Re-visiting and re-visioning Metapsychology Part I & II

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Abstract

Freud wanted to be assured that the 'therapy would not destroy the science' in psycho-analysis. Presciently he had foreseen that the popular therapeutic use of his method might overshadow its function as a research methodology, obfuscating his cherished 'metapsychology,' a term so rarely uttered these days that many don't really know what it refers to.

Yet by 1915, having laid down the broad conceptual dimensions of his findings, Freud's primary interest was not clinical but the *scientific* framework through which he hoped to find explanatory principles for the transformative phenomena and effects his method was bringing to light. He ended his life severely disappointed in the *Weltanschauung* of his era bemoaning that it could not provide adequate explanatory underpinnings for his *depth* psychology, urging those who followed to update and revise his metapsychology as new knowledge came about.

Steps in revising these meta-theoretical foundations were undertaken in two interdisciplinary works; "Symbolization; Proposing a Developmental Paradigm for a New Psychoanalytic General Model of Mind" (1997/2016) and "Forms of Knowledge; A Psychoanalytic Study of Human Communication" (2008/2016), the first, a comprehensive revision of the topographical model, the second, an extension of this model into a study of human communication through the prism of the clinical and supervisory situations. The paradigm shift underlying these two volumes brings theory and practice under one conceptual system of ideas. Via a process-oriented vocabulary identifying the semiotic progressions and dialogical processes effectuating the method's therapeutic action, the foundations for an updated metapsychology are radically altered for, as Freud (1917) stated, "What characterizes psycho-analysis as a science is not the material which it handles but the technique with which it works."

Part presents an historical overview of the concept and subsequent problems of metapsychology from its birth to the present day. This is followed in Part II by a detailed look at how these problems have been tackled and re-cast in my two revisionary books.

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Revisiting Metapsychology; its Origins and Development. Part I

"We must call on the Witch to our help after all!" Goethe, *Faust*, Part I, Scene 6.

(*in* Freud, 1937, p 225)

This quote comes from one of Freud's last papers, "Analysis terminable and Interminable," as late as 1937. Here as everywhere he was searching for a more conclusive way of tapping into the relationship between the biological and psychological. Remember, his early clinical theory was developed around the concept of repression; conflicts between instincts and their taming and resultant symptomatic compromise formation. Yet the fundaments of his uncovering of the unconscious in the Dream Book, are about a new *general* theory of mind; regression its cornerstone, the dichotomy between primary and secondary processes, its backbone. The tension between these two trajectories never subsided. Freud always turned back to his "metapsychology," seeking scientific principles for the dissolution from "word-presentation to "thing-presentation" and, vice versa, explanatory answers for how the method works. It was not until 1925 that he introduced the Structural model -Id Ego Superego — undergirding his famous dictum, "Where Id was, there Ego shall be". But this more clinically useful structural model never supplanted the earlier Topographical model descriptive of *systems*- Ucs, Pcs Cs. It is to *this* general model of mind that our attention will soon turn.

What then is this meta-psychology? Why was it so close to Freud's heart from start to finish? And why was he not able to arrive at explanatory clarity for "how the method works"? what concepts/phenomena/processes were missing at the time that he turned to physicalist analogies and metaphors to describe the processes he was uncovering. These are the questions we are looking at beginning with the origins of the term and its significance in the Freudian opus. Let's start by retracing its first murmurings in his correspondence with W. Fliess:

<u>April, 2nd, 1896</u> "On the whole I am making good progress on the psychology of the neuroses...I hope you will lend me your ear for a few *metapsychological* questions as well." (108)

Dec, 17th, 1896 "Hidden deep within is my ideal and woebegone child- *metapsychology*." (216)

<u>Sept, 21st, 1897</u>... "In the collapse of everything valuable the psychological alone has remained untouched. The dream (book) stands entirely secure and my beginnings of the *metapsychological* work have only grown in my estimation." (266)

<u>March 10th</u>, 1898 It seems to me that the theory of wish-fulfilment has brought only the psychological solution not the biological -or, rather, the *metapsychological*-one. (I am going to ask you seriously, by the way, whether I may use the name *metapsychology* for my psychology that leads behind consciousness". (note the spatial metaphor here, "behind"). (301-2)

In his letters to Fleiss, one can feel the pressure behind Freud's sporadic yet persistent mention of "metapsychology."

Then, March 15- May, 1915, "Papers on Metapsychology."

And finally, in <u>1937, in "Analysis Terminable and Interminable,"</u> he is still in the dark about key theoretical questions, yet turns again to his 'metapsychology' for crucial answers. Undoubtedly

this pressure to understand came from an inherent drive in Freud's highly abstract thinking to organize and establish a cohesive body of theory. This same need *to understand* kept him amending and refining his theoretical extrapolations for which, I remind you, he was severely criticized (not to say ostracized) by the 'scientific' and medical communities of his day.

A little backtracking: Published in 1900 the 'Interpretation of Dreams' burst in on the scene with its famous Chapters VII, laving the theoretical fundaments of Freud's Topography of mind. Not until 1915, however, do we see him tackling a meta-psychological summing up in an interconnected series of papers collecting the major areas of observation and conceptual theorizing he had arrived at thus far. In a flurry of creativity, a mere seven weeks, from mid-March to May 1915, he produced these 5 brilliant papers, a tour de force in detail, synthesis, and clarity. Later he added 7 more which, regrettably, were lost. In this collection of 'Papers on Metapsychology' he intended to provide a preliminary solid theoretical basis for his findings. This is revealed in the exhaustive thoroughness with which he covers the following topics: 'Instincts & Their Vicissitudes;' 'Repression' (the cornerstone of Freud's theory of pathogenesis in the neuroses); 'The Unconscious', which contains seven sub-sections and three appendices; 'A Metapsychological Supplement to the Theory of Dreams' which reiterates principal points in dream theory relating to the formal regression of the dream-work and primary process; and finally 'Mourning and Melancholia, addressing the difference between wholesale *identification* vs *internalization*, distinctions that can only be truly understood retrospectively through the body of psychoanalytic developmental theories that came on Freud's heels. We also see what he intended by 'meta'- "It will not be unreasonable to give a special name to this whole way of regarding the subject-matter, for it is the consummation of psycho-analytic research. I propose that when we have succeeded in describing a psychical process in its dynamic, topographical, and economic aspects, we should speak of it as a *metapsychological* presentation." (1915, 181) Here he has identified psychoanalytic metatheory as *polyperspectival*- having several viewpoints. And then he adds that the due to the current state of knowledge there were only a "few points" at which he could succeed in this requirement.

