Theories of Symbolism

The Ontogenesis of the Symbolizing Function

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THE ONTOGENESIS OF THE SYMBOLIZING FUNCTION

INTRODUCTION

The term "symbolizing function" refers to the actions of the brain mechanisms that produce symbols. The ontogenesis of the symbolizing function is a product of an interplay between the biological maturation of the brain and shaping developmental influences contributed by the environment. The process is characterized by vast, subtle, and complex detail, and complexity blurs the detail. It shrouds the nature of the maturation of symbolic forms from easy comprehension. As a result theorists are free to create impressions of the symbolizing function, which are shaped by disparate persuasions that support parochial goals. Both those who need to keep things simple and those whose thinking is served by complexity, derive something to champion and support their cause in the bewildering complexity that characterizes the ontogenesis of the symbolizing function. There results a panoply of preemptive explanations, which become awesome hurdles for those students of symbolism who seek the sources of the symbols of man in the workings of the brain. Such students must push tradition-laden explanations aside, to free the way for research designs based on the study of the repeatable, transmissible, and verifiable workings of the symbolizing function.

One preemptive explanation limits all symbols to the "simple" form. It posits the theory that there are neither unconscious aspects nor dynamic repressions during symbol formation. Only the idea that the mind produces simple transmutations is invoked. Those, who follow this approach, come to the study of symbol ontogeny prearmed with views of complex symbols that preclude objective study. Such theories conceive of symbols as elements of the personality that arise de novo at birth. "There is what represents, and there is what is represented. That's all there is to know". If there were any thought given to a contribution from an ongoing maturation of the mind to the construction of symbols in these theories, it would be only a token. Pathological alterations in the symbolizing function based on faulty ontogenesis are foreign to such theories. Symbol laden latency states are ignored and the age range six to twelve is construed to be a time period devoid of development and without a psychology of its own. As a result, in their concepts the role of the natural development of symbols in the control of affects and the evolution of

civilization tends to be unexplored.

Another preemptive hypothesis assigns the activation of dream symbols to the chance stimulation of memory traces in the brain by vagrant electrical impulses arising in the reticular ascending substance. In this hypothesis there is no place for the ontogenetic unfolding of symbolic forms.

Transcendent symbol theorists have elevated their symbols to the level of divine messages. In discussions of transcendent symbols, the contribution of ontogenesis is for the most part considered to be irrelevant. Instead, symbols are thought to appear full grown as gifts from the minds of gods. They are not seen to be the products of human mentation and brain function with its attendant ontogenesis. The deistically inspired manifest transcendent symbol comes to man from dreams or visions or the chance forms of nature. The sources and referents behind their latent contents are seen to be streams of consciousness that exist beyond the boundaries of mortal existence in places far removed from the material natural world of humankind.

Ontogenesis is of interest only to students of simple symbols and to students of psychoanalytic symbols. The studies of the former are best served by observations and reconstructions of events that occur during the first twenty-six months of life. The studies of the latter begin with the onset of the development of psychoanalytic symbols beginning with the third year of life. A knowledge of the development of psychoanalytic symbols aids in understanding the clinical characteristics and pathology of any manifest symbolic forms, which have been divorced from their referent by repression.

PHYSIOGNOMIC THINKING

Symbol ontogenesis has pertinence for theorists who study complex symbolic forms whose characteristics derive from stages in the maturation and development of symbols. The ontogenesis of poetic symbols for instance is linked to one of the vicissitudes of projection that is activated at puberty, (See Sarnoff 1972b.) and the paradigmatic roots of transcendent symbolism can be found in physiognomic thinking.

Physiognomic thinking (V.I.) is a cognitive process that attributes meaning and motivation to the movements or appearances of objects. It colors the syncretism that dominates childhood cognition early in

the first year of life. Regression of adult thinking to the ways of physiognomic thinking can result in attribution of identity, meaning, and motivation to the images, shapes, and movements of intrinsically inanimate objects, such as trees and the idols, which are used for worship. Physiognomic thinking represents a protosymbolic (primitive) stage in symbol ontogenesis. Kent (2000) described a possible neural substrate located in the amygdala for physiognomic thinking: "Increased regional blood flow has been demonstrated in the amygdala of healthy subjects in response to the presentation of fearful facial expressions." (p736.) This observation reinforces Damasio's (1999 P 62) observation that people without functioning amygdalas cannot judge negativity in faces.

PROTOSYMBOLS

Protosymbols are the products of symbolizing structures and functions, which begin to appear during the first year of life. They have characteristics of preverbal representations. (See this volume P 130.) Like the true symbol they can be perceived to represent something other than what they intrinsically are. They may be differentiated from true symbols by the absence of a clear conceptual boundary between latent contents and the manifest form of the protosymbolic representation. The face that is feared remains the face that has been misinterpreted. Physiognomic perception works through misinterpretation. True symbols work through displacement. Protosymbols when added to memory share with symbols the role of memory moieties that may carry false or altered data that will influence interpretation and participate in the symbolization of future perceptions and memory recalls.

THE ONTOGENESIS OF THE SYMBOLIZING FUNCTION

INTRODUCTION

The symbolizing function involved in the creation of simple and psychoanalytic (secondary) symbols normally grows in strength and complexity with each stage of development up to the age of 16. The symbolizing function's contribution to memory creates words or images, which enter memory as efficiently reduced representations of perception and experience. These are retained to serve later recognition, communication, and interpretation of stimuli, as well as for evocation.

At times memories under the impetus of drives or sympathetic stimulation rise toward consciousness. When this occurs after the acquisition of psychoanalytic symbol formation during the third year of life, symbol formation is available as a defense. Disquieting affect that accompanies the rising represented memory activates denial and displacement for the production of substitutes (psychoanalytic symbols).

The latter convey the represented memory in form so masked that diminished valence for attracting affect is generated.

The ontogenesis of the symbolizing function begins during the period of dominance of the affect motor memory organization. (115 months) "Affectomotor memory organization" refers to the organization of memory that dominates during the presymbolic stage of development. It is built around the ability to recall initial contact with experiences through the use of evocation of affects, perceptions, and bodily postures. Such recall is organized around sensory experiences rather than through words or abstractions. Correction of such recall through confrontation with verbalized conceptual contradictions is not possible.

Pettito(1991) noted that ". . . babbling is tied to the abstract linguistic structure of language and to an expressive capacity capable of processing different types of signals (signed or spoken)." Babbling can take place in the form of vocalization or manual expression. Babbling is an early manifestation of brain based language capacity. It is a primitive representation of the expressive capacity that can process the capacity for conceptualization into spoken and signed communicative manifestations. Babbling contains practice forms that will be converted to simple words once articulation becomes sufficiently mature.

Though simple words are available toward the end of this presymbolic stage, they are used primarily for naming. Verbally encoded memory (the use of words for retention of experiences and the communication of recall (simple symbols) is given gradually increasing priority as the child approaches 15 months. This is "verbal concept memory", (See Sarnoff 1976 P. 106.) It grows in usefulness till it dominates at 7-8 years of age.

Affectomotor encoded memory for experience is usually recalled in its entirety. This situation holds sway during the first 15 months of life. Later developed verbal and image encoded memory reduces to a

fraction the content of the original experience. All such reduced tools of recall are simple protosymbolic forms.

THE SHIFT FROM HAPTIC TO TELERECEPTIVE DOMINANCE

In the earliest experiences of the child, haptic sensation dominates. Haptic (close in, internal) sensations such as affects, proprioception, protopathic sensation, vibration, heat and cold, dominate in the recalls of affectomotor memory. They are not subject to external corrections. The haptically based initial world of the infant, is self centered, and without a remembered concept of the self immersed in a world of reality, to be used as a reference for interpretation.

During the first months of life, there is little in the memory to give interpretive shape to the diffuse incoming sensory experiences that are the phenomena of telereception, (perception at a distance), namely, incipient vision and hearing. As a result telereceptors are at first thinly cathected and relegated to unimportance. The gradual enhancement of stored items in memory, which can be used for the interpretation of visual sensation enables the creation of telereceptor memory based interpretations of perception. When these become stabilized and recognizable they contribute preconception and opinion to the interpretation of both haptic and telereceptor perception. Once fixed, they become subject to verbal confrontation, challenge and correction. The latter process provides an early paradigm for the intellectual verbal confrontations of secondary process thinking. The latter enhances reality testing and foreshadows the communicative corrections seen in tertiary elaboration (V.I.)

