The Ontogenesis of Symbols From Birth to Six Years

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REVERBAL COGNITIVE MATURATION LEADING TO WORD USE

During the mid months of the first year of life, maturation in perceptual awareness accompanies waning of syncretism and synaesthesia. One product of this waning is the loss of the sense of timelessness. This change underlies the acquisition of the experience of memory as a retained affectomotor experience (remembered early perception) in the context of time passing. Such sensory memories contribute to the body of retained experience that influences the template by which new perceptions will be categorized or judged. Using earlier impressions as a source, memories shape the representations used to interpret the world. Affects associated with recall of these memories activate denial. Substitute formations (symbols) to which attention is directed in response to denial populate the memory contents that shape conscious psychic reality. Fluidity characterizes interpretations, which are based on affectomotor memory. Fixing of concepts awaits the dawn of words, whose ability to fix meanings leads to the mutually agreed upon interpretations of perceptions that characterize verbal memory systems.

THE DAWN OF WORDS

The forms of a child's words begin with sounds (babbling), which signify concepts and things. Evidences of such non-verbal representation occur before eight months. The inner experience, occupying the mind of the eight-month-old, expressed in these representations are feelings, visual images, affects, and ideas without words such as you will find while searching for an inexact cognate word when trying to go from one language to another. Such elements exist from the time the child has the capacity for recognition recall. This was underscored by Barinaga, (1995) who pointed out that "... human infants, ... recognize individual vowels and consonants common in their language before they learn words, phrases, and sentences."

We can only know of the nonverbal child's capacity for concept formation when there is some evidence, which impinges on the world, such as a planned action that will produce an effect on the

environment. An example of this would be crawling up a stair to obtain a favorite toy. Once established, the concept is linked to a found or remembered sound, or to a word or phrase used by a caretaker to represent the concept or action. Linked to the concept, the word becomes the representation.

For the most part words are passively acquired from older verbally proficient people who eagerly await a child's acquisition of the ability to use words for naming and later for communication. Spitz (1945) described the importance of this interest by the parent for infant survival. Without this attention no word use is developed and the child suffers developmental arrests, depression, inanition and even death.

PERSISTENT PRESYMBOLIC NON-VERBAL THOUGHT PROCESSES

At the end of the first year of life, words are introduced for thinking, remembering and communication. They quickly achieve dominance in these areas. In spite of this, preverbal thought processes steeped in haptic cognition persist. They provide mechanisms for automatic responses that are ever at the ready to push aside verbal logic (telereceptor cognition oriented), encouraging impulsive behavior and emotional reactions. Verbal activity alone permits access to conscious reflection.

Preverbal mental activity exists beyond the realm of conscious reflection. Preverbal thought processes assert themselves during states of regression, psychoses, intoxication, and creativity. They appear as a component of the dominant visual aspect in dreaming. In regressed selection of sources for planning and the formation of concepts priority is given to sensation over words. Freedom from verbally encoded logical limits on thought and behavior is produced. Such thinking, which is characteristic of preverbal mental functioning, gives rise to fight or flight behavior. It facilitates application of the illogical healing balms of fantasy that soothe wounds which follow in the wake of the child's felt loss when he becomes aware that his unity with the world, which is associated with syncretism is a false perception; and he realizes that parts of the syncretic unit are beyond one's control; and once unchained, can wander off.

STAGES OF WORD USE

At the earliest, word usage is acquired through a two-phase process. This consists of two stages

beginning toward the end of the first year of life (6-8 mos.) These phases were described by Drucker 1979). The earlier stage, ". . . the "endowing process" refers to the acquisition of mental representations that imbue personal experience with subjective ‚meaning,' however organized or mentally represented. During the first phase, there is absence of the frozen state associated with words, which results from a ‚locked in' communicative shared meaning. The preverbal child who has achieved remembered non-verbal affectomotor concepts is capable of making spontaneous poetic recreations of a world drawn from remnants of experience. Freud (1961b) in described this phenomenon, wrote, ‚Every playing child behaves like a poet, in that he creates a world of his own . . ." Emerson opined that "Every word was once a poem".