In each of these papers Freud is synthesizing the essence of his discoveries, always concerned with the connection between the *biological*, for him, the seat of the "true Ucs", and the psychical. This psychobiological scaffolding is the foundation of all Freud's thinking. Whether he is reiterating what he means by "instincts"... a concept lying on the frontier between the mental and the physical, "the psychical representative of endosomatic, continuously flowing source of stimulation (3 Essays, 1905); or introducing the term "cathexis" defining 'quantities' of energy investment in keeping the repressed unconscious; whether he is revisiting the unconscious still having to justify the concept with all its attributes and qualities, or reiterating the topographical point of view, as a hierarchy of states each unknowable to the others; whether summing up the sources and mechanisms of dreams, or revisiting the antithesis between primary and secondary processes, he is always cognizant of how far he has come theoretically versus what still remained unreachable. One thing he securely developed in these papers is the multidimensional quality of

the different "points of view" in his requirement for a full metapsychological explanation. To the dynamic, topographical, and economic perspectives, H. Hartman was later to add the genetic and the adaptive. But these requirements seem to have dissolved into thin air in our day!!

To understand why Freud so persistently returned to his metapsychology one must understand that for him unconscious processes and phenomena held *scientific* value- they provided a window into the prehistory of human mental evolution and the original links to the body: to wit, the dictionary definition of metapsychology is, "**speculations about the origin, structure, function, etc., of the mind, and the relation between the mental and physical**." (Webster's New World Dictionary, 1966, p. 925)

By 1937, towards the very end, after his summative Outline (1937) while discussing the processes in analysis, Freud returns to the unanswered question, "If we are asked by what methods...this result is achieved, it is not easy to find an answer," and then, as if throwing his hands up to superstition, he turns to Goethe!!"We must call on the Witch Metapsychology" (225), adding, "**Without metapsychological speculation and theorizing...we shall not get another step forward.**" He then refers to a single solid clue, "**the antithesis between the primary and the secondary processes;**" (225). There are other formidable clues interspersed throughout these papers that we detect retrospectively; in appendix B, of 'The Unconscious,' "Psycho-Physical Parallelisms" and appendix C, "Words and Things" and particularly revisiting the theory of dreams regarding the difference between "word" and "thing- presentations", the regressive dissolution of words into condensed imagery via the dream-work. But his observations outpaced the times he lived in and it is quite astounding what detailed meta-theoretical insights Freud arrived at from his analysis of the structure of dreams. With reference to the antithesis between primary and secondary process modes of thought; the human unconscious does indeed continue to represent experience in ways that differ fundamentally from the secondary process mode of linguistic representation.

Freud started out as a research biologist and turned into scientist of the mind via medical neurology. But his passion became what he was discovering by listening to people speak...and in listening he found hysterical symptoms held unconscious *meanings* that could be uncovered. He constructed a body of theory and a new language of terms adapting his findings to a conceptual framework—a Weltanschauung—that could not fit the phenomena of his observations or conceptual inference. To the very end he could not explain how his psychoanalytic method effectuates a cure: how Id becomes Ego, or, how primary process fantasy or dream transforms into secondary process conscious thought through linguistic interpretation. Freud took recourse in metaphors belonging to a physicalist science to describe transformative phenomena issuing from mental processes that become reorganized neurobiologically through a dialogue. These are biocognitive processes that require an altogether different conceptual framework and body of knowledge, most of which came after Freud's era. So, his framework is grounded in principles of Newtonian physics; mass, force and energy. To describe his mappings, he used spatial metaphors (the topographical model); conflicting forces (the dynamic dimension), and of "cathectic" quotients of energy investment (the economic). And his metatheorizing is very coherent in this kind of mapping system. But the map is not the territory and phenomena may be described in quite

different ways once new knowledge is accrued, or the paradigm is changed, a common but slow occurrence in the sciences. To the end, however, he was convinced that metapsychology was the *scientific heart of* psychoanalysis and that, one day, it could provide a synthesis of explanatory principles for how the mind, and his method, work.

When I entered graduate studies in the mid-eighties, storm clouds hovered over debates in the field between various factions; Ego-psychologists vs object-relationists, hermeneutists vs hard scientists, classical vs relational and interpersonalist schools, Kernberg vs Kohut regarding narcissistic pathology etc. While R. Schaefer had turned psychoanalysis into a literary genre via narrative theory, Kohut was underscoring a pre-oedipal psychology of the Self; developmental theorists like M. Mahler were adding invaluable data to our growing knowledge of early development, and the neuro-cognitive sciences were gaining ground looking into the brain! Amidst all this, and although at its tail end, the most contentious and widely written about debate questioned the usefulness or even *validity* of metapsychology, to many, an obscure concept that was no longer tenable in its current form. Freud's neuro-energic physicalist scaffolding left psychoanalysis open to disparaging attacks from without and from within, because it didn't fit the clinical method. Rather than its core, it had become a curse for the field. Arguments raged between those who considered metapsychology obsolete, those who would try to limit psychoanalysis to its clinical therapy, and those who believed no theory other than "practice" was needed-- one theory or two, or no theory at all? Holt aggressively declared metapsychology DEAD and Grunbaum and Gill held intellectual boxing matches at the NY Psychoanalytic (which I attended!) arguing about the decidedly non-scientific vs the potentially-scientific basis of our method, but never appealing to Freud's great vision as to what the science was or where to look for it! As the illustrious group of Ego psychologists of the 50's and 60's died off, so the whole enthusiastic adherence to any 'meta-theory' slowly died with them. They had been its main exponents --Hartman, Kris, and Loewenstein, Rapaport, G Klein, the great H. Loewald, and later M. Gill, Gedo and Model, to name just a few. Without their intellectual fuel, this crucial core of Freudian thought was buried with them.