THE EMERGENCE OF TELERECEPTOR INFLUENCE ON MEMORY COMPONENTS RESULTS IN THE PASSING OF HAPTIC DOMINANCE

The appreciation for natural reality achieved through haptic body percepts contrasts sharply with reality testing acquired on the basis of telereceptive (i.e. visual and auditory) perceptions. The former sensations are highly personalized and are limited primarily to sensations from within the body. The latter sensations participate in the creation of a differentiated reality tested external world. Telereceptive dominance in organizing memory introduces reality testing, which supports recognition of the existence of the natural world. Haptic percepts only gradually come to be confronted by perceptions of the external world.

There is no way to validate consensually haptic percepts the way that one can use a witness to reality test shared experiences of vision and hearing. Haptic memory elements that participate in this form of perception are at first not sensed to be representations. Rather the retrieved memory is early on experienced and later on recalled as syncretic with the original experience or perception. Such a memory element is called a *syncretic protosymbol.* Syncretism no longer dominates memory when experience and memory can be *disjoined.* The ability to sense the difference between an event and the created differentiated memory of the event is a necessary step in the experience of being able to delay responses, chose reactions and create simple symbols. It underlies the ability to separate referents from representations. Once such separation occurs, repression makes possible the creation of psychoanalytic symbols.

THE AFFECTOMOTOR EXPERIENCE

What does the child experience as a characteristic of the affectomotor memory organization? During the affectomotor memory subphase of syncretic cognition, the non-communicative and non-verbal nature of affectomotor memory makes direct communication of verbally encoded observations of the inner experience of the presymbolic child's cognition impossible. The experience in statu nascendi, cannot be conveyed by the child. Even for the adult there are too few words for the communication of haptic experience to make possible the sharing of haptically oriented experience. Scientific insight into the nature of this process must be gained from other sources. One such source is the study of the mental functioning of persons with persistence of primitive preverbal cognition. Another source is reconstruction based on manifest regressions to this early stage in an otherwise healthy individual. Such regressions occur either as a result of psychological pressures or of physical trauma resulting in brain damage. The study of animal cognition is also of value.

A reconstruction of the mental experience of this aspect of the first year of life has been the target of a number of investigators. A synthesis of their work is presented here, in an attempt to offer insight into a child's memory function during "the syncretic period" when the symbolizing function has not yet developed to the point at which true communicative symbols are produced.

THE SYNCRETIC PERIOD

Werner (1940/1964) described the first stage of cognition in the child, the characteristics of which also form the ultimate stage of cognition in animals, as *syncretic* (p 53). Syncretic cognition presents to the child a view of the world in which all perceptions and concepts are experienced as fused. Sensations from outside and from inside the body boundary are not differentiated. Percepts and affects such as tense expectation (a forerunner of anxiety) are perceived as being a unit. The ambient world is a fused mass from which elements that stand out disrupt homeostasis and in the process generate affects. Though haptic, these affects appear to the child to be part of an outside stimulus rather than a response to it. There is no sense that the affect could arise from within the perceiving subject. Drive satisfying objects such as food stand out from the fused sensations of the ambient world. Hunger oriented tension is resolved without delay by eating. This creates a perception of a fused relationship between food and sensations.

SYNCRETISM AND AFFECTOMOTOR MEMORY

In the preverbal stage, memories are retained and recalled in the form of affectomotor states. The closer that representation comes to complete syncretism, the more does the process of representation recreate a "concrete natural situation" (p 253). There is no space for time delay.

Affectomotor memories and protosymbols go through a stage of first appearance and then succumb to maturational obsolescence, as a result of being overshadowed by increased cathectic attention to more mature symbolic forms. This process produces infantile amnesia for affectomotor memories. The infant's experience with symbolic forms derived from the earliest cognitive state in man, can be reconstructed from studies of regressions along the path of this developmental progression. In Werner's words (1940/64) "Whenever there is a decline in the power of the symbol, the genesis of representation is bared . . ." (p 252) A pertinent study by Werner (1940/64) described syncretic methods of representation without word symbol use. He observed ". . . in certain psychopathological conditions in which the symbolic function has regressed . . ." (Referring to a "symbol blind" aphasiac (P 152) patient reported by Head (1926) that there occurs in syncretic cognition, an ability to create "sensuous images" (p152) with a "loss of the ability to express schematic images derived from the realm of abstraction." (p

152) Such a patient's experience is limited to a "concrete life space and mode of action" (p 198) "they are bound fast to the eventual situation as it is experienced and are bereft of the capacity to execute an action according to a preconceived schema." (p 198) "Such patients have not forgotten words as such, but they are quite unable to use them . . ." (p 252) He refers to a type of aphasia in which "the intellectual ability to symbolize" (p 252) not the use of words for naming is effected. The use of conceptual and communicative symbolism is beyond the powers of these patients. They may be capable of knocking at a door before entering the room, but be unable, as a pure fiction, to demonstrate the act of knocking. (p 252)

"The function of representation is . . . much more primitive, the less intentional[ly] . . . and volitional[ly] determined it is." (page 253). Volitional behavior based on conceptualization does not occur during the stage of syncretism. There are no verbal concepts to lock plans into memory. There is no differentiation between subject and an object as a target goal. Therefore there is no context within which to orient action in affectomotor cognition.

A study of regression in dreams is another source of information about the experience of syncretic cognition. The mechanism of condensation by which two concepts (the latent content and the manifest content of the dream symbol) appear as a single representation in a dream symbol (i.e an human with the leg of a wolf) is a manifestation of regression to syncretism. Other examples of such fusion appear in mythology. Examples are metamorphoses and hybrid beasts (monsters and chaemera) such as the griffin or basilisk in Greek mythology and the makara in Hindu belief. Each of these examples give an idea of the capacity for fusion of images that characterize the earliest states of syncretic cognition. Persistence of syncretic thinking enables religious fusions in the creation of idols. The fusion of god and self experienced in mysticism[1] and god and image experienced in the transubstantial sanctifications of ancient Greek religion[2] are examples of symbolizations that offer insight into the nature of the early syncretic cognition of the child. A loss of differentiation between referent and representation occurs with transubstantiation. The process was described by Hall (1994) who noted that ". . . when an artist made an image of the sun, the moon, or a thunderbolt, it was the god himself that he was portraying." ". . . this kind of image goes beyond symbolism: it is a literal representation of a deity." (page X) "In the Dionysiac rites the Bacchantes, female devotees of Dionysus/Bacchus, frenziedly tore the beast apart and ate its raw flesh. This had a more mystical symbolism: they were consuming the god himself, just as they drank his blood in the form of wine. The bull's death released the god's power which passed to the worshippers".

(page 13)

These early symbolic forms can persist. Piaget (1945) observed persistent of syncretic thinking occurring between the ages of two and seven. As a result, "Perceptive activity, which being incapable of analysis and comparison, of anticipation and transposition, [left] the child passive in the presence of what he perceives." (p78)

The absence of a familiar object within the surround creates a reality that intrudes on syncretism. When experienced as a state of apprehensive expectation it becomes a forerunner of food oriented hunger feelings and the affects of separation anxiety. Both are evidences of disruption of syncretism. Werner (1960/48) hypothesized interference with syncretic cognition in a hungry ape. "If . . . for example, an ape . . . {believes} that he is about to get a certain food . . . , and then . . . {is} given something else he will be . . . "disappointed". ". . . the ape's representation of the anticipated fruit must not be thought of as an explicit idea. Rather, as is often the case among human beings, the prospective thing is anticipated implicitly in terms of a certain psychophysical state of tension, of a specific affective attitude. (p. 250) In ". . . syncretic representation; the object is represented (reexperienced) not explicitly, but implicitly by means of motor-affective behavior" (p 250). In this description of ape cognition, there is introduced maturation during symbol ontogenesis at the point that syncretism gives way to a self-object oriented world view. Sensations and perceptions can now be retained in the form of protosymbolic nonverbal abstractions that create memory banks, which can be used as representations for use in the interpretation and differentiation of new perceptions. The ape's reaction to food is an example. Hunger and recognition of the need satisfying potential of food cause fruit to stand out from the background. The introduction of focused emphasis on a real and wanted element in the world undermines the state of undifferentiated fusion of world and object that is syncretism. This undifferentiated ambiance is changed when objects, which satisfy need call attention to the world. Syncretism, the first stage of cognition for children, gives way to a differentiated world as the result of the introduction of such emphases. To understand the effect of experience and memory on syncretism consider the common experience of walking into a forest and at first only differentiating the trees one can name; Or consider the hungry man in a foreign land who is attracted first to the foods which he can identify on a laden table.