The later stage was called by Drucker (1979) a ". . . representational one . . ." (p35). At this stage, words are drawn from parent provided vocabulary banks, which by convention are linked in meaning to the memory encoded conceptual patterns of the endowment phase. These become the simple verbal symbols, by means of which validatable and reliable communication between minds becomes possible.

The capacity to produce spontaneous yet universally understood verbal representations for thought contents is a characteristic that is achieved with the transition to Drucker's representational phase. This development is illustrated in the following clinical vignette.

The parents of an eight-month old child had an intercommunication system, which permitted them to hear in their bedroom, sounds emanating from their child's room. It had been explained to the child that if she would say "Mommy" her mother would come to her. Recognizing the word was easy for her. Finding the word when she needed it was at first beyond her. One morning she awakened early and started to scream "Wa Wa". There was no response. She stopped and tried a series of sounds. She said, *"Upup, ah-ah, umwa, ee-ee, ma ma, ur-u. "* Then she stopped and returned to *"ma ma"*. She repeated the word with obvious delight. She had recognized that for which she had been searching, some consensually accepted verbal signifier for the thought concept (personal experience endowed with meaning) she wished to represent.

Actions and experiences that are endowed with meaning, and the words that come to represent them, are the earliest communicative forms of representational symbolism. The recognition of the sound

of a mother's footsteps that quiets the crying infant is a very early example of this.

At Drucker's second stage (representation), the child first learns to use the verbal signifiers of others. At first, he is limited to recognition recall of signifiers. Through this skill he can point to people and parts of his own body when they are named. He cannot yet retain words for spontaneous recall. Recognition recall is paradigmatic of later conformance to schemata and social patterns encountered during acculturation.

Then comes spontaneous recall in which words, learned for passiveuse, are adapted to be used for active symbolization adapted for use in the representation of thought content. The ability to adapt schemata of thought such as fairy tales to the process of creative symbolization begins as part of this process. As a result, culture tinged fantasies will soon serve as patterns for the active discharge of personal tensions. Creative symbolization reaches its height in latency play. It persists in dreams. The relationship of spontaneous fantasies to the latent fantasies they represent is to hide their meaning while they represent them.

Toward the end of the first year, the first spontaneously produced verbal symbol is usually a vocal signifier determined by convention. It is not an integrated organic part of the expressed inner content. This signifies a child's readiness to move from memory based on affectomotor experience to memory organized around verbal concepts. At this time the objects in the child's environment are used in play as recruited concrete representations (i.e. simple symbols free of distortion) to be used for the expression of latent fantasies that serve needs.

CONCEPTUAL MEMORIES

Conceptual memory is defined as the ability to evoke recall of learned patterns in the form of verbal signifiers, such as words and related symbols. It follows the dawn of words. Conceptual memory increases gradually, but never fully replaces affectomotor memory or dynamic-physiognomic contents, which are often reactivated at times of stress and ritual.

Memory based on verbal concepts may be divided into: intuition derived early verbal content memory which is based on the primitive verbal precursor contents of Drucker's endowment phase:

verbal conceptual memory, which consists of recall of earlier experiences through socially dictated verbal schemata of naming: and the relatively late-appearing abstract conceptual memory, which is constructed from memory moieties, i.e. symbols derived through associative linkages based on similarities. These include superficial similarities between objects in support of concrete symbol formation (about 15 months) and psychoanalytic symbol formation with the advent of repression (about 26 months) Recognition by the child of similarities among verbal concepts, reflecting an high level of abstraction becomes increasingly evident in the production of symbolic linkage formation (about 11 years), when the ability to interpret proverbs begins.

DYNAMIC PHYSIOGNOMIC THOUGHT

Smith (1979) refers to the term "Dynamic-physiognomic thought" (p.19) (used by Werner (1948) and Werner and Kaplan (1963) to characterize the nature of persistent non-verbal thought in children between the years of 1 and 6. Such thinking characterizes the thought process of the system unconscious, a psychic structure that is established when repression becomes strong at 24 months. Dynamic-physiognomic thought is also found in those with impaired or poor verbal skills. Many of the characteristics of Freud's "Primary process" and Piaget's "prelogical" thinking have roots in dynamic-physiognomic thought. Motoric and sensory phenomena and qualities of affectivity, expressivity, and energy are used in creating concepts, "In contrast to objective or technical thought, (Dynamic-physiognomic thought) appears loose, willful, and weak at organizing logical systems of category and causality." (Smith 1979 p 19) Pathological highly subjective links of intuitive perceived similarity (i.e symbolic linkages) between referents and representations produce evocative and highly personalized symbols of psychosis and poetry. These have origins in dynamic-physiognomic thinking.

CONCRETE SYMBOLIC REPRESENTATIONS

With the development of verbal concept memory, and the start of the use of words for communication, (available by one year), one can observe the capacity to deal with objects in a manner that connotes nothing more than the object. The object concretely represents itself to the child and nothing more. Blocks are piled on blocks as blocks. Seaweed is seaweed. The manifestations of acute emotional disturbance at this time, with this cognition, are anxiety, somatic symptoms, and sleep

disturbances. Neurotic symptoms await abstract conceptual memory.

THE ONTOGENESIS OF SYCHOANALYTIC SYMBOLS

SYMBOLS BASED ON ABSTRACTIONS

Abstract conceptual memory is defined as recall of experiences through verbalized abstract concepts representative of the intrinsic substance of things and events. Such memory is based on abstract interpretations of concrete events, abstract interpretations of sets of abstractions, and complex psychoanalytic symbols based on abstract symbolic linkages. Psychoanalytic symbols develop as the outcome of a series of steps that parallel the cognitive stages of development that inhabit the gap between simple and complex symbols.

STEPS IN THE DEVELOPMENT OF PSYCHOANALYTIC SYMBOLS

Step one involves the time when there is no capacity to form symbols. Piaget places this at zero to fifteen months.

Step two involves the time of the development of precursor capacities in symbol formation. Piaget places this at fifteen to twenty-four months. The precursor capacities are four in number: 1. There is the capacity to perceive similarities on the basis of few and superficial cues. This is necessary for the mind to be able to establish verbal mental linkages and perceive abstract relationships between objects. 2. There is the capacity for condensation and displacement. Symbol formation proceeds through linkages made possible by this awareness of similarities. The products of this transit through linkages are the early protosymbols. They are unstable and facultative at first. They do not provide consistent and reliable pathways for instinctual drive discharge. 3. There is the capacity to delay. This vital element is a derivative of disjuncture. Only with the establishment of the capacity to delay is time provided for the objects sought for discharge of instinctual drives to be modified along the lines dictated by condensations and displacements. 4. A need to protect self or primary object from aggressive urges, is necessary as the motivation for displacement.

When the four factors just described are present, the budding personality is ready to establish true

symbol precursors. They take form through mental linkages, which are constant and obligatory such as mother-nurse, penis-bird, father-king. Displacements are obliged to go through such fixed pathways in the centrifugal direction of objects more removed from the self. This is motivated by the need to protect referent primary objects. It is from this rich ore that the fantasies of the controllable world are created. In addition through these symbolic linkages, substitute objects for drive discharge are made available. Symbolic linkages are the basis of conscious substitute representations such as the double entendre, metaphors, and similes, e.g., 'Thy two breasts are like two young roes that are twins . . . '.

Step three involves the development of symbolic play. Symbolic play is introduced when concrete objects used in play take on the specific characteristic associated with the use of words that is described above; namely, they are seen as themselves at the same time that they begin to bear a second meaning. Piaget (1945 p. 97) saw the first examples of this ability to bring ideas unrelated to an object to the interpretation of an object in 15 month old children. For his subjects the object comes to represent something besides its concrete presence (e.g. in play, a child punishes a doll for being naughty). The connection between the object and what it represents remains conscious. Piaget first called this type of activity symbolic play. It is well exemplified by the child who places one block upon another and describes this as 'a child sitting on the toilet'. An object (seaweed) can mean something else and the child is aware of it.>

From fifteen to twenty-four months, the child *knowingly* deals with play objects (toys) in a manner that imparts convention-derived meanings to their interpretation. These are the characteristics of the simple symbols used in symbolic play. Before the third year of life, symbols occur which are of a conscious metaphorical and generic type, such as flags representing a nation. During the first half of the third year of life symbols with unconscious meanings appear.

PIAGET'S SECONDARY SYMBOLS

Piaget recorded a step beyond the level of symbolic play. Here the connections between the referent and the manifest symbol are repressed. They are unconscious. Piaget called this 'secondary symbolism'. He defined it in the same way as defined by Jones (See this volume P 58.) Secondary symbolism develops during the period from two to four years of age. In reviewing his direct observations of children at these

ages (1945 p 177 et seq.), one can find few symbols, in Jones's sense, before the age of three. Piaget points out that at two, the child seems to be aware in part of the linkage between the symbols and the thing represented, but some of the link has been lost. According to his observations the personality structure necessary for the formation of psychoanalytic symbols can exist at twenty-four months. At twenty-four months, the child could have *unknowingly* used play objects in a manner that imparts meaning foreign to the intrinsic qualities of the object. Through this capacity the child could express otherwise threatening and frightening feelings and thoughts. This is a direct precursor of psychoanalytic symbol formation.

Step four includes the development of Psychoanalytic symbols. This occurs when the dual representation potential of words and objects is harnessed to serve instinctual need, when a relatively weak form of repression comes into action (V.I.) during the first half of the third year of life. At that point, the connection between referent and representation can be excluded from consciousness, and a representation introduced, which has less valence for attracting affect than the referent.

The establishment of this resource precedes the creation of cryptic symbols, one of whose meanings appears to be hidden. Piaget's concept of secondary symbolization includes such symbols. Two factors mature sufficiently at 24 months to transmute symbolic linkages into true psychoanalytic symbols. The first is repression. By repression, I refer to the fact that the link to the referent is made unavailable to consciousness. The second is reality testing. Sufficient enhancement of the capacity for reality testing has to reach the point that makes possible the maintenance and support of sufficient distance (disjuncture) betweenthe signifier and the signified that they appear to be unrelated. This function supports the intellectual cathexis of symbolic forms that belong to the world beyond the self. This is necessary to maintain the conscious denial of the relationship between symbol and referent. For instance a tower and a phallus can be linked on the basis of superficial similarity. One can symbolize the other. Anxiety may be avoided through the repression of this similarity. This is further enhanced by the reality-supported rationalization (secondary process confrontation) that they are not at all alike since there is such a realistic difference in size. Thus reality testing supports psychoanalytic symbol formation. Psychoanalytic symbols may be subdivided into fantasy symbols, ludic (play) symbols and oneiric (dream) symbols. (See this volume pp. 160 and 163.) The differentiation takes on importance during late latency.

One of the most striking clinical manifestations of maturation of the symbolizing function during the third year of life is the appearance of a symptom, a psychic reality, or a mode of behavior the meaning of which is derived from a symbolized referent. Newly acquired symbolizing skills provide such means for a more sophisticated way of expressing conflict. They express early childhood conflicts and fantasies in new ways. An example of such a phenomenon is the sudden appearance of phobic symptoms during the first half of the third year of life. (See also Foulkes (1999) and Domhoff (2003).)

LITTLE JAN

There follows a report on a clinical manifestation of maturation of the symbolizing function that appeared at twenty-six months. A phobia appeared the meaning of which was derived from a symbolized referent. Newly acquired ego skills provided this child with a means for more sophisticated ways of expressing early childhood conflicts and fantasies in new ways.

Jan, age twenty-seven months, was brought to my office because of bad dreams and the sudden appearance of a fear of seaweed.[1] The child was the constant object of her mother's attentions. The child had become a highly verbal youngster speaking full sentences at twenty-four months. She had no substitute objects. From the age of twenty-two months, the child had awakened repeatedly on any given night, crying and afraid, but unable to explain her distress. She could not describe any related dream nor thought. Daytime fears first appeared at twenty-six months with complaints about, and fear of, children who wore Batman masks. At twenty-seven months concern about separation from the mother became intense. She refused to stay with a baby sitter whom she knew. The parents had to remain with her until she fell asleep. Intense fear of separation from the mother became manifest. The parents and the child went to visit the grandmother the following weekend. On Friday she seemed happy and unafraid. She went to the beach and enjoyed playing in the sand and water. She remained highly sensitive to separation from her mother. On the next evening, still with the parents at her grandmother's house, she became afraid when her parents left for the evening. The next day the family went to the beach. The child went down to the water's edge. She enjoyed facing the water from within the protective frame of her father's legs. As they walked away from the water she insisted on being carried to avoid touching the 'green stuff' on the beach.

The next day she went to the beach with her mother, who led her to the water's edge. Suddenly she reached for her mother in terror and insisted on being held out of the water. Seaweed at the water's edge had drawn her attention. 'Carry me', she said. 'Why?', asked her mother. 'What's that?', she asked. 'Just seaweed', said her mother, 'like spinach, like lettuce, like grass'. She picked up the seaweed and showed it to the child. The child recoiled in terror. She insisted on being carried across the sand and on leaving the beach. She would not touch the sand or water. Her parents provided her with a small plastic wading pool at the grandmother's house. The child enjoyed it until some grass got carried into the water on her feet. She then refused to use the pool. The parents went out that evening to dinner. That night the child awoke from sleep several times crying hysterically. She had awakened thus on occasion from the time that she was twenty-two months old. This time there were new features to her behavior. She kicked her feet in the air, using the motions she had used to get her feet out of the water that afternoon. For the first time she could tell what had awakened her. She said that she was taking her feet out of the water away from the green stuff. She could not describe what she feared.

The next day, the distraught parents brought the child to my office. With the mother present I asked the child about her dreams. Highly verbal and still very much impressed by the dream, she told me that she was trying to take her feet out of the water away from the seaweed. 'I'm afraid of seaweed.' I asked, 'What are you afraid of with seaweed?'. In response her body shook with hysterical sobbing. I asked, 'What are you afraid it will do?'. She cried more. 'Are you afraid it will hurt you?' 'No', she said. 'I'm afraid it will hurt Mommy.'

To myself I thought that seaweed does not have hostile affects but that little girls do. I asked the child if she were the seaweed. 'Yes', she answered. 'Are you ever angry at Mommy?' 'Yes', said she. 'When she goes away.' The child had projected her own hostility onto the seaweed. I went on to explain that children do feel anger when mommies go away and that children have a right to feel angry and that it is good to be able to tell mother and that she can be sure if she tells mother, mother will not be angry at her.

What had happened between the twenty-fifth and twenty-eighth month of age was a shift in the way that she expressed her conflict about separation from her mother. The conflict was the same before and after the development of the phobia. Early on she directly expressed her feelings of anxiety, fears, and thinly masked hostility. After 26 months she expressed these feelings through her phobia. Her

frightening aggressive feelings toward her mother were projected onto a symbol, seaweed. She expressed her anxiety over her own aggressive feelings by displacing the anger onto and creating a fear of the power to harm with which she had endowed the seaweed.

The child had experienced a change in her symptom picture as the result of the maturation of a higher level of ego function. This included the ability to form and use symbols. Apparently her capacity to form psychoanalytic symbols, (i.e. symbols associated with the displacement of affects from referents to representations) first appeared at about 26 months. Though the child suddenly looked sicker, emotionally she had made a step forward. Her phobia represented the development of the capacity to form symbols, which were separated in conscious awareness from their referent.

Kubie (1953) has noted that adult psychopathology often contains distortions in representation based on paradigms, which could not occur in the human infant before symbolic functioning begins. This finding would be in keeping with the finding that repression based symbolization first develops years after birth. A study of early childhood case reports from the psychoanalytic literature supports this concept. It sets the timing of the first appearance of symptoms based on symbolic forms displaced from their referent, early in the third year of life. This is in keeping with the findings in little Jan and make clear that her experience was not an isolated occurrence.

The earliest age for which treatment of a "phobia" has been reported in the psychoanalytic literature was Max Wulff's (1928) "A Phobia in a Child of Eighteen Months" . A true symbol shaped by repression and underlying the phobia was not described. The eighteen-month old girl was reported to have shown signs of anxiety early one evening, crying, ‚Mamma, don‘t give Lichen away‘. She clung to her mother and showed clearly signs of uneasiness and anxiety. This happened several days in succession. Then she began having anxiety attacks both day and night. Her anxiety increased whenever anyone knocked on the door. She had fears of the dark window, church bells, and the sound of passing motors but no exaggerated fears in relation to a relatively neutral object. These fears are examples of the phobic avoidance and anxiety reactions commonly seen in children at this age in response to general perceptions which stimulate drives and affects without the interposition of displacement and symbolization. We see in the experience of this eighteen-month-old a parallel to the first stage of little Jan‘s illness and to Piaget‘s symbolic play. The capacity to manifest emotional disturbance through

displacement of aggression to representation separated from the reference by repression was not seen.

Further information comes from a paper by Editha Sterba, (1949) "Analysis of Psychogenic Constipation in a Two-Year-Old Child" . At sixteen and a half months, the child, a boy, showed anxiety when his mother talked to a stranger. He would not go to sleep alone, awoke screaming during the night, stood up in bed, and when his mother came, clung to her and looked anxiously around the room. He cried whenever his mother began to leave during the day. He developed constipation so severe that all bowel movements had to be assisted by an adult. He was taken for treatment at twenty-six and a half months. He took an interest in little wooden balls in the playroom. The therapist said, "I can do something much better with the ballies". She loaded the sleeve of her blouse with them and let them fall. He wanted to do the same; but after loading up, he became pale, thoughtful, and silent and said, 'I don't want to take the ballies out'. He kept them in his sleeve for a half hour. He asked the therapist to take them out. This clinical incident at twenty-six and a half months illustrates a transition phase between symbolic play and true symbol formation. The child dealt with the balls as though they were something else. We cannot tell if the connection was conscious.

Wulff's case illustrates the nature of symptoms before the development of the capacity to develop psychoanalytic symbols. Children can only develop anxiety, sleep disturbance, and somatic symptoms at that point in development. Sterba's case illustrates presymbolic emotional reactions (anxiety and somatic symptoms), which transition into expression through psychoanalytic symbols with the onset of repressive activity by the symbolizing functions of the ego, at twenty-six months.

Melitta Sperling (1952) reported the case of a girl who manifested a transition to the use of psychoanalytic symbols during treatment, which had begun at twenty-three months. In Sperling's case one can see the phenomena seen in Jan. First there was the typical emotional response (anxiety and somatic symptoms) before the development of substitute symbol formation. Then there was the appearance of a phobia at 26 months accompanying the development of the symbolizing function.

Sperling's patient's chief complaints were at first attacks of paroxysmal tachycardia for which no organic cause could be found. The child would grunt and assume a crouched position. At twenty-six months, following the birth of a brother, a sleep disturbance appeared. Nightly she would wake up in

fear and scream, 'A doggy (a kitty or a fish) is biting my finger'. The child carried these fears into the daytime. She avoided feeding her doll because she was afraid the doll would bite her finger and swallow it.

True symbol formation occurs when a symbolic linkage is unconsciously utilized as a pathway for the displacement of drive energies from the body or primary object to the word representation of the linked environmental object. The symbolizing function effects the discharge of drive energies in such a way that endangered object representations are spared. Apparently the appearance of the fourth step occurred in Jan at the time she was in conflict over her anger at her mother during a period of separation. In effect a new bottle had been provided for old wine. That which had been presented in anxiety and night fears was now presented in phobias and dreams from which she awoke. Other cases from the literature show us this transition to the use of symbols and phobic symptoms as a means of dealing with conflicts during the third year of life. Variations in the timing depend upon individual variations in children. The course of nonpsychotic human psychopathology in early childhood is marked by a transition from diffuse representations of anxiety to the development of neurotic symptoms during the first half of the third year of life.

The ease with which the child was able to respond to the interpretation of the meaning of her symbol-determined symptoms is typical of the way children can perceive and confirm the unconscious meaning of their symbol-determined symptoms, when these are pointed out to them. Piaget observed that the intensity of the repression of the awareness of the connection between the symbol and what is represented increases with age. A parallel transition can be observed with symbol-determined symptoms.

In the case of Jan, conflicts related to the oral phase formed the basis for her first symbols even though they occurred during the anal phase. The child had evidently failed to resolve conflicts related to orality and separation and so still had them to deal with during the time period of a later phase. Unresolved oral-sadistic conflicts may carry over into the period when symbol formation occurs.

NOTES

1 A more complete presentation of this case can be found on page 94 of Sarnoff (1976)