I came to psychoanalytic studies at the graduate level fairly late in life from a background in the Arts, humanities, languages, and from another career. By the time I reached graduate school in psychology, having already had an early introduction to Freud's writings, I found that my passion narrowed *exclusively* to psychoanalysis and that by cognitive proclivity I was intensely drawn to the abstractions of metatheory. Luckily in those days the psychology department at the New School was among the best in the city and looked favorably on psychoanalysts. I was privileged to have a roster of incredible professors; Festinger, of cognitive dissonance theory; J. Bruner, of narrative studies offered a superb doctoral narrative seminar; A. Wilson gave the most up to date copious readings in psychoanalysis, Al. Brock covered group studies, Jo-an Gerson offered an exhaustive course on family therapy, and later H. Schlesinger headed the department. I audited classes in other departments as well as other universities, notably, a yearlong lifespan development course at Fordham, and seminars at Columbia and The Alanson White Institute, and attended *all* scientific meetings offered by the city's psychoanalytic institutes. At the same time, I participated in a two-year research project on the first Separation-Individuation process at the New School overseen by Dr. Mahler herself, until she died in surgery.

Most memorable and influential was an intense 6-week graduate summer course taught by a young Wizz-kid, R. Sapolsky, fresh from Harvard and studying with the great E.O Wilson. He gave a tour de force course on Behavioral Biology (everything from the genetic code, to the endocrine system, and brain biochemistry!) a crash introduction into the new unifying field of Sociobiology, which intensified my interest in the biological basis of behavior. He became a mentor and, with others along the way, pointed me to the writings of Cassirer, Langer, Wittgenstein, and I later discovered Turner (anthropologist) Penfield, Luria, Damasio (neuroscientists) Vygotsky, Bahktin, ...I say all this to underscore that *re-visioning* requires broad interdisciplinary reading from which a synthesis does not come easily or obviously. It ripens slowly through questioning, conceptualizing, and searching the right places; from an accretion of knowledge built from disparate quarters and a gradual integration from this multidisciplinary foundation.

But, to return to *metapsychology:* It was obvious that Freud had couched his theories in concepts and analogies that were not adequate for his findings. But he said as much! And had recommended that we who follow should update as new knowledge accrued and revise what he left by modernizing its conceptual framework. Despite all the hoopla around me no one seemed interested in heeding the *master's words* or of pursuing the path he indicated. In fact, the field showed clear symptoms of a paradigm crisis, continuing to split off into more and more divisive clinical "schools" each addressing a very small part of our very large multidimensional discipline, drifting further and further away from its *poly-perspectival metatheory*. Rather than unifying and synthesizing the field fragmented and splintered.

By then I had launched into further interdisciplinary readings pursuing a PhD programme with independent study following closely Freud's recommended curriculum for training analysts. In addition to psychological studies this included sociology, the history of civilization, as well as anatomy, biology, and the study of evolution. To these I added epistemology, the philosophy of language and science, Kuhn's classic treatise on paradigm change, the neurosciences, and the study of narrative and dialogue, along with our voluminous psychoanalytic literature. Notable among many informative readings was a slim volume on 'Sublimation' by H. Loewald (1988) subtitled 'Inquiries into Theoretical Psychoanalysis' in which he proposed the specialty of 'theoretical psychoanalysis' for essays that address meta-theoretical questions. But perhaps most influential of all was the philosopher S. Langer's three volume opus 'Mind; An Essay on Human Feeling'. In direct lineage with her teacher A.N Whitehead and Cassirer's semiotics, her exhaustive search into the biological origins of the human mind was engrossing, exhaustive, inspiring, but, for psychoanalysis, inconclusive. While she touched on Freud, she could not be privy to the details of the breakdown of symbolization in schizophrenia (see Kubie and Sechehaye in Aragno 2016); or relate this to Freud's analysis of the mechanisms and composition of the primary process in dream construction, nor detect their theoretical implications. We needed a similar search but one that stretched further into semiotic processes and included all the advances in psychoanalytic and

psychological knowledge, particularly in early development, since Freud's death. And, once again: one had to ask the *right* questions. Freud had clearly paved the way; yet it seemed that no one was considering the possibility of building on his existing theories or even pausing on a statement that loomed so large for me, "What characterizes psycho-analysis as a science is not the material which it handles but the technique with which it works." (Freud, 1917) If one was interested in the *science* of psychoanalysis one had to explain how the method works.

Freudian energic metaphors would need to be replaced by operative processes for what mind *is* and what it actually *does*, as these would hold the key to how consciousness is transformed through dialogue. Explanatory principles would have to tally with the technique and neurobiological impact of our interpretive protocol and key discourse processes. How the method works would have to correspond to contemporary cognitive neuro-science. A radical revision must include the genetic and adaptive dimensions (introduced by H. Hartman) and pull apart the micro-and macro-progressions in semiotic development and semantic reference correlating these with the specific dialogic features and phases of our clinical process. Having first recast a general model of mind in *real* operative processes, the discourse analysis of our protocol follows certain principles of semiotic mediation that correspond to the slow neurobiological process of "working -through".

The task Freud left was to uncover a conceptual paradigm that could encompass and advance our understanding of the pluralistic phenomena and transformative yields of his methodology. Updating has to be inclusive, integrating all that came before with all that is known now, and then move beyond this. More importantly, a radical revision has to ask pointed questions that lead to paradigm change, just as the discovery of the subatomic world lead to quantum mechanics, a dizzying but necessary departure from classical physics.

But, as Dr. Wilson put bluntly; "Anna, dear, no one is interested in metapsychology anymore, except you!" How was I to face this alone? Luckily mentors appeared like N. Friedman, T. Shapiro, Eric Marcus, also working with similar interests. After my petition to write a nonempirical dissertation at the New School was turned down due to licensing restrictions, I set about writing my non-empirical dissertation on the developmental processes of Symbolization, anyway! This recasting of the topographical model was published in book form by IUP a few years later. My answer to what is mind? what does it do? How does our 'talking' method "work"? followed closely on Freud's descriptive accounts. The revised model expanded his topography of three 'systems' stretching it out into an epigenetic hierarchical developmental model of semiotic progressions, a mind now anchored in real operative processes. In light of these new foundations the difference between primary and secondary 'modes of thought' is reconsidered as well as the structure and signifying mechanisms of the "dream-work". As mentioned above, my revision is based on interdisciplinary advances in psychology, the neurosciences, and psychoanalysis, that came after Freud.

In conclusion: The 'mind' does only one thing: it 'represents experience'. And it does so by organizing sensory stimuli, impulses, feelings, and ideas, channeling their *meanings* through acts of *signification*. The dream composes these meanings via a spontaneous primary process semantic of imagery. Through our linguistic semantic and system of cultural signs we interpret and translate these condensed meanings into words. *This is the 'semiotic process' in action in our method.* Attribution of meaning — signification-- begins from the get go through perception and movement in the very first perceptual organization and recognition of the facial gestalt. It then develops through the contouring of objects and categorizing of sensory experiences from sensations, sounds, touch, taste, and movement. The term "schema" has been given to this early phase of sensory organizations so that Piaget's 'sensori-motor phase' lists stages in the unconscious registration of experiences recorded directly *in the sensing-moving body*. Werner & Kaplan went one step further for psychoanalysis in referring to this process as "dynamic schematization" encompassing the whole incorporated patterned-scenario, including language, tone, and relational nuances. Not until the advent of " object constancy", the capacity to hold (or re-present) an image in the inner eye, along with evocative memory, can there be some verbal recollection.

All experience and knowledge is gradually filtered through some proto- or cultural semiotic system so that recognizing the consequence for cognition of the developmental sequence of symbolization is crucial to understanding the steps involved in the transformation from unconscious to consciousness; the translation from primary to secondary process modes of thought; the impact of verbally articulated awareness; how Id becomes Ego; and, finally, how our dialogical method 'works'. The semiotic process has *always* been central to psychoanalysis-- from the two-tiered semiotic structure of dreams, to the disintegrative fragmentation of desymbolization in schizophrenic processes, a subject to which several major analysts have drawn attention. Yet no one, thus far, had integrated and systematized, in developmental terms, all that was known of the evolving process by which our human mind *comes into being*, organizes, represents, and, communicates experience. Symbolization is that semiotic process with its own developmental line, heavily interwoven with all other aspects of early development, and later greatly influenced by discourse semantics.

Given that there were already treatises on semiosis in Freud's day (i.e., C.S. Pierce1860's, De Saussure 1880's), why wouldn't he have been aware of, or looked into these? The answer is because they came from disciplines far afield from medical neurology like philosophy, philology and formal logic, not the biological, Darwinian roots that spurred Freud's nuero-biologistic evolutionary interests into the pre-history of mind. These fields were not aligned with studies in hysteria which led Freud to his attentive observation/listening stance and to his groundbreaking psycho-analytic insights into dreams or infantile sensuality. They were far removed from his focus on his two "Principles of Mental Functioning"- the Primary and Secondary process modes of thought. Part two will illumine why Freud was right to give such theoretical weight to these two diverse ways of representing "ideas" by examining how semiotic and semantic meaning-forms are implicated in their differences.

Part II looks at paradigm change. I then examine what semiosis is, what its study is all about, and why psychoanalysis is the best methodology for understanding its impact on human mental functioning. I will explain the importance of expanding and transposing Freud's tripartite (Ucs Pcs Cs) descriptive topography of 'systems' into an epigenetic model of real operative

processes that can be systematized along developmental lines and that have considerable explanatory power. A new psychoanalytic general model of mind that begins in natural biological signals (affects) and evolves via semiotic mediation anchors our metapsychology in embodied processes that correlate with developmental studies, the cognitive-neurosciences, and our clinical process and outcome, while rerouting our conceptual base and terminology into the realm of modern interdisciplinary sciences.

Re-visioning Metapsychology Part II

Revisiting its Conceptual Framework and proposing a Revised General Model of Mind and Communication

Above I presented an historical overview of the origins and subsequent problems of metapsychology. Now I examine how these conceptual problems and the paradigm they were couched in were tackled and re-cast in two books based on an updated new psychoanalytic general model of mind. This part is designed first, to examine what was missing in the Freudian-era paradigm that led to his physicalist meta-theoretical framework and to root out 'energic' metaphors; and second, to show what a revised and updated, epigenetic, developmental model of mind, embedded in a completely new paradigm, can accomplish for our *meta-psychology*.

Under the general heading of 'depth psychology' and entering via hysterical symptoms and the Dream, Freud uncovered a realm of unconscious phenomena and processes hitherto unknown. From his observations and inferences, he created a method that 'interprets' and investigates meanings and defences that are below the limen of consciousness and outside awareness. In the clinical setting the interpretive process is specific to an analysand's personal psychology; for research purposes we investigate how a dialogic linguistic process produces conscious awareness and effectuates psychobiological change. For *meta-psychological* understanding, then, we seek underlying explanatory *principles* for how the method, and therefore the 'mind,' works.

In psychoanalysis we speak about "psyche" a Greek word meaning "soul": the secularization of 'soul' can lead only to "mind", another abstraction! The human mind, like all things human, is part of the body. In my conclusion to part one I wrote: <u>The 'mind' does one thing</u>: it 'represents experience'. And it does so by organizing sensory stimuli, experiences, impulses, desires, and feelings, channeling their *meanings* into ideas through acts of *signification*. The dream composes these meanings via a spontaneous primary process semantic of imagery. Through our linguistic semantic and system of cultural signs we interpret and translate these condensed meanings into words. *This is the 'semiotic process' in action, in our dialogical method*. The interpolation of the 'sign' in mental organization is fundamentally transforming because any semiotic instrument or semiotic act introduce a *re-presentation* with new meaning. Principles of *form and transforming organizations* are the scientific 'laws' for inter-acting living systems, *not those of cause and effect*. This is why it is so important to know what semiosis is, how it connects to biological underpinnings, it's impact on the human nervous systems, and how language in a specific dialogue effectuates psychological change.

Freud's neuro-energic physicalist terminology and theoretical scaffolding could not survive advances in relevant fields arriving after his death leaving psychoanalysis open to attacks from within and without. In order to present a modernized revised model of mind and a coherent metatheory what was needed was a redefinition of what mind/psyche *is*, what it *does* and *how:* a reframing of its operative principles in concordance with current neuro-cognitive science within a broader general scientific paradigm shift. Rather than dynamic 'structures' or a topography of 'systems' transformed by fictional 'cathectic' shifts of 'energy,' we have moved to intra- and intersystemic 'organizations' of experience and knowledge that are influenced and transformed through the interface with others. In this light, psychoanalysis represents a new a *way of knowing*.

For Freud the dream was the entry point to viewing the development and evolution of the human mind as well as to the deepest unconscious where much of our cognition occurs. To the very end he believed that his theory of dreams would lead to knowledge of our species' archaic heritage and to what is psychically innate, confident "that psycho-analysis may claim a high place among the sciences which are concerned with the reconstruction of the earliest and most obscure periods of the beginning of the human race." (Freud, 1900, p. 549)

Yet although he artfully interwove biological drive with mental representation through the motivational "wish" as propulsive impulsion: and despite his great insight that the dream's primary process pictographic imagery is merely "another mode of thought" expressing *ideas*, the deterministic scientific paradigm in which he was embedded could not accommodate the subjective nature of his discoveries. 'Meaning', whether conscious or unconscious, did not fit the existent paradigm. So, he turned to analogies and metaphors from Newtonian physics based on mass, force and energy – a paradigm that itself would be shaken up by the quantum revolution. The fundamental underlying clash between a frame-work of *causal explanations* versus one of *interpretative understanding* could not be mended since meanings are not *caused* but *created*.

Freud bitterly lamented the *Weltanschauung* of his day that it could not provide adequate conceptual tools for his discoveries. The paradigm his life's work was pointing to would not materialize until the fifties when embeddedness between observer and observed came to the fore along with advances in attachment research, the neurosciences, semiotics, dialogics, and "cybernetics", a 'living' paradigm of pattern, form, and inter-systemic *in*formation. Arriving on the heels of the quantum revolution in physics, advances in communications technology, and infant/child development studies, a new 'information' paradigm gradually evolved and took center stage. In order for me to illustrate how this important shift provides new theoretical grounding for a "talking' method, allow me a brief digression.

Changing paradigms, paradigms, for Change.

In the thirties and forties Norbert Weiner (1948) spearheaded a group of scholars from various disciplines studying what McCulloch (1965) called the "Embodiment of mind." At the same time Piaget (1969,1970), in Switzerland, was researching children's cognitive development; Bateson and Mead in New Guinea were embedded in the naturalistic study of rituals and rites of passage; Maturana and Varela (1980) and others in the Palo Alto group were examining organizations of living forms; and Weiner, a mathematician, was developing *Cybernetics*, a way of discerning

pattern and *form* as *organization* for a new science of information, one markedly different from physics. Living systems could now be studied in terms of relationships, interactions, communications, in non-linear recursive patterns of interface in which events have specific *meanings* according to the contextual frames of reference that engender them.

The difference is that of two distinct epistemologies: the world from the Renaissance until approximately the 1940's was founded on deterministic explanations based on causes. But causality precludes human elements like purpose, drive, expression, tone, all based on interactive circumstance and subjective intent. With good reason Gregory Bateson (1972, 1979) an epistemologist, remarked that Cybernetics was "the biggest bite out of the fruit of the tree of knowledge mankind has taken in the last 2000 years" (1972, 476). Arguably, an even bigger bite was taken by von Bertalanfy's (1968) Systems Theory. Synthetic thinking evolved in reaction to hard determinism with the idea that a system's functioning must be understood through the changing organization of its interacting parts internally and in relation to other systems (Ackoff, 1975). Viewing the organism as essentially active introduced the concept of innate development and wholeness in preserving the 'disequilibrium of steady state' (von Bertalanfy, (1968, 209): coherence occurs spontaneously between interacting systems that come into constant contact. What has impact and what is impacted upon, invoking Heisenberg, will always have to be understood as a dialectic, in terms of recursivity. This epistemological shift provided the conceptual base for a way of thinking about living exchanges in the realm of human communication, family interactions, as well as larger social systems.

Drive theory takes discharge of psychic energy as its conceptual building block; its aim, to form a bridge between body and mind. Innate needs give rise to tensions, the force of which "represents the somatic demand upon the mind" (Freud, 1940, p. 148). Freud's use of drive propulsion for principles of homeostasis corresponds to his adopting a scientific system that explains physical phenomena by determining the mechanisms that move them—the mind as machine. Thread through his entire theoretical system, libido provides internal coherence for a causal model that accounts for mechanisms moving a "mental apparatus." The mind is conceived as a discharger of internal stimuli; the mind's work, to find ways to reduce tension. But the mind's work is to *organize* experience by representing it. It doesn't do this by letting off steam but by using its innate propensity for creating and using *signifying* instruments - a *semiotic* activity. The dramatic shift is from an epistemology of substance to one of form: from a material world and the analysis of its mechanics, to an interactive world discerned through the transformation of the forms it shapes and is shaped by.

What is most important regarding the early Freudian framework, and the centrality of the dream in it, is his insistence on incorporating the biological underlay into the functional principles of his 'metapsychology' (1915), so named to define "**speculations about the origin, structure, function, etc., of the mind, and the relation between the mental and physical**" (Webster's New World Dictionary, 1966, p. 925). Freud labored to create a somato-psychical framework in which the 'Unconscious' (Id) was also the 'core-self' of an organism governed by a nervous system that

gradually develops to tame and socialize what is universally recognized as 'human nature'. His primary investment in 'the mighty primordial melody of the instincts' reflected a need to create a *psycho-biological metatheory* accounting for human motives and behavior as universal as it could be. The bifurcation in psychoanalytic theory that would lead Freud to producing his second, Structural model of mind, was foreshadowed from the outset. The first was a general model of how the mind/brain represents and *knows*: the second a dynamic model of personality and psychological conflict. The difficulty of incorporating into metatheory what is instinctually innate within the "psychical" was compounded by neglecting to make a clear distinction between the primary function of the human brain/mind, which mediates action, emotion, and thought, through the *use of learned signs*, and the vicissitudes of character formation in early adaptation. The interpolation of signs into human thought, communication, and behavior, the gradual filtering of all experience *through* personal and cultural *signification*, leads to human meanings. By 'human meanings, as no other species can,

For Freud the organic/somatic underlay was the true unconscious; "The physiological substrate does not end once the psychical begins but rather creates a psycho-physical parallelism a "dependent concomitant." (1915, p. 207) It will be for Piaget's genetic epistemology to identify that the first "sensory-motor" (unrepresented) stages in cognitive development are actualized and registered in the sensing-moving body. For Piaget, as for Freud, the Ego is first a 'body-ego.' For this reason, in my revisions, continuity with the body and epigenesis are emphasized as core principles. The body's expressions continue to seep through words, speech, and acts, regardless of the semiotic level or even medium, especially in the arts. And we are entrusted with the charge to feel/observe and interpret these subliminal meanings that reach us through various sensory channels. Nowhere is this continuity between biological and psychical more clearly expressed than in dreams which, straddling both, form a link from one to the other. Freud's dynamic "psychical apparatus" was of a mind divided by conflict with fundamental 'directional,' excitatory and motivational qualities. Without Piaget's genetic epistemology, or the integration of semiotic mediation, the fundamental questions regarding continuity between body and mind, and therefore also the *translation* from unconscious to conscious modes of thought, were left mired in physicalist concepts. Freud's reaching for spatial, energic, and economic metaphors to depict formal/functional transformations of psychical organization were ingenious constructs that he recommended be revised as new knowledge is accrued.

This conceptual framework needed radical revision, to be superseded by principles of semiotic development and the study of the *specific* semiotic/dialogical features of psychoanalytic practice, within a modern information paradigm. Studying the phases of analysis and the gradual shift in ratio from Ucs acting-out to increasingly Pcs material from dreams and insightful free-associations reveals that the *speech/interpretive and working-through processes* specific to our dialogue correlate with gradual alterations in cerebral re-organization--Where Id was there Ego shall be-- what we commonly refer to as "structural change." The bio-semiotic underpinnings implied in Freud's first Topographical model, around which pivot the foundational premises of

psychoanalysis, needed *updating*, their grounding in biological drives and affects *modernized*, not abandoned. As the concept of "*trieb*" (instinctual drive) became associated with Ethology, the neuro-cognitive sciences began studying human 'affects' introducing the notion of 'embodied' speech. It is now commonly accepted that emotion and reason, affect and cognition, are intimately connected. Freud's "two principles of mental functioning" are not as sharply polarized as he depicted them; reconceptualizing and reframing these two 'modes of thought' reveals two semantic spheres within an amplified developmental model of mind.

Or take the problematic concept of "energy," introduced by Freud to describe psychical shifts as unconscious becomes conscious. Objections to this energic idea continued to haunt metapsychology around mid-century becoming a thorn of contention in English Object Relations and America Ego Psychology schools. The battle between those *for* developing the natural science claims of Metapsychology (1915) and those for debunking it altogether, tore apart the theoretical backbone and scientific aspirations of the Freudian legacy. And as the great post-Freudian Ego psychologists passed away, amid acrimonious inconclusive disputes, the field split itself up into many schools each under the banner of a very small piece of the large discipline it inherited. Without a unifying core meta-theory of mind that could account for the transformative action of its therapy, Freud's 'Metapsychology' dissolved, a term so rarely used nowadays as to have been forgotten.

Many of the fields' problems arose naturally as developments in the shaky evolution of a young science in search of a paradigm. But many others stem from its own insulation, it's limited exposure to academic interdisciplinarity, its massive resistance to conceptual change. Dropping the challenge implied by the unification of theory of mind and operative principles of dialogic therapy, psychoanalysts turned to clinical issues, sidestepping the core scientific explanatory potential of a method that researches the human mind in its *entirety*. Just when radical revision was called for the field folded back into clinical grounding and metaphorical jargon, ignoring the incongruence between the dated conceptual language of its foundations and the efficacy of its therapeutic dialogue. And so it has remained; stagnant and divided, a community sidetracked by its own fragmentation; a field stuck in a paradigm crisis.

When I entered the field, what struck me was the extraordinary potential of Freud's methodology and first *general* theory of mind, as heralded in the Dream book (Freud, 1900). Freud's decoding of the language of the deep Ucs as a primary process form of *cognition* continues to be the entry point for the study of the evolution and development of the human mind. The implicit plasticity and epigenetic composition of Freud's topographical model provide important inroads through the directional features and types of regression identified, particularly through the study of dreams. Integrating a broad interdisciplinary base of studies in anthropology, sociobiology, the philosophy of science and language, semiotics, and including contributions of important developmental theorists like Piaget, and from psychoanalysis, the invaluable studies of H. Werner and Kaplan, Bowlby, Mahler (to mention just a few) led me, over and over again, back to Freud, and to what he *specifically* pointed to as the scientific base of the field; "What characterizes **psycho-analysis as a science is not the material which it handles but the technique with which**

it works. What it... achieves is nothing other than the uncovering of what is unconscious in mental life." (Freud, 1917, 389)

The key question then was: *how does it work*? Since our method is a "dialogue" (a "conversation" Freud called it) the place to look, in my opinion, was semiosis, language development, and semantic reference in dialogues, with an eye to understanding the basic developmental principles underlying *all* sign-use and symbol systems. For this reason, I take an organismic perspective, returning to early Freudian tenets of continuity with the body and epigenetic principles in the origins of mind and the achievement of conscious awareness. Psychoanalytic phenomena are pluralistic, polysemic, multidimensional, each aspect contributing its own facet of inquiry, revealing its own developmental line, according to its own operative principles. *Meta*-theoretical principles are articulated at the highest levels of abstraction; they govern what occurs at practical levels.

Taking note of Freud's discrete but incisive plaint against those who "failed to notice that we have something here from which a number of inferences can be drawn that are bound to transform our psychological theories."(1908, xxi), led me to two guiding propositions: if the representational trajectory in the dream exhibits *natural* functional processes in a body/mind continuum, i) it must have a traceable phylo- and onto-genetic line, which, ii) would be applicable to development (in various semiotic media) as well as to acquiring consciousness through verbalization. This epistemological approach amplifies the motivational springs of the dream well beyond "wish-fulfillment" to more basic functional processes that organize and formulate human meanings, namely, signification; the process *of symbolization*.

The revision below, is part of a broader general paradigm shift in which the concept of 'energy' is replaced by functional semiotic and dialogical processes within dynamic, interactive, inter-penetrative fields of mutual influence. In these tilted interpretive dialogues unconscious dynamisms run fluidly both-ways, hence the importance of neutrality, opaqueness, and extreme vigilance, lest counter-transference or projective inductions derail delicate processes created by levels of less-differentiated modes of communication. On the other hand, due to this multi-layered, polysemic array of communicative modes, it is also an optimal situation to investigate how one person's organism can "attune" to the message/meanings (transmitted, projected, pictured, or uttered) emitted unconsciously, by another. The technical directive is to reach out and "meet the other' at their 'level' of interaction; an empathic stance that must be equipped to both reach-into as well as observe, simultaneously.

In an organismic framework epigenesis manifests in a multistratal model of increasingly mediated semiotic forms along a continuum that moves from natural hard-wired affect-signals, through indicative and denotive signs, to increasingly abstract forms of symbolization. Nowhere is the continuity between biological and psychical more clearly expressed than in the interpretation of dreams, a process forming a "bridge" between what is pictorially re-presented unconsciously and how it's condensed meanings may be translated into conscious verbal articulation. Yet without Piaget's developmental model of cognition, or the integration of steps in semiotic mediation, the fundamental continuity between body and mind, and the translation from unconscious to conscious *modes of thought*, are left highly polarized, their translation depicted through energic metaphors. Given the model proposed, analogies are no longer needed to describe real, formal/functional transpositions in the organization of a multilayered, polysemic, *sign-infused* psyche.

A more fleshed out bio-semiotic hierarchic model of mind, built on Freud's skeletal tripartite topography (Aragno,1997/2016), composed of micro-genetic semiotic stages towards symbolization undergirds the evolution of mind, ontogenetic development, and the dialogical progressions in psychoanalytic therapy, in which the translation of unconscious into conscious awareness, gradually leads to psychic reorganization

The Revision

A Developmental Paradigm for a new General Model of Mind and Communication

A version is not so much made right by a world as a world is made right by a version. N.Goodman, 1984,127

The comprehensive revision of Freud's topographical model first presented in "Symbolization" (Aragno1997/2016) later incorporated and expanded in "Forms of Knowledge: A Study of Human Communication" (Aragno 2008/2016) provides a viable, developmental general theory of mind based on operative processes of semiotic progression and discourse semantics. This model correlates with evolutionary and ontogenetic processes along the Ucs-Cs dimension, as well as those underlying acquiring conscious awareness, in a unifying conceptual framework. Inclusive of non-conscious, unconscious, preconscious, and conscious (*Nc*, *Uc*, *Pcs*, *Cs*) forms of experience, thought, and communication, it yields a seamless epigenetic six-stage continuum, crystallizing in hierarchic organization, in which shifts in phenomenological experience are tied to each form.

The questions I asked, and my constructivist/developmental organismic approach, generates a more detailed stratified version of Freud's topography of mind. The key to this revision is *symbolization*, a unique faculty of the human mind at the root of all manifestations of our social evolution and civilizations and the natural soil of theoretical psychoanalysis. This revision addresses problems of our metatheory at their epistemological source. My goals at the outset were threefold: to reconceptualize the notion of libido or the convertibility of 'instinctual energy' as explanatory base for psychic transformation; to contextualize 'meaning' and subjective experience as semiotic activities; and, in reconstructing a metatheory from new fundaments, to bring about a paradigm shift in how we view the nature of mind.

In 'Symbolization,' (Aragno, 1997/2016) the concept of multi-layered or stratified organizations of experience is expressed in a developmental model of semiotic mediation moving from natural signals (affects), through acquired signs, to symbolic organization. The semiotic function is a hardwired inherited hominid trait gradually evolved to interweave with cerebral areas predisposed toward representing experience in ever more expedient ways, producing signs to record, represent, calculate and, in language, to name, point to, refer to, categorize, conceptualize, and communicate abstract and *complex meanings*, as no other species can. A clear distinction is made between the given biological affect-signal, a natural mode of communication through facial/motor expressions and sounds (inciting *re-action*) shared with higher primates and other species, and the learned systems of signs and symbols which, due to human cerebral architecture,

provide semiotic means dominating communication, behavior, and experience, in many different ways.

Key essential points to understand regarding this model are; i) each of these discrete semiotic functional-forms results in dramatic shifts in subjective experience, motives, thought, meaning, and psychological-organization; ii) advances in semiotic functioning during development are contingent on exposure as well as increased cognitive distinctions between reality and subjective experience/fantasy, implying *adequate* affect-modulation and intrapsychic separation and differentiation; iii) these semiotic forms intermingle in everyday communication, thought, and experience; and iv) pre-proto-semiotic and semiotic modes along the continuum, *particularly the least differentiated modes of regressed or psychotic states*, induce *powerful* bidirectional impact in human interactions.

The developmental continuum (see Diagram I) moves from a natural/biological anlage of signals, through signs (serving either indicative or denotive functions), to the formation of the symbol proper. These are not stages definitively arrived at but specific functional forms designating planes of mental organization that tend to crystallize favoring higher more efficient modes yet intermingle dynamically all the time and remain subject to various types of voluntary and involuntary regression. This is a highly simplified summary of what, in ontogenesis, are complex, interrelated, early separation-individuation and learning processes, tied to temperamental proclivities and environmental exposure. We would not expect language, our most universal and expedient complex semiotic system to sprout fully hatched from its pre-linguistic egg! Precursors of verbal signification are hard wired, inherent in the human disposition for dynamic schematization and pattern-matching: seeds of signification are germinating from the get go in visual processes of the perception, in expressive gestures and tonal sounds, long before the first words are uttered. Although predisposition for language-acquisition is hard wired, it is conditioned by imitation and learning (environmental triggers) and subject to a time-sensitive window of exposure. Early language-use is governed by signal and sign-semiotic organization; a semantic still strongly tied to the senses and affects overlapping but not yet firmly anchored in higher semiotic realm of stable symbolic thought. Verbal signs are by no means the only or even the best semantic through which to express qualities of human emotional experience for which non-verbal arts are far better suited (except for poetry, our music of the mind). Nevertheless, language is the semiotic system that provides denotive signs discrete, efficient, and specific enough, to enable us to communicate expediently in ways that lead to conscious awareness.

'Forms of Knowledge' (Aragno, 2008/2016) greatly expands this model's underlying principles (see Diagram II) through a comprehensive study of pre- proto-and semiotic communicative modes via the analysis of the semantic and propositional reference of speech-processes in our specialized dialogues, and the resulting phenomena aroused in these semantic fields. The fundamental premise underlying this study is that communication is reciprocally constructed between a communicant and an interpreter; by definition, this implies a dialectic. The unit of study, therefore, must include the reciprocal interplay and respective contributions to the communicative process of both parties. What emerges is a developmental model of communication

delineating how human interactions are transformed by sign- and symbolic-mediation and how semantic and discourse reference determine the nature and meaning of what is spoken about. The purpose of the study was to identify and differentiate various projective, enactive, inductive and narrative forms, to trace their evolution ontogenetically and then to examine how they are recapitulated in analytic dialogues.

Human communication in its *totality* becomes an empirical window into the many intrapsychic and interactive pre- and proto-semiotic processes we refer to under the broad term, the 'unconscious.' My inquiry addressed all interactional phenomena bi-directionally and *in* process, reconstituting semiotic activities that first capture, construct, and then crystallize into linguistically-created realities, pushing those unwordable, unthinkable, or unacceptable thoughts and emotions, out. What I observed was a spectrum of transmissive, replicative and narrative modes of recounting along a continuum from unconscious to conscious form-varieties. Pre-symbolic expressions shadow symbolic articulation and residues of earlier stages infiltrate and fuse into higher forms. Under the general rubric "Morphic Sentience,' distinct intuitive or attuned unconscious forms are posited and named. Although superseded by linguistic communication, these deep biopsycho-social strata remain vitally active registering tonal nuances, intent, and unconscious dynamic/emotional dispositions subliminally, that continue to play a critical role in all interactions.

The study began from the premise that since many unconscious meanings are rooted in, and expressed *through*, the body forms of human expression and communication from an organismic standpoint offer the best empirical viewing of 'psyche' in the study of mind. The psychoanalytic study of communication became a vehicle for observing how humans register, transmit, and communicate what is *in* and *on* their minds; what they project and induce unconsciously in others; the nature of internalization, transference, empathy, and the interweaving of enactment and recall in the current presence of the past. Simply put: I was interested in what happens *between* interlocutors, in identifying and differentiating the *forms* of interactions themselves; in laying the groundwork for a systematic study of their logical forms.

This was therefore a multidimensional study filtered through the unifying template of a biosemiotic model of mind leading into the complex polysemic domain of meanings, forms of reference, and sources of "gnosis" in the sense of knowing *prior* to the adoption of conventional signs. In psychical terms semiotic *functional-forms* reveal *how* something is currently experienced or known: therefore, *transpositions in form lead to functional re-organization*. This, essentially, is the correlate of functional neuro-plasticity.

This functional role of form in the phenomenological organization of mind becomes apparent when considering the dynamic interaction of many elements in relation to a whole, like a composition. Examination of interrelationships between function, form, and content through time, provides a theoretical template for the complex architecture of human meanings. The analogy of a musical score helps envision the hierarchic nature of this model manifesting the multistratal and multidetermined condensation of many levels of meaning that are expressed simultaneously in human communication. A free-associative verbal stream, often subsuming subliminal organic metaphors and unconscious dynamics, enables us to reach the core source-points of unconscious ideas, emotions, and meanings, peeling away by analysis surrounding layers of associations, as in the interpretation of dreams.

Psychoanalytic semantic fields are generated by, and embedded in, a methodology that is also an *interpenetrative epistemology*, a dialectical process that uncovers how we come to know. Its inquiry bifurcates into two branches each expanding human consciousness in different ways: one, via analysis of the personal unconscious, leads to therapeutic insight; the other, displays microgenetic mediations in the transformation of natural undifferentiated experience into increasingly differentiated, verbally referenced ideation. The clinical task is to interpret unconscious meanings through an emergent, contextual process: the theorists to identify, classify and systematize semiotic forms. From this perspective a primary interest of mine has been to examine the reciprocal impact of different semiotic forms (and mental organizations) on how we receive, understand, and interpret meanings issuing from these diversely coded forms. The marked formal and functional differences between these imply different types of reference and meaning and different organizations of experience, each, most importantly, eliciting radically different kinds of responses: Natural Signals alert to inner feelings; their transmissive function induces reactive responses unless restrained; the referential distance between signal and signalizer is nil, hence the expressive form and intensity of signaling behaviors are what they "mean." Due to their nonreferential nature, signals incite physical reaction, not ideation: feelings and action are their currency. Signs, on the other hand, are more differentiated and discrete; by their indicative or denotive reference they point to, single out, and signify. But unlike the symbol, which is fully differentiated from that which it stands for, the sign-function still partakes in some way of that to which it points: its referential distance is greater than that of the signal but not sufficient to incite conception; signs announce their objects, symbols conceive of them.(Langer, 1942) Only the symbol proper and symbolic referencing is truly ideational, of a cognizing *mind*: the symbol frees experience from the senses becoