the activity of symbolizing subserves. The patient's entire interpersonal and intrapsychic life undergoes at least some degree of dedifferentiation and disintegration.

One may characterize the world that an extremely disturbed patient establishes, the "reality" in which he is immersed, as a filmy flat- land, devoid of those crucial distinctions between what there is and what is merely appearance, what is substantial and what is ideal, what is felt or imagined and what is taking place. Here all experiences are on a par; one no longer has control over his various intentionalities and is on longer able to allocate his moncntary impressions into domains of subjective and objective, that is, the seen, the fantasied, the thought, and the performed. A patient may momentarily recover these distinctions, but then without warning he finds himself back in the flatland again. There is thus an unregulated incursion of the primordial affective-mythopoetic mode of functioning into domains from which it had been excluded in the course of normal ontogenesis, a mode in which intensity of experience and in which affective relevance are the sole or main determinants of the "real" and "objective," and hence one to which reasoning, critical analysis, and control are essentially alien. Phenomena familiar to us from our own circumscribed oneiric and hypnagogic modes of functioning become the standard phenomena in the waking lives of the more disturbed patients.

In a world formed through the affective- mythopoetic mode of functioning, symbolization must be radically altered. Organically involved in the development of mentality and integral to the individual's socialization, symbolic activity now becomes syncretically fused with fceling-acting-perceiving and loses its distinctive status as the means of representing the ideal, the intangible, and the remote.

Let us first distinguish the major constituents of those situations (symbol-situations) in which symbols, both linguistic and nonlinguistic, are characteristically employed. In well-articulated symbol-situations, one may distinguish at least the following components: the *addressor,* or one who uses symbols (in part, at least) to communicate; the *addressee,* or one to whom the communication is addressed; the *intention*, or that which the addressor wishes to communicate to the addressee; the *referent,* that object or state of affairs to which the addressor wishes to call the addressee's attention; the *context,* or situation in which the communication takes place; the *scene,* or locus of the referent, insofar as the referent is not part of the context; and, finally, the *medium,* the means (one or more) by which the addressor conveys his intentions and/or represents his referents to the addressee.

In both the relatively undifferentiated mentality of early childhood and in the dedifferentiated and disintegrating mentality of psychotics, these distinguishable aspects of symbol-situations are far less articulated from each

other and, paradoxically, far less integrated with each other than is the case for normal adults.

For the normal adult, through a complex process of socialization and quasi-autonomous intellectual development, in both of which symbolic activity plays an enormous role, the world has become a diversified and stratified realm. There are people in it who are distinct from himself and from inert objects. They live their own lives. Some are close to him; the overwhelming majority are unknown to him and unknowing as well as uncaring of him. He may represent them individually or collectively, to himself, and in this way make them part of his thought world; he thus can conceive of himself as capable of acting with respect to them, addressing and communicating to them. However, throughout he is aware that even those closest to him do not share his memories and are not privy to his feelings, fantasies, and fleeting thoughts. If he wishes to make these known, he must express them by means that allow him to communicate them to others, being aware as he does so of the varying distances of his addressees from his personal life and experiences.

Through his multiple transactions with his social and, in large measure, socially defined physical environment, transactions in which, to an incalculable degree, his capacity for symbolization is essential, the normal adult comes to represent to himself a domain of social objects, all not only

distinct from persons, but also distinguished among themselves. Almost automatically, he is able to articulate his global experiences and to segregate his feelings, hopes, and fears about these objects from the objects themselves and to perceive and classify them in ways that other members of his community are likely to categorize them. Thus he can distinguish his intentions toward the objects or distinguish the personal meanings and attitudes that he has in regard to them from the objects themselves as socially shared referents. In the main, he locates these objects in a causal-pragmatic-functional network, one which he shares with other normal adults. Nevertheless, he is aware that objects and events of concrete experience can be viewed in other ways, that is, aesthetically, religiously, and so on. These ways of viewing are, however, sharply distinguished from the pragmatic-causal, and he does not confuse the relations thus established among objects and events with their causal relationships.

The normal adult is able, through the indissociable interplay of socialization, semiautonomous intellectual development, and symbolic activity, to entertain also a world of ideal objects, occupying a different "place" from that pre-empted by the everyday things and events with which he has direct and immediate commerce. Through an activity of symbolically mediated hypostatization, he can and does build up in the matrix of society purely intellectual objects and relations, which concrete objects and events are taken to exemplify. These, as well as the particular things of experience,

can become the objects of his thought and reference as well as of the thought and reference of others.

In his communication to others, the adult takes account not only of his addressee, but also of the context, socially-symbolically defined, in which his communication takes place. Normally, he adapts his communication to this context, referring to it when pertinent, using it as one component of his medium of communication when germane, disregarding it to the extent that it is irrelevant to that about which he wishes to communicate. Especially in the latter situations, he makes a sharp distinction between context and scene and recognizes the necessity to provide an ideal, symbolically delineated locus for the subject matter of his communication, enabling his addressees to share with him the nonpresent situation to which his symbolic utterance pertains.

To stabilize and define the transitory impressions which are experienced by him, to locate them in one or another region of his world, and to think and communicate about them, especially when they have vanished, the normal adult uses chiefly the linguistic instrumentality, which he shares as a common medium with others. Early in ontogenesis, this instrument, or better, the rules governing its use, are internalized and integrated with his innate capacity for vocalization; this capacity, subordinated to thought and symbolization, is thus transformed into speech. In early ontogenesis, however, speech is syncretically fused with context, action, and private

images and is immersed in the child's affective, ludic, and practical life; it is used mainly as a means of expressing feelings and demands, as a thing with which to play, or as a device which substitutes for action in the attempt to control and regulate the behavior of others. Furthermore, language is there assimilated to an interfused, syncretic, diffuse, labile, and relatively rigid mentality and cannot have the value of representing stable thoughts and articulated concepts of which the child is as yet incapable.

Speech can be used in these ways by the adult in special circumstances and with particular addressees, but he is also capable of using the medium in an ideal manner to represent objects and events, to symbolize how he feels about phenomena, and so on. To do this adequately, he must at the minimum be cognizant of and respect the communal and autonomous values of the various parts of the medium, not only the referential values of lexicon and syntax, but the expressive values as well. Even in poetry, where he may be interested in the aesthetic properties of linguistic sounds, he must recognize that he can "alter the sounds of words no farther than the [common] sense would follow," on pain of excommunication. Archibald MacLeish has succinctly put it: "If you want the sound of *lurk* instead of *lark* in your sonnet you can write it down but your bird will disappear. If you want to play sonorous games with *I'amour, la mort*, and *la mer* you may: but you will still have love, death, and the sea on your hands with no possibility of escape. . . ." In sum, the principal medium of representation and communication is, for the

normal adult, recognized as autonomous and interpersonal; a structure with values distinct from his own actions, thoughts, feelings and associations, and one that cannot be manhandled in an idiosyncratic and arbitrary way.

It will be recognized that the young child participates in symbol-situations of quite a different kind from those in which the adult is capable of engaging. The child dwells in a world of a limited number of vaguely differentiated addressees from whom he, himself, is not yet articulated; is governed primarily by affective, ludic, and practical intentions; is concerned with relatively few referents, and these highly charged and infused with personal meanings, which he is unaware are not shared by others; is restricted to a few concrete contexts; does not clearly take into account the differences between his contexts of communication and the scenes in which his referents are located and is, furthermore, often incapable of representing these scenes if requested to do so; and, finally, does not sharply distinguish the medium of language from his other media, from his context of utterance, and from his affect and action. For a detailed treatment of the ontogenetic progression, the reader is referred to *Symbol Formation*.

Again, in psychopathology, there is a tendency toward dedifferentiation and disintegration of symbol-situations as a whole and of all the constituents of such situations. This does not mean that the psychotic regresses to childhood. In the dissolution of his functioning he almost invariably carries

with him residues of social and intellectual attainments, mastered at higher levels of functioning than the child is capable of reaching. Moreover, in less extreme cases at least, the psychotic often manifests such higher levels of functioning, even if only transitorily, sporadically, and outside executive control. Again, as interfused, syncretic, diffuse, labile, inflexible, and even unintegrated, as the child's functioning may be, he is not disintegrated in his activity. The primitivity of the psychotic, it must be reiterated, is of a different kind than the primitivity of the child, just as it is of a different kind than the socially adaptive primitivity of men in technologically backward societies.

In discussing the character of psychopathological symbol-situations, one need not elaborate either on the fusion between the patient and his momentary addressee or on the lack of differentiation among addressees. These closely related phenomena have almost invariably been observed in schizophrenia and related disorders. In the first instance, the patient tends to feel fused with, incorporated within, or threatened by invasion from, the one to whom he communicates. In the second instance, the addressee is not grasped as a distinct, stable, and socially determinate contemporary, but is a diffusely interwoven composite of remembered, feared, desired, "need-relevant" persons; in extreme cases there is that radical autism in which even the unstable linkage of the patient with such composites dissolves. Underlying these phenomena from a formal or structural point of view is the syncresis of activities (feeling, wishing, perceiving, and so forth) and the

consequent psychophysical undifferentiatedness (lack of distinction between the ideal and the substantial-concrete) that characterize the most primitive levels of functioning.

One need not dwell overlong on the differentiation and disintegration of the patient's intentions, that is, his attitudes, purposes, and meanings with regard to objects and to others in symbol situations. These are invariably fused and ambivalent, frequently unknown to him either before or after he has expressed them, often manifested in an involuntary and uncontrolled manner, and sometimes experienced as unrelated to himself and infused into him by malevolent others. Rarely is he oriented toward an impersonal, factual communication about neutral states of affairs or oriented toward representing his feelings and wishes to another; in the main, his posture is egocentric-affective, and he is prompted unwittingly to express or enact his diffusely felt rage, fear, love, or desire to control the objects of his world, and the like. Since he has little control over his attitudes, they are liable to be both labile and inflexible; for example, Searles reports one patient who suddenly paused in the midst of vicious paranoid tirades against him to ask him in a calm and friendly manner for a light for her cigarette (p. 543).

That the patient's relations to his world of objects and events, his actual and potential referents, undergo dissolution, likewise requires little commentary or illustration. The factors in play here are, in large measure, the

same as those that enter into the patient's relation to his addressees. Due to a syncresis of wishing, remembering, imagining, perceiving, and so forth, and an impairment of critical analytic and synthetic operations, the patient is often unable to articulate his momentary impressions in a manner so as to shape and categorize objects and events in social-consensual terms. Rather he senses and defines impressions in terms of idiosyncratic-affective categories. Such tendencies toward construing impersonal events in personal-emotional terms are especially illuminating in those cases where the critical faculties are still operative but have become to some extent dissociated from percept formation. For example, Alberta Szalita refers to one of her patients, who reported, "I went to visit a recent acquaintance of mine.. . . We had dinner together. . . . After dinner, the hostess served coffee. When I raised my eyes as I was reaching for the cup of coffee, her face looked different than before. I felt that my sister was handing me the cup. I had to move closer to check whether it was my sister or not." Another of Szalita's patients, looking at the ceiling of her office, claimed to have seen a witch there moving her arms. He later remarked, "You need not tell me that there is no witch on the ceiling—I know that as well as you do. But I really felt it" (p. 59).

There are many related phenomena in the schizophrenic's affective-mythopoetic construction of reality: the unwitting transformation of feeling states into things and concrete happenings, the substantialization of thoughts, the equation of parts with wholes, attributes with things, and so on. The

reader is referred to the writings of the close students of schizophrenia. One may also once again refer the reader to the works of Levy-Bruhl and Cassirer despite the fact that these authors do not directly concern themselves with pathological cases, their discussions of the principles governing the formation of an affective-mythopoetic world are clearly relevant. Both have the further merit of avoiding the "naive realism," which would take as given to primitive mentality those distinctions that are established only at higher levels of functioning.

The dedifferentiation and disintegration of the relation between patient and context is of the same order as that between the patient and addressee and between the patient and referents. It is noteworthy that, on one hand, the patient often cannot exclude the context, even when it is irrelevant to the communication situation; on the other hand, that he frequently takes no cognizance of the socially defined context in expressing himself. Thus, with regard to the lack of differentiation, one of McGhie and Chapman's patients remarked, "My concentration is very poor. I jump from one thing to another. If I am talking to someone they only need to cross their legs or scratch their heads and I forget what I am saying. I think I could concentrate better with my eyes shut" (p. 104). Another patient remarked, "I can't concentrate. It's diversion of attention that troubles me. I am picking up different conversations! It's like being a transmitter. The sounds are coming through to me but I feel my mind cannot cope with anything. It's difficult to concentrate

on any one sound. It's like trying to do two or three different things at one time" (p. 104).

With regard to the tendency of the patient to be oblivious to or to be dissociated from the socially defined context, the following case is illustrative: one of Cameron, Freeman, and McGhie's patients "would occasionally spring to her feet, with her face convulsed, and scream obscenely. The content of these comments was usually to the effect that a fat old woman was in bed having sexual intercourse with a man who did not belong to her. She, the patient, was not going to continue to bring home her pay-packet to keep them in this situation—and she was not going to scrub the floors either" (p. 273). Such dissociation may be due in part to the tendency of the patient unwittingly to equate the affectively relevant scene in which the "referent" is located to the present, socially-defined context. It is also in many cases due to the loss of hierarchic integration, and hence it is the tendency of the autistic patient to blurt out involuntarily whatever he feels irrespective of the present context.

Striking in many cases of psychopathology is the disintegration and dedifferentiation of the relationship between patient and the scene in which the referent of the communication would normally be located. This dissolution is one of the major determinants of the bizarre appearance of patients' expressions, even if these are comprised of well-formed sentences.

In normal persons such settings may either be justifiably assumed to be known by others or may be symbolically (ideally) established. Due to the pathological person's syncretic mentality, however, all ideal relationships tend to disintegrate. The consequence is that the patient becomes immersed in the scene and conflates it with his current context. The normal person's temporary immersion in affective memories and fantasies is an approximation to this kind of situation.

The strikingly altered relationships between addressor and medium (or media) of representation are part and parcel of the more pervasive dedifferentiation and disintegration of functioning which marks the disturbed individual's relation to all of the other constituents of symbol situations and, indeed, to all of the other events in his life.

Due to the syncresis of his mental operations and to the profound impairment of his capacity to maintain purely ideal relationships (including those of symbol to intention and symbol to referent), the severely disorganized patient often apprehends the communal symbol systems (for example, language, conventional gestures, pictures) in an affective-mythopoetic way. He thus does not treat them as autonomous of himself, with relatively fixed values, and subject to stable rules of usage enjoined on all; instead he tends to assimilate them to his magical-austistic universe and to endow them with idiosyncratic-emotional significance. Construing his world

with a relatively unstratified mentality, he often has difficulty in distinguishing between the conventional values of symbols and his personal wishes, fears, images, and uncontrolled associations. Furthermore, the loss of ideality'' bars him from distinguishing items of his experience as things and actions. Thus words and gestures which the normal person would take as having merely representational values may, for the patient, be experienced as incarnate objects and efficacious actions; and ordinary objects and actions may be infused with a "mystical" significance and be perceptually transformed in terms of that significance. Such interpenetration and loss of ideality sometimes leads to the patient either to refusing to use symbols or to dismembering words as he would things that threaten him; analogously, actual or magical destructive activities may be carried out against ordinary things that are invested with malevolent significance, including as Szasz notes, one's own body. Such interpenetration allows the patient to construct his own forms and to imbue these with a significance that they have for him alone, although he may feel that this significance is obvious to anyone; hence, in part, the emergence of neologisms, neomorphisms, glosso- lalias, and the like.

These processes of dedifferentiation and of the correlative disintegrative processes may lead also, in the extreme, to a radical dissociation between the patient and the communal symbols systems. He may find it difficult to channel his diffuse-affective experiences into the

conventional linguistic forms. He may experience an enormous gap between his thought-feelings and his utterances. His own utterances and productions, themselves, may appear to him alien, external, or thrust into him from without. Sometimes they will be totally incomprehensible to him. As the rules governing the different usages of a medium (for example, language) interpenetrate—rules internalized in the course of ontogenesis and operative in the production and comprehension of symbols in their varied functions—and, as hierarchic control diminishes, the patient's utterances may become dystaxic or agrammatic or may verge on verbigeration. Within the microgenesis of a single utterance, he may sometimes be pulled by the external phonaesthetic features of words, sometimes by their syntagmatic relations (for example, horse runs), sometimes by their paradigmatic relations (for example, cow-horse, cow-calf), and so on. The final outcome may be a word-salad.

It is not possible here to illustrate all of these phenomena, but examples of several of them may be presented. It will be observed that these examples often reveal more than one of the phenomena. Consider the idiosyncratic use of communal symbol systems. It is unlikely that Rosenfeld's patient, a severely disturbed schizophrenic, used the statement "The Russians *were* our allies" to impart factual information or to speak metaphorically or allegorically; rather it appears that he gave this utterance the personal value. "A person who may appear to be your friend for a while can turn against you,

and you might do that to me." One may say in this connection that, although one cannot conclusively rule out an awareness of an allegorical intention, it seems likely here that the patient infused his vaguely sensed horror of being betrayed into the apparently neutral utterance. Such phenomena characteristically occur in early phases of the genetic actualization of thought ("microgenesis"), but are normally barred from overt expression.

In another instance of the infusion of personal meanings into conventional symbols, one of Bobon's patients drew the eye of a fish, which he believed not only gave him access to his past states, but also which he felt would also be efficacious in allowing others access to unknown realms. Again, for Mme. Sechehaye's patient, Renee, the drawing of a circle with a point in it was both plurisignificant and profound in personal meaning; the point in the circle signified both a process of disintegrating into nothingness and a feeling that in this process one would rediscover mother (p. 983).

To illustrate the transformations of "linguistic forms" into efficacious actions, one may mention Schilder's patient, who believed she could destroy objects by words, an act she neologically designated as "bumping off" *("bumbse ab").* One may consider also another of Rosenfeld's patients who felt that whenever his analyst made an interpretation he literally put himself into the patient's mind. For another example, one may take Bobon and Boumeguere's patient, Antoine, who, persecuted by a mass of invisible living

corpuscles, used "words" (and gestures) as efficacious actions to dispel or control these malevolent entities. For the patient, the spoken word was a power in itself; in pronouncing it, one perturbed whatever it designated for the utterance of the word automatically unsettled the *elementaux* that corresponded to it. The patient, himself, remarked: ". . . each word represents the material thing: it is a power, it is the stuff in question . . . you say the name of a city and you sense that the atmosphere of the city has changed . . . when you say the name of a person, you influence him in the same way; my name influences me in a certain way when it is pronounced, how it is pronounced, and by whom . . ." (p. 818). Underlying all of these instances is an interpenetration and fusion of meaning (thought), referent, and "symbol."

To illustrate the transformations of gestures into magically efficacious actions, one may again refer to Bobon and Roumeguere's patient. Antoine would stop all influx of aggressive elements against his person by turning his back to this influx, arms dangling and palms turned toward the rear. He would purify himself by allowing his arms to hang, palms turned toward his body, fingers spread. A rotary movement of his body and elevation of his head, with or without concomitant torsion of the trunk, constituted an infallible attack (pp. 816ff.).

Again, symbol-realism often underlies the avoidance and/or dismemberment of "linguistic forms." A striking example of this phenomenon

is provided by Bobon's patient Joseph, who admitted that he amputated and deformed certain words, even to the point of unrecognizability, because their use was mysteriously charged with unlucky influence (pp. 361ff.). "Certain words should not be pronounced," he said, "because they are revolting . . . because there are always words which attract bad things." Thus, this patient would use "tection" instead of "protection" because "tection is protection in the good sense. I take half of the word because protection is the bad meaning."

A fascinating example of the steps in the construction of a progressively complicated neologism (and a corresponding neomorphism) is presented by Stuchlick and Bobon. Their patient attempted to "synthesize his ideas" both in drawings and in words. In one instance he started out with the discrete notions and drawings of a fish (*poisson),* a maiden (*pucelle),* a pacifier (*sugon*), a caterpillar *(chenille),* a cow (*vache),* and a locomotive *(machine).* He next joined together, in drawings and "words," pairs of these referents: *"poicelle," "sucelle," "sucenille," "vachenille," "mache."* Then triplets: "*poisucelle," "sucelille," "suvachenille,"* "*machenille."* Finally, he constructed a conglomerate of fragments of all the drawings and names: *"poisucevamachenille."*'

There are many other phenomena in the disturbed person's use of communal media and in construction of his own vehicles of symbolization that would further reveal the tendencies toward dedifferentiation and

disintegration characterizing psychopathology.

The brief outline here of some aspects of the comparative-developmental approach to psychopathology of symbolic activity may be filled out and supplemented by the reader through a perusal of *Symbol Formation.* Explicit mention should be made of the significant works of Piro and Bobon and others, works that are relatively unknown in America.

Normal Analogues to Symbolization and Language Uses in Psychopathology

This chapter should not be concluded without, at least, a brief discussion of phenomena occurring naturally in the everyday lives of normal adults that bear a remarkable resemblance to the handling of symbolization and language in psychopathology.

Dreams

There is the dream. Freud has provided a classic treatment of oneiric phenomena. In general, he has approached these phenomena from a psychodynamic point of view, although he presents an extensive discussion of formative factors in the structuralization of dreams. Unfortunately, however, he and his followers have tended to convey the impression that the latent contents or the dream thoughts are initially more or less discrete, lexico-syntactically organized patterns which are subsequently operated upon by

acts of condensation, displacement, and the like, to produce the manifest contcnt of the dream. Whether or not Freud actually intended to maintain that the outcome of analysis is temporally prior in the formation of the dream, such a notion must be rejected by those holding to a comparative developmental viewpoint. Interfusion, syncresis, and diffuseness precede articulation and discreteness in the microgenesis as well as in the ontogenesis of explicit thought.

Due to the brilliance of Freud's work and to the spread of a psychodynamic orientation, the outstanding monograph by Kraepelin on speech disturbances in dreams has been generally overlooked in psychiatric circles. In this monograph, Kraepelin analyzes speech in dreams from primarily a formal point of view and highlights the similarities between such speech and the speech of severely disturbed schizophrenics. For a brief treatment of Kraepelin's work the reader is referred to *Symbol Formation.* Bobon presents a detailed analytical summary of Kraepelin's main points.

Hypnagogic Phenomena

Of equal importance to the study of dreams is the investigation of hypnagogic phenomena. As one knows, Silberer believed that these phenomena were susceptible to quasi-experimental control and that they could thus provide an excellent way of examining in slow motion the manner

in which thoughts are given form on relatively primitive levels of organization. Silberer's views on the formation of symbols, including his tacit belief that one is not limited to the expression of a circumscribed sphere of contents either in dreams or in hypnagogic states, accord closely with those maintained by comparative developmental theorists. It may be noted that, in the main, Silberer was more concerned with imaginal representation than with linguistic forms in hypnagogic states.

The author, in the course of writing this paper, adopted Silberer's procedure, but was oriented toward such "linguistic forms." In one instance, he dozed off as he was thinking of those very narrow views of cognition which observe the thinking process from a remote vantage point. This "thought" was realized in an image of a long road that at the same time looked like a pencil telescope; there was someone looking through it. At the same time the thought "It's a tunnel potential" was uttered. In the hypnagogic state, there was a vague feeling that the author wanted to say "tunnel vision" and was aware that "potential" was somewhat tangential to what he was trying to say.

In another instance the author had just read a passage in a work where a cautious alienist had discussed a theme to the effect that one could not be very sure concerning the nature of thought organization in schizophrenia in the absence of experimental work. Earlier in the day the author's mother-in-law had arrived with many pieces of soap for his youngest son. Earlier, too, a

colleague, noted for cautious experimentation and stringent criticisms of any conclusions not based on experiment, had been given a birthday party attended by the author. As the author dozed off, thinking about the objectivity of "clean" experiments and about the difficulty of getting impeccable information about pathological thought, he found himself hearing his colleague say "It's unjective to throw soap" in a tone which suggested that the colleague was once again railing against his bete noir.

These illustrations may suggest that the processes of symbol formation and that the genetic actualization of the transformation of "thoughts" into words may well benefit from a more thorough examination of those hypnagogic states where one can partly witness the formation of a symbolic expression "not answering the aim/and that unbodied figure of the thought/that gave't surmised shape."

Attempts to approach primitive levels in the formation of symbols in normal adults in a somewhat more orthodox, but still far from clean, experimental fashion are discussed in detail in the author's joint work with Heinz Werner, *Symbol Formation.*

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