Syncretism seems on the surface to be a simple phase from which the child merely needs to emerge into a relationship with the differentiated reality of the natural world. This is not the case. Stimuli must be actively interpreted to form perceptions in memory of reality. Such interpretation requires a bank of stored acquired representations in memory (protosymbols and symbols) to create an interpretive context within which new perceptions can be understood.

The immature sensory apparatus of the syncretic phase has characteristics that distort sensory stimuli from the start. Perceptual distortions such as suppression and denial are innate to the nervous system. (V.I. "the physiology of visual suppression" in Chapter 10 this volume) Their presence creates inaccurate representations of reality, which are placed in the storage banks of memory. After *disjuncture* (See, this volume, Pp 119, 126.), these distortions contribute to faulty perceptions of the natural world. This process provides a paradigm for tolerance of later impaired psychic reality.

Results of research into the functioning of the visual sensory cortex has revealed details about the role of memory in shaping the interpretation of stimuli. Studying distortions of the field of view during visual processing, Maunsell (1995) found that there is selectivity in perception, which is self-determined and based upon prior experience. Utilizing "Microelectrode recordings from behaving monkeys . . ." (p 764) Maunsell showed that "neuronal responses in the visual cerebral cortex can depend greatly on which aspect of the scene is the target of the animal's attention." (p 764) ". . . while the early stages of the visual pathway provide a faithful representation of the retinal image, later stages of processing in the visual cortex hold representations that emphasize the viewer's current interest. By filtering out irrelevant signals and adding information about objects whose presence is remembered or inferred, the cortex creates an edited representation of the visual world . . ."(p 764) Memory elements that persist from the phase of syncretic thinking, can alter interpretations of perceptions of reality to the point that memories derived from them do not mirror a true image of the real world.

There are two types of impaired perception that may persist from infantile cognitive immaturity. These are physiognomic thinking and synaesthesia. These contribute to the formation of representations that fall so far off the mark in accuracy that they are not reproductions and therefore are symbolic forms according to the definition of D'Alviella. (V.S.) When these misperceptions become part of memory, the symbolic forms that they become contribute to distortions after disjuncture that influence life decisions

and perceptions down through the years. An understanding of physiognomic thinking and synaesthesia gives insight into the nature of the child's experience at the time of origin of the protosymbol memory banks that will be used in interpreting new sensations. Using this premise one can reconstruct childhood cognition as it comes to be influenced by the mature symbolizing function that produces word symbols. Insight into this process may be derived from a study of people who suffer from persistence of such early cognitive modes.

PHYSIOGNOMIC THINKING DURING THE SYNCRETIC PHASE

Physiognomic thinking refers to the apparent power of images to create a sense that they have animate life, in the eyes of an observer. The term was introduced by Werner (1940/64) who described physiognomic thinking as participating ". . . in our perception of the faces and bodily movements of human beings and higher animals. Because the human physiognomy can be adequately perceived only in terms of its immediate expression, I (Werner) have proposed the term physiognomic perception for this mode of cognition in general." (p 28) Arising during the syncretic phase, physiognomic thinking sets the pattern for later appearing transcendent symbols. Werner noted that during the phase of syncretism ". . . objects are predominantly understood through the motor and affective attitude of the subject (sic) . . ." "Things perceived in this way . . . even though actually lifeless, seem to express some inner form of life." (p 69)

THE SOURCE OF PHYSIOGNOMIC DISTORTION

The experience of physiognomic thinking in the adult gives insight into the world of experience of the syncretic child. Self-descriptions of artists . . . reveal such experiences. Kandinsky, the artist, saw the world physiognomically. He reported that "on my palette sit high, round raindrops, puckishly flirting with each other, swaying and trembling." (p 71 in Werner 1940/1964) As a result of physiognomic thinking, form can suggest animate motivation. Form and movement evoke responses from humans. This provides the basis for the "power of images" to evoke symbolic responses. Physiognomic perception is an antecedent of anthropomorphism (reading humanoid motivation into idols, animals and swaying trees.) This response is a primitive level of signal affect, which in later more mature forms, is an activating link in initiating the symbolizing process.

THE ORIGINS OF PHYSIOGNOMIC THINKING

At the inception of human cognition, there is no bank of remembered "symbols" to fall back upon. All perception is experienced as belonging to an undifferentiated surround. The interpretation of objects perceived through sight and sound (the telereceptor experience of the world) is informed by memories of recent and unchallenged syncretically diffused haptic sensations. Both self and nonself elements are included for there is as yet no boundary between the I and the non I. Touch, proprioception, fine sensibility, epicritic, protopathic, and erotic sensations are encoded in memory banks in the period before disjuncture. Since contributions to memory derived from haptic sensations are not subject to modification by confrontations, their derivatives in memory give rise to protosymbolic forms and reactions that contribute to misinterpretation of stimuli originating in natural reality. Therefore the initial interpretations of objects are free of reality constraints. The syncretism of childhood is similar to the cognitive style that gives to symbols that appear in dreams free reign to change form. As Kubie (1953) has noted ". . . in the dreams of sleep we . . . accept . . . visual pseudopercepts complacently as though they were real, precisely because no comparisons with "Non-I" reality are possible." (P 81)

In order to exist secondary process thinking (the system of thought characterized by realistic logic) requires disjuncture. The introduction of the object world into memory through telereceptor inputs established the basis for a line across which correcting confrontations derived from immediate reality perceptions can alter future interpretations of sensations in favour of reality testing. Failing this, there is persistence of haptic influence. This failure promotes a propensity for autistic personalization in the memory elements that create symbols after disjuncture. Haptic memories inform psychological responses to perceptions such as feelings of awe, tingling, and other inner sensations, which are attributed to telereceptively acquired images. Reality testing regarding haptic percepts contrasts sharply with reality testing regarding telereceptor sensations. Since they are experienced within the organism, haptic percepts cannot be challenged by external perception. There is no way to validate consensually haptic percepts. When experienced as an attribute of the syncretic global reality of the child, haptic sensations can influence the interpretation of motivation of movement and facial form in the natural world. This is part of the psychological infrastructure that produces physiognomic thinking.

SYNAESTHESIA DURING THE SYNCRETIC STAGE

Synaesthesia refers to an overflow of sensation from one sense to another. It can be understood to consist of cross modal associations. Gombrich (1956) described synaesthesia as a "splashing over of impressions from one sensory modality to another(P 366). An example would be hearing a sound upon seeing an image. Critchley (1994) defined synaesthesia as a ". . . break out from the confines of the recognized modalities of sensory perception, leading to an illusionary misinterpretation of sensory data . . ." (p 112) (The word, Synaesthesia is derived from the Greek; syn meaning union and aisthesis (as in anaesthesia) meaning sensation. It appears to have been recognized as a phenomenon as early as 1710. Synaesthesia dominates cognition in early childhood. (P 106.) It is an innate immature distorting factor in interpretation of sensation.

In synaesthesia, stimuli are reacted to by responses of sensation from neurons unrelated to the sensory modality through which the stimulus entered the brain's perceptual system. This influences the form of protosymbols by shaping the interpretation of natural reality, and in the process produces a distorted view of the world. An example is offered by Luria (1968) ". . . every sound . . . immediately produced an experience of light and color and sense of taste and touch as well." (p 24) For the naive child, these distortions are experienced as valid phenomena. Synaesthesia as an aspect of early childhood experience leaves memory traces of distorted perceptions—once or more removed from the referent. This is a feature shared with true symbols.

Synaesthesia is a characteristic of the early inputs of affectomotor memory. Displacement of sensation introduces an altered context to the memory of a perception or a recall. As a highly personal protosymbol it is a primitive form of simple symbol. An emphasized presence in early childhood presages tolerance for autistically tinged interpretation of stimuli in later life.

ADULT SYNAESTHESIA IN NORMALITY AND PATHOLOGY

Synaesthesia at any age implies the introduction of "illusionary misinterpretations" when differentiating self from object world. Synaesthetic perception can attribute a memory, which is interpreted under the influence of fused sensations to events in the natural world. Persistent synaesthesia refers to the influence of remnants of infantile fused sensations in adult perception. Such

capacity adds to skills of substitution, displacement, and condensation in seeking representations. Lack of these skills as occurs with damage to the angular gyrus (Wernicke's aphasia) leads to concept formation with impairment in finding words/symbols for representation of concepts. (see Solms (2000) p 99.) These capacities remain sufficient in healthy personalities to make it possible for the symbolizing function to shift from referents to representations in the formation of symbol substitutes.

Critchley (1994) has observed that adults with a gift for synaesthesia can ". . . receive a sensory impression, translate it into a sensory percept within the same sensory modality, and then, in the course of extracting from it an emotional appeal or some equivalent higher sensory recognition, invoke other sensory percepts" (p 112). These can involve ". . . unrelated and apparently disparate modalities of sensation; for example, the blast of a trumpet may awaken waves of golden sound." (p 112) "Somehow those subject to such synaesthetic sensitivity are able to conjure forth . . . imagery and sensation—which belong to different sense modes." (p 112)

Should the phenomenon persist in a dominating form, aberrant states such as mnemonism dominate cognition. The experience of synaesthetic perception in the mnemonist may be inferred from Luria's (1968) description of cognition in an adult mnemonist who encoded memory by using information derived from a technique like the shift in form that characterizes synaesthetic perception. The mnemonist had a perfect memory for visual and verbal percepts, but not necessarily for their conceptual meanings. He achieved a remarkable capacity for total recall by "converting meaningless sound combinations into comprehensible (visual) images" (p. 45). This complex process parallels synaesthesia, which the mnemonist had experienced extensively in early development in its simpler form. He was fixed at the sensory affectomotor level of memory organization. He could recall visual images of words. He could not recall their abstract meanings. He developed poorly the capacity to gather abstractions in memory so as to create a bank of abstract conceptions against which to compare new experiences. Never could he develop the abstract conceptual level of memory organization. "Thus, trying to understand a passage, to grasp the information it contains (which other people accomplish by singling out what is most important), became a tortuous procedure for S. a struggle against images that kept rising to the surface in his mind" (p. 113).

THE ROLE OF SYNAESTHESIA IN ACTIVATED MEMORY

Synaesthesia (cross sensory stimulation in which stimuli in one modality (taste) can activate memory elements derived from past visual experience can play a part in creativity. Proust's (1928) telling of the role of the taste of a bit of pastry in evoking a visual memory from time long lost is an example. (p. 66) He describes the passive evocation of a memory, in which taste sensation activated a visual image of a city. A cookie was eaten. The taste activated visual memory contents synaesthetically linked outside of consciousness. Taste served as an activating agent that dragged a visual protosymbol into the consciousness of a disjoined world. El Greco, while painting, obtained similar inspiration from the playing of a hidden orchestra. (Luria 1968 p 115)

DISJUNCTURE—THE TRANSITION FROM SYNCRETISM TO SIMPLE SYMBOL FORMATION

"Disjuncture" refers to the beginning of the use by the mind of the fact that need and fulfillment are not fused in the areas of aggression, sexuality, thirst and hunger. The state of fusion referred to is called syncretism. As a result of disjuncture mental substitution of alternative objects in fantasy can offer gratification in the short term. With the advent of disjuncture applied to zones of time, space, and memory, the syncretic fusion of self and object fades and capacity for delay of gratification becomes a factor in mental life. With disjuncture at first, as Kubie (1953) noted ". . . concepts and their related symbols overlap." (p.70) Then with developmental accumulations of learned skills, and acquired knowledge about the world, the child establishes a memory image, which approximates natural reality. This internal image of the world permits delay of reality gratification and the establishment in psychic reality of a boundary between the self and the world. Gratification in fantasy begins. Banks of knowledge, which are based on these internal world images become the sources of information about areas beyond the boundaries of the self. Manifest symbolic forms in thought and in fantasy—as well as memory panels needed for recognition and interpretation of new perceptions—are derived from these banks of knowledge. Disjuncture is the process at the very heart of emergence from syncretism.

Potential for delay of discharge or gratification of drives is generated when need and fulfillment need no longer be fused and delay is possible. Such a state exists after disjuncture for hunger, sex, and aggression. Delay itself readies a place for yearning in the field of awareness. Kubie (1953) in describing

the nature of the experience of unfulfilled psychic needs of the child in the preverbal early disjuncture period, commented that, "During this brief initial period . . . the infant experiences his psychic needs as changes in his vague sensory percepts of the parts, the products, and the requirements of his own body." (p. 72) This is probably an accurate description of the child's experience of the "intermediate zone of experiencing"[3] that is generated by disjuncture. The intermediate zone is not an empty space. In reality it is a zone of sensation and experience dominated by affects associated with hunger and a fear of regression to rejuncture with a loss of freedom of choice in adjustment to inner needs. The latter is associated with markedly discomforting affect. This is reconstructed from expressed fears of loss of boundaries in psychotic patients, especially those dealing with conflict related to mother child symbiosis. These discomforts can be obliterated briefly by drive satisfactions derived from substitute objects in reality such as Teddy Bears. Failing this, the space is filled by recreations informed by often errant memory systems, whose content has been limited by the nature of protosymbols (neuronal distortion, synaesthesias, and somatizations). In discussing this transition period,(ages 4 mos to 15 mos) during which the dawning of disjuncture introduces protosymbols, Kubie (1953) emphasizes the stepwise nature of the process. He noted that ". . . in preverbal stages of human life . . ." "the capacity for symbolic function remains . . . limited." (p 65)

Early on, telereceptor sensations contribute little to protosymbol formation. With the accumulation of banks of sustained telereceptor derived visual memory elements, which are connected for expression to elements from verbal concept memory, the verbal sharing of experiences with others becomes possible. Relationships between remembered concepts is disciplined into socially shared usages established by parent and child as the result of conventions arising from culturally determined ways of viewing the perceived natural world. These conventions are also protosymbols. They are called *symbolic linkages.* There is often no intrinsic connection between the elements of a linkage. The creation of true simple symbols, with shared meanings between concept and representation, and cryptic symbols whose manifest symbolic forms and latent content can only be established by free association, is derived from the bridges provided by symbolic linkages. For the psychoanalytic symbol, awareness of the connection between a concept and its representation is lost to consciousness.

In the early verbal child the symbolizing function produces images encased in words in the form of simple symbols often steeped in affect. These become tools for acquiring need fulfilling objects. An

example is the word ‘milk’.

Enhanced by repression at 24 months, the symbolizing function is set to prowl. It ferrets out words and ideas with discomforting affects and counters them with affect buffering symbols, which hide referents through the use of displacement. Imagery is created in the service of the avoidance of the uncomfortable affects of disjuncture. The world as it is seen by the child is altered. The symbolizing function produces alterations in sensed reality. Comforting fantasy landscapes that promise gratifications are created in consciousness. A false new world is expanded each day anew, ever evolving and ever influenced by sanction and support from others in the natural world beyond the self. Consensually validated rationalizations, myths that fill in the unknown and promise fulfillment for the future, such as the "big rock candy mountain", provide comfort in the deprivation prone world that opens to the child as a result of disjuncture.

SYNCRETISM AND PHYSIOGNOMIC THINKING DURING THE PHASE OF DISJUNCTURE

Man alone of all animals completes the transition from syncretic to repression enhanced symbolic thinking. Thinking during the transition stage of disjuncture is characterized by the development and use of late protosymbols.

Initially protosymbols are the products of errors in the perception of stimuli due to immature cognition. Later in development protosymbols are products of alterations in memory centered symbol content, produced by psychological mechanisms such as displacement, during disjuncture.

COGNITION DURING DISJUNCTURE

Reconstruction Based Upon The Experience Of Children And Adults Who Have Retained Or Regressed To The Emergent Phase.

Disjuncture occurs late in evolution and early in ontogenesis. It is accompanied by diminution of the contribution of synaesthetic experience to memory. Loss of syncretism between drives and objects, concepts and protosymbolic representations and bodily sensation characterize disjuncture.

The formation of true symbols begins with disjuncture. The cognitive development that takes place in the symbolizing function during emergence from syncretism was described by Werner (1940\64) as "The function of representation . . ." ". . . which expresses itself in the capacity for communicating a cognition by symbolic formulation (gesture, sound, writing, drawing), moves through a course of development from a syncretic (implicit) symbolism to one that is pure and detached." (p 250) The preverbal ". . . child is undoubtedly conscious of the symbolic values of language between the first and second years . . ."(p 250). However in the earliest phase of emergence from syncretism, ". . . language still permits a . . . use of syncretic representation (i.e., representation embedded in concrete motor-affective activity) . . ." (p 511) Here lies the paradigm for recall through regression to the affectomotor reexperiencing of somatic sensations that occurred at the time of object loss. This process underlies many forms of somatization.

THE PROTOSYMBOLIC PERIOD

Remembering through representation utilizing coordination of verbalization with concrete affectomotor (somatic) activity is an early form of protosymbol. It dominates early word use in the protosymbolic period. An example of this would be experiencing original sensations together with words. This occurs with verbalized rage.

In protosymbolic communication, language is limited to the role of a concrete instrument for obtaining need satisfaction. For example, a child points at a cookie and says cookie simultaneously. Words are synchronized with action. Concepts and words move to the center of the developmental arena. During this first stage of the acquisition of words for naming, the name and the thing it represents are felt by the child to be aspects of the same phenomenon. Language is not used to express abstract thought on a communicative level.

When caretakers delay response in late childhood, they open the door to abstraction through the introduction of "no" and delay tactics that force the child to use words for communication. Words come to be more than servant-like (syncretic) extensions of the child. They become differentiated objects with which one can influence. Children learn to use naming words in the service of requests and concept words in the service of communication. This implies the ability to influence others who are recognized as

beings separate from the self and capable of being influenced. Word usage expands to permit communication to others within a flexible world with future potential for change in response to verbal demands and planning.

NOTES

1 See Underhill (1955) p 413 etseq.

2 See Harrison (1903) pp490-91.

3 See Winnicott (1953) p 239.

EARLY WORD USAGE

Sandler (1962) described a transition, which begins with transient syncretic cognition and ends with enduring existence for images and associated concepts. Transient syncretic cognition involves momentary sensory ". . . images (that) are at first initially indistinguishable from experiences of need satisfaction."(p133) "(E)nduring existence" involves an image that can persist after the stimulus that initiates it has ceased. From images that can persist there can be developed representation based on stored banks of enduring symbols "constructed out of a multitude of impressions". (p 133) Enduring existence (called by Sandler "representation" (page 133) is needed to produce the sustained and permanent thought content to which words can be attached. This sets the groundwork for the transition from a mental *life* of immediate need satisfaction to a mental life consisting of preparation for need satisfaction based on memory and preinvolvement in time with a conceptualized need satisfying object. According to Piaget, such enduring representation cannot be well established before the 16th month of life, when symbolic play with simple symbols is established.

Drucker (1979) described the transition that marks the phase of emergence from syncretism that characterizes the two stages in early word usage. The earlier stage is called "the "endowing process." The term refers to the acquisition of mental representations. By the term ‚endowing' [she] refer[s] to a psychic operation in which an aspect ofpersonal experience is imbued with subjective ‚meaning,' however organized or mentally represented. No requirement is made that the symbol thus created be communicated nor communicable, nor that it could be expressed tangibly. (p 35) The later stage is called the "representational one" (p35) In the representational stage, the communicative potential of words that share meaning through convention is introduced. Drucker's transition, which occurs during the second half of the first year of life is a paradigm for the shift from evocative to communicative symbols that marks the cognitive shift implicit in the move from late latency to early adolescence, (see below) which supports reality testing and sanity.

Reconstruction of cognition, during the presymbolic period of the phase of emergence from syncretism, may be found in Werner's (1940/ 64) comments on adult cases with cognitive regression due to cerebral trauma reported by Head. One such case was that of a man who suffered from symbol

aphasia. Essentially these people are bereft of mature symbols. (P 198) They retain word representations. Their words are used for naming but lack a communicative role and cannot be used to imply the future. Such words are evocative simple symbols. Werner noted that the aphasiac who is *symbol-blind* is ". . . forced back into a more primitive, concrete life space and mode of action. [Locked into] the confines of the immediate event, and . . . limited [in] the ability to behave in terms of an anticipatory scheme of action." (p 198) ". . . action requiring some sort of prevision becomes increasingly disrupted . . ." They are bound fast to the eventual situation as it is experienced and are bereft of the capacity to execute an action according to a preconceived schema. (p 17) or be influenced by the implications of action for the future.

The stage of development described by Drucker and by Werner establishes a developmental line along which regressions produce the clinical manifestations seen in children and adults who regress to an affectomotor level. This is seen in periods of psychosis, certain psychosomatic conditions, posttraumatic states, and during intoxication. Claims that symbols improve during intoxication with certain drugs lose sight of the fact that the symbolic forms experienced are protosymbols with little integration into a world containing communicative symbols and a future. Cathexes (attention energies) are limited to self and the here and now in the areas of space and time.

Sandler's emphasis is on need gratification while Drucker places emphasis on the acquisition of the communicative function of symbols. Sandler's transition occurs earlier in development than Drucker's transition. Drucker (1979) describes a line of development that takes a child's use of symbols from an evocative to a communicative mode, She begins with syncretic (momentary) images, then takes us through Sandler's "endowing existences" (persistent images) and then leads the way to simple symbols used in a communicative mode.

PLAY AND DISJUNCTURE

PASSIVE AND ACTIVE SYMBOLIZATION DURING EMERGENCE FROM SYNCRETISM

Physiognomic thinking is a forerunner of passive symbolization. Physiognomic symbolization starts with the use of awe-inspiring stimuli as automatic activators of reflex responses. The process is syncretic.

Passive symbolization relates to acquired response to external stimuli. Active symbolization refers to the creation of symbols in the interpretation and communication of memories and perceptions. Physiognomic and passive symbolizations are earlier in evolutionary and ontogenetic origin and development than actively produced symbols.

Many animals can play. The larger the brain, the more play is possible. In playing, the animal utilizes the capacity to separate needs and drives from their specific satisfying objects. Such schemata of behavior, which are independent of immediate gratification, are disjunctive. The ability to play is a manifestation of disjuncture. In play, energies are diverted from fixed patterns of drive gratification (i.e. syncretisms).

Initially the relationship between drive and object is a syncretism. It is hard to conceive of breathing without including air in the concept. No disjuncture of respiratory need from its object of desire is possible. Drive object disjuncture is limited to the expression of hunger, sexual and aggressive drives, whose discharge can be delayed. It is also manifested in support of the denial that is mobilized to deal with the force of drive equivalents such as feelings of love and fear of death. In the latter case, eschatology fills the empty space created by the otherwise unanswered question, "Is there life after death?" Drive object disjuncture establishes a zone of flexibility when obligatory drive objects are lost. The blank check produced becomes a playground for the symbolizing function and for creativity. Within this zone, displacement, condensation, and delay can result in the production of substitute representations, which attract the child's attention from reality and become the objects of play.

Active symbolization develops with the appearance of disjuncture. In both phylogenesis and ontogenesis, play symbols are direct substitutes for gratifying elements. They are a primitive form of symbol.[1] Cryptic (complex) symbols eventually become the highest evolutionary derivatives of the process of drive object disjuncture. With the development of the capacity to form cryptic symbols, the stage is set for the emergence of man, a being capable of thinking in contexts of disjuncted future time.

With disjuncture, drive discharge is freed from syncretic response. It becomes associated with fantasy and symbolic play objects. At about 26 months, manipulation of three-dimensional toys as ludic symbols to represent fantasy concepts extends the coordination of schemata to include drive discharge

fantasy play. At about eleven years of age fantasy derived play objects are replaced by fantasies about real people as objects for the discharge of drives. The transition is called ludic demise. (V.I.) It parallels an increase in reality testing.

PHYSIOGNOMIC SYMBOLIZATION DURING EMERGENCE FROM SYNCRETIC COGNITION

The form of found objects conveys meaning based upon physiognomic response. Resemblances to familiar or dangerous forms gives power to new images. It is not uncommon for a young child, as a neophyte symbolizer, to utilize objects found in the environment as symbols around which to build distorting fantasies. The use of real objects as symbols precedes the use of spontaneous verbal symbols in the creation of distortion fantasy. (i.e. fantasy with controlled affect and content and that stifles unbridled affect),[2] This phenomenon is a paradigm for the early latency child's use of found symbols, encountered in fairy tales and stories, for the discharge of his own drives. Because he adapts rather than actively creates the symbols, the process is called passive symbolization. Symbols and tales passively acquired become prototypes and precursors of the spontaneously produced masking symbols and fantasies in the state of latency. The use of passive symbolization becomes the basis for cultural capture in latency and conformism in later years.

COORDINATION OF SCHEMATA
[THE ROAD FROM THUMB TO FANTASY]

Piaget introduced the concept of motor patterns called schemata which become coordinated with each other in such a way that they can substitute for one another in the expression of a drive. Piaget's theory of the coordination of schemata affords a point of contact between motor activity and drive discharge, through which drives can cross a bridge to discharge through substitute activities and objects. Such substitute manifest activities and objects have a potential to serve as do true masking symbols. New schemata used for libidinal drive energy discharge can become linked to older schemata, They offer through displacement of function, a pathway for drive discharge, when the older schemata becomes unacceptable. The arrangement resembles a relay race in which a baton is carried through a whole race by a progression of runners. Handing on of the drive is a form of displacement. The availability of substitute discharge pathways permits delay of gratification. The original object, if forbidden or conflict

prone, may be set aside to make ready a space in time and place, where wishes can search and play.

There follows a description of the series of coordinations of schema that takes need fulfillment from sucking to fantasy. While a child is at the breast or bottle, the pleasure that he experiences is obvious. During nursing, his hand plays with mother's hair or clothing. The thumb is sucked while the blanket is stroked. When the breast or bottle is removed, the hand continues to search for comfort using fingertips to rub hair or clothing. When the hair ceases to be available. Substitutes such as a blanket or fuzzy strip rubbed between the fingers continue to be associated with pleasurable sensations. Then a new schema, used to take over the discharge function of sucking and finger play, is introduced. Responsibility for drive discharge function shifts from physical to mental activity and from affectomotor concepts to simple word symbols as the result of reading bedtime fairy tales. Then fantasy using simple symbols and words, which represent need satisfying objects are introduced. Fantasy now can replace suckling and finger manipulations as a means of drive gratification. It has the advantage of taking place in precincts of the mind beyond a mother's reach.

In healthy circumstances the strength of old motor schemas is dissipated and verbal symbol loaded fantasy becomes the dominant pathway for drive discharge. Psychoanalytic symbols add cryptic representations of lost objects. New objects sought in these fantasies are cryptic substitutes for lost objects. A paradigm for adjustment to loss through realistic object seeking involving available new objects is introduced. In latency they can even serve covert discharge of tensions through the acquisition of patterns of fantasy derived from passive participation in the reading of stories. In early adolescence they become templates for planning the future and finding objects for love and comfort in reality.

In less healthy circumstances, the pleasure driven cathexis of hair, blanket or any other element of the original syncretic phase unit persists. Objects involved in such persistent attachment are called transitional objects. Their persistence underlies the development of a fetish. At the very least, a paradigm is established for adjustment to loss through maladaptive attention to thoughts and behaviors, which echo the past and foreclose the future.

Literature and clinical experience are mines for incidents of transitional object related unresolved mourning. Examples are Tennyson's "Enoch Arden", Schiller's "Ritter von Togenborg", and Ruppert

Brook's "Dust".

A related clinical extract follows—

> Saddened by his wife's death, Paul, a professional man in his early sixties spent his days wandering about the places they had loved. Foremost amongst these were great halls where their joy in music
>
> had been shared in squandered abundance. They held hands at those great themes, which in privacy accompanied their acts of love. Years passed before he turned to the living for his future. By then his time was short.

DISJOINED DRIVE DISCHARGE PROTOSYMBOLS

TRANSITIONAL OBJECTS, SUBSTITUTE OBJECTS AND FETISHES

Protosymbols are primitive symbolic forms, which are not wholly differentiated from their referent. Included in the group of protosymbols are innate responses to stimuli, synaesthesias and the intuitive interpretations implied in physiognomic perceptions. Protosymbols emerge in statu nascendi before true symbols develop. They may be observed in later life as persistent preverbal elements and during stress induced regressions to primitive forms. Protosymbols are not symbol precursors as much as they are epigenetic products of the maturing factors and forces that will eventually give rise to symbols. Abnormalities in the surface manifestations of protosymbols do not presage abnormal symbol formation. An intermediate form of early symbol is body organs or functions that are used to represent affects or other organs (i.e. tears for sadness).

Yahalom (1967) addressed the question of differentiating late protosymbols from symbols proper. He established a theoretical differentiation between substitute objects, fetishes, and transitional objects, and simple objects used as true symbols. The former are not differentiated in the child's mind's eye from the referent, (p 380) though they may serve as a forerunner way station on the road to the creation of true symbols. The absent parent can be replaced by a protosymbolic object, which because disjuncture is not complete, is not wholly differentiated in the child's psychic reality from the parent. Simple ". . . symbolic objects *are representational"* (italics his) (p 380). A functioning observing ego can recognize this. The essence of the simple symbol is that it is a representation that can be differentiated by the creator of the symbol from the referent (latent content).

Once there is disjuncture, it becomes possible to feel deserted by others and become aware that one is alone. There develops new attention to telereceptor sensation. The fact that telereception can be shared, validated consensually, communicated and used in the construction of symbolic forms results in the intrusion of reality testing into symbol formation and fantasy. This causes symbols to be reshaped so that they both represent latent content and mutually agreed upon conscious meaning. Repression of recognition of the relationship between the referent and the representation creates the psychoanalytic symbol.

LATE PROTOSYMBOLS THAT PLAY A FORERUNNER ROLE IN THE ONTOGENESIS OF SYMBOLS

An important step during the first year of life is the development of the capacity for spontaneous recall of the image of a mother who is gone. Some theorists suggest that when the recalled image of the parent is recognized as not present in reality, an empty space is recognized to be present by the child. I prefer to think of this space as an affect lined cavernous need. The need space which the awareness of a mother's parting leaves in the consciousness of the child serves as a canvass upon which the child can create images to be used for comfort. There are three such entities. These are transitional objects, fetishes and substitute objects. The new image recruited to fill the void becomes a protosymbolic substitute for the lost object, whose presence staunches needs. Recognition that this *substitute* object representation is separate from the lost object would be necessary for the creation of a simple symbol to represent it. Repression of this recognized link produces a psychoanalytic symbol.

Normally the emptiness is filled by the presence of objects (smooth cloth, fuzzy toys) that serve the feeling imagery that attempts to fill the need for the lost object with subjective remnants of a syncretic yesterday. These are transitional objects, which eventually may progress to serve the mental images that strive to place newly cathected substitute objects in fantasy contexts. The latter fantasies presage the symbol populated fantasies of the late three year old, which in turn presage the discharge mediating fantasies of the latency age child, which in turn presage the adolescent fantasies which shape choices from the people populated realities of maturity.

A pathological turn is possible here should the transitional object not become disjoined from the subjectively experienced syncretic self-world unity and not go on to serve communicative needs. Instead

it becomes locked in place and becomes a fetish. This process was described by Winnicott (1953), who noted that "Transitional objects [in contrast to substitute objects], may eventually develop into a fetish object and so persist as a characteristic of the adult sexual life." (see Yahalom, 1967, p 380) A fetish is defined as a possession or part of a loved object, which is used as a sexual stimulus or object (i.e. a shoe or underwear). Persistence of odor is important. Merck Manual (1987) describes fetishism as "The use of nonliving objects as the preferred exclusive method of producing sexual excitement . . .", ". . . the fetish is required for erotic arousal. Commonly used fetishes are female undergarments, shoes and boots-less commonly, parts of the human body such as hair or nails." (p 1498). Hinsie and Campbell (1960) described the use of the fetish thusly: "Persons who "are unable to love a real person to whom they are attached, may carry out all the pleasures of love through the agency of some object belonging to the loved object. A lock of hair, a handkerchief, a shoe, a glove, anything, may be looked upon as the reembodiment of the loved one." (p 297) Yahalom noted protosymbolic qualities shared by this concept with Greenacre's 'somatopsychic structure' which serves as an image but not a symbol." (p 380)

A COMPARISON OF SUBSTITUTE OBJECTS AND TRANSITIONAL OBJECTS

Substitute objects (new loves, and realistic future goals) have the potential to attain the status of a symbol associated with communicative potential and reality roots. Transitional objects (blankets, hair, thumb) have different roots and directions. They are evocative and are more shaped by past impressions than are substitute objects, which look to the future for its sources.

The transitional object is a remnant of the parent-child syncitial fusion unit that exists during the early months of life. In the absence of the parent, some components of that fusion persist. They perpetuate the unit in the child's mind's eye and protect the child from a sense of loss. The substitute object is experienced by the child as differentiated from the parent-child syncitial unit. The transitional object is a persistent part of the syncitial unit. Transitional objects are remnants of a comforting complete entity, bits of which are left over as comforting souvenirs at the point that disjuncture becomes possible. As fetishes, they have the potential to serve as a narcissistic tool for sexual expression in the absence of a differentiated object.

Substitute objects replace the lost object with representations that being new, are changeable and

representational. They offer the possibility of useful adaptive future adjustment. Transitional objects and fetishes being drawn and sustained from the population of the syncretic world, are backward looking and reinforce narcissism. A memory element experienced by the child to be an extension rather than a representation of a referent for the lost object is a transitional object. Transitional objects are old, unchanging, timeless and are not representational. Rather, they, like dried roses, are backward glancing perpetuations of a lost yesterday. They are as adaptive as a teddy bear at a college interview. Substitute objects are primitive symbols, sought out as objects to represent latent contents, which are drawn from a world that lies beyond the self and futureward in time. Substitute objects are representations that provide a new form to replace a lost object. This process of replacement is paradigmatic for the adaptive replacement of fantasy symbols by reality elements in the development of future planning in early adolescence. Substitute objects become symbols when there is disjuncture and when the memory banks that are used for interpretation turn stimuli into perceptions and personalized memories that can be experienced by the child as separate from that which was the parent child syncitial unit. As Yahalom (1967) has noted such "*mental representations* . . . make possible mankind's unique ability to form and use symbols." (p 382) The formation of representations is part of the capacity to find "meaning in sensation". "Texture must become feeling; sound must become listening; sight must become seeing . . ." (P. 382).

In a panel (Hartke 1996) that dealt with symbols and psychic reality, (including Hartke (1995), Blum (1995), Gibeault (1995), and Mateu (1996), the concept of an empty space where once there had been need gratification is taken as the starting point for the understanding of the ontogenesis of symbols. The empty space is filled by the creation of an object conception, which in memory becomes a substitute for the object in the development of one's personal psychic reality. Memory elements are created which compensate for lost or absent objects. Such memory elements can become referents, which manifest symbols later represent.

From the standpoint of a Child Psychiatrist, painful affects of loss characterize the first subjective experiences of this space. To compensate for such affects, concepts and images that promise need satisfaction are generated. In psychic reality they provide a haven from discomfort. These ideas and images are neither subject nor object. They retain the potential for gratification of the original syncretic unit. This is a product of the child's impression during the early years of cognition; the word and the

thing it represents are considered to be one. The non me intermediate space grows between self and world during the phase of disjuncture when the object can be experienced as gone. If part of the lost object is evoked or recreated as the result of poor or repressed reality testing, a transitional object is invoked. Where the sense of loss is diminished by supplies from present reality, it is a substitute object to which the child is responding.

WHEN PSYCHIC REPRESENTATION BECOMES A SYMBOL, WHICH IN TURN BECOMES A REFERENT.

Ability for persistent recall of the object when out of sight is a preliminary step in the creation of the psychic representation (referent) to which symbols refer. Memory and manifest symbols both contain representations. A mental representation in memory can be considered to be a thought symbol. The lost object is represented by an idea, which is perceived in the mind's eye. It is a preliminary step in the creation of a simple symbol, which is an idea given a form that can be perceived in one's consciousness of self and other. When a memory trace finds expression in words, it becomes the spoken word representation for the referent. A memory trace (not the subject and somewhere short of the object) when placed by the child in a space between the zone of memory and natural reality promises a reexperiencing of gratifications experienced with the lost object. This phenomenon occurs when departure of the caretaker and separation can be perceived by the child. In times of need the representation moves from memory to manifestation in the form of a transitional object such as body parts or a preexperienced object found in the natural world, such as the thumb or a blanket (transitional object), or in a newly discovered substitute object that lends itself to an exploration of future reality such as new caretakers (teachers) and friends. Substitute objects are forerunners of manifest reality-based symbols. Simple symbols first appear when self-object differentiation provides a sense that referent and manifestation are separate.

Early cathexes of objects in response to loss provide a paradigm for the direction of cathexes that occur when loved objects are lost by adults. At first, during mourning the lost love is recalled intensely. One of two further responses may occur. On one hand there may occur pathological extended mourning in which there occurs enshrinement of the lost love including saving locks of hair, a search for shared melodies and avoidance of new partners. Memory of the lost love attempts to recall her from oblivion. Such pathological mourning echoes the child's link to the transitional object. On the other hand in a

healthy resolution of mourning, old memories fade and real world objects are sought. Like Antaeus who regained strength from contact with his mother, the earth, memories need contact with their source to refresh their strength. With the extended absence of the original need-gratifying object, the mind goes in search of a new real world object as a substitute for lost love (communicative symbols). The new relationship soon ceases to be a substitute and takes on a life of its own. Through practice the newly found symbol becomes the new object, offering need satisfying characteristics of its own and generating new hopes in place of the memory of old objects.

Transition in the nature of the mind's symbolic use of the manifest world is central to the process of mourning. It contributes as well to the process of change in psychotherapy. The need satisfying characteristics of older and original love objects influence the selection of the symbols, which represent a lost parent in transference and in finding new love objects. Primary objects such as parents and close family members (see Jones 1916) and body parts serve as the initial source of the referents for simple symbols. Only at the point of recognition of sensations of unrequited need in the "empty space" does the referent expand its base to include sources from beyond the self.

Jones' (1916) description that says, *"All symbols represent ideas of the self and the immediate blood relatives . . ."* (Italics his) suggests an ontogenetic hierarchy. The earliest referents for symbols are organs and body parts (Ferenczi 1912 p 279). With disjuncture, memory stored referents expand to include telereceptor realities. In the panel referred to above, these materials are most strongly suggested by the work of Gibeault (1995). Memory derived from sensations expands. The content of referents includes realities, which as in the case of dream elements can also serve as manifest symbolic forms.

The timing of the acquisition of external images as memory elements to be used to represent another referent symbolically in the absence of direct sensory stimulation from the object, was identified by Piaget (1945) as occurring at the end of the sensorimotor period. That would be at about 18 months. (p 97) At that time the source of elements to be used in representation goes from haptic affectomotor feeling of loss to better defined mental representations of the lost object. These substitute objects are symbolic forms, which stand at the brink of true symbols. Creative utilization of the substitute object follows. This refers to the image of the parent being symbolized in consciousness by a reworking of memories associated with it. The referent goes forth from the mind to the world, through a symbol, which

bears its escutcheon.

As life progresses symbols take on the coloration of new experiences. Old referents become dim memories. They seem to have been left in the past. In reality they are not completely left behind. In the form of memory moieties they themselves serve as internal abstract symbols for the lost object. They inform the selection and interpretation of manifest substitute objects. They interpose an abstract step between the latent content and the manifest symbol. They are different from the transitional object of Winnicott. They do not consist of continuing physical remnants of the old relationship. They are derived from the products of an abstracting internal step, which creates referents out of memories of the lost object.

Such internal representations are determined by the content ofintrojects. These are accumulations of affectomotor experiences of loved objects, which coalesce to produce memory for the objects. They offer memory based content about lost ones, which guides the shape and selection of symbolic representation of parents. They create a prexisting informational matrix through which symbols, which evoke or communicate to achieve drive discharge, can reassert affect related content. The contribution of the memory content to the final form of the true symbol, is ultimately limited in its influence by the reality of the natural world.

DEAFFECTIVISED WORDS

MEMORIES ALTERED BY DIMINUTION OF THEIR ASSOCIATIONS WITH AFFECT

A memory moiety which retains content without affect though similar to the original experience offers to conscious awareness only a partial memory for the total experience. Removal of affect is a necessary step in the development of memory referents and a necessary step in the production of effective cryptic symbols. Failure of this step produces the affect porous symbol (q.v.) True symbolism appears when there is removal of affect accomplished by displacement of cathexes to a substitute representation.

A symbol is an affect binding representation of that which is not in the focus of conscious awareness (see Gibeault 1995). Ideas and words that remain unchanged in content with altered associated affect,

are sufficiently modified to be identified as a symbolic form and not as a quasi-accurate representation.

In the formation of simple symbols, there is a need to isolate the referent from the affect that would make it a complete but discomforting memory. If this were not the case, affect would interfere with the ability to think clearly and to learn. For a word to become a simple symbol used for communication, it must loosen its connection to affects that distract from the shared logic of society. This process (deaffectivization) begins at the end of the first year of life. A simple example of the deaffectivisation of words as it appears in adult life would be the neutral presentation of unpleasant content isolated from affect during medical lectures. When through isolation, a memory is shorn of its affect, verbal representation becomes possible in place of unaltered affectomotor recall. On the other hand, cryptic and psychoanalytic symbols are formed when affect is diminished by changing the word used for representation to one that is more neutral.

Words that serve to convey memories become more neutral as affects diminish. Early in this transition, words retain remnants of the affect they represent. (see Ferenczi 1911, pp. 139 and 145). The affect-laden meaning of words succumbs to an "infantile amnesia" at about six years of age. At that point use of words for neutral communication moves to center stage. When affect is removed from word representations of natural things greater neutrality and clarity can be brought to bear in solving problems related to the management of reality.

In the child who is developing normally, improvement of the apprehension of reality, as culturally defined, is contingent upon a shift in the emphasis of the cognition used in memory from affectomotor hallucinatory memory to a memory organization based on verbal conceptual elements, which are susceptible to secondary process confrontation based the verbal challenges of others.

Such cognition (verbal conceptual memory) dominates from 6 to 8 years of age. At 8 years challenges by socially clued reality, based on the intrinsic nature of natural reality, becomes a part of secondary process dominated confrontations. The development of cognitive memory based on abstract concepts begins at about eight and strengthens till at eleven to twelve years of age, proverb interpretation based on abstract cognition becomes possible.

Deaffectivization of words is emphasized in the latency period. The fantastic objects that populate

early latency imagery have more in common with primitive emotionally charged words than with affect neutral words. With the onset of late latency, words with a less charged tone representing neutral reality objects are introduced as fantasy objects.

In adolescence, thought links to fantasy can be reduced. The objects chosen to populate fantasy tend toward realistic affect neutral ones. With this change in the nature of its symbols, fantasy is converted to future planning in which the future is organized with a focus on the future and reality.

REAFFECTIVISATION AND ART

In the creation of an art form highly charged personal latent content is hidden behind seemingly neutral symbols. This is achieved when Psychoanalytic symbols are created through displacement, to a representation, accompanied by diminution of affect. In the appreciation of art, reattachment of affect to a symbol is an important concomitant. In presenting a symbol laden story on the stage, the addition of music reasserts the capacity of the symbol to evoke affect in the listener. This creates a more effective simulacrum. The production of movies, operas and plays can be made more effective and compelling when empathy and catharsis in the audience is encouraged by the use of music and metaphors for affect which restore the power of affect to the symbolic image. Music, melody, and verbal rhythms reaffectivise symbols. The world they create through symbols is a world with an intensified capacity for reparative mastery, discharge, and catharsis through art.

PSYCHOSOMATIC REPRESENTATION

A protosymbol, found within the affectomotor memory organization consists of manifest bodily sensations (affects) or organs of the child's body. The latent content that they represent consists of other affects and organ functions. Examples of such protosymbols are tears, which express sadness, and bowel discharge which expresses fear or rage. These are a part of childhood experience, which provide a template for regressed or displaced expressions of feelings in later life.

SYMBOLIC LINKAGES

A symbolic linkage contains a referent and a protosymbol. It consists of a personalized connection

between an idea or memory as referent and a verbal or material element that could be used as a symbol. Displacement uses symbolic linkage as a guide in finding the manifest symbolic forms to use as a representation for a referent. A paradigm for this exists in incorporation and in diffuse primitive early synaesthesias. Incorporation refers to identifications with parents based upon memory traces of parents experienced in terms of body sensations including distorting synaesthesias, skin contact, odors, and cleansing. Symbolic linkage between parents and body parts are established through incorporation. Memories established through the evocation of incorporative sensations and synaesthesias set up symbolic linkages that permit aggression aimed at the parent to be turned upon the self (masochism or suicide) as a representation of the parent, or expressed through the organ substitute (asthma and mucous colitis). Aggression, guided by this regression to personal somatic protosymbolic representation, is directed toward the self.

For example, Marla was a fifty four year old married female diagnosed in 1955 as having an Involutional Depression. She had been admitted to a psychiatric ward following an unsuccessful suicide attempt. When asked for the reason for her suicide attempt she spoke of herself as deserving death because she was a thief. No supportive information could be obtained. Her father with whom she identified had been imprisoned for theft.

DISJUNCTURE AND THE CREATION OF TRUE SYMBOLS

The presymbolic cognitive period ends when haptic dominance passes, telereceptor based confrontation enhances reality testing, and syncretism gives way to disjuncture. Confrontation and an ensuing correction of impressions to conform with shared societal concepts accompanies disjuncture at the end of the first year of life. This foreshadows the transition from evocative to communicative symbolization that befalls the psychoanalytic symbol during late latency, early adolescence. The affectomotor memory system is associated with excellent rote memory for preverbal experience. The acquisition of verbal memory interposes an additional layer into the memory systems. This new verbal complexity adds to fragility in the accuracy of evocation and recall of events and affects. Images and words can be remembered without accuracy in the recall of meaning. An example of this would be a child who can recite Shakespeare by rote or the recall with altered affect, which characterizes and makes possible psychoanalytic symbols.

Having reviewed the ontogenesis of the structures and functions that produce symbols, we turn in the next two chapters to the ontogenesis of the specific symbolic forms that are generated over the years.

NOTES

1 See below, symbolic play of Piaget, the ontogenetic equivalent of the phylogenetic play symbol.

2 In the chronology of cave art, stone shapes are adapted to create representational forms earlier than the creation of art on flat surfaces. This is an early manifestation of the persistence of physiognomic thinking in symbol formation (active and passive symbol use) and explains in part the power of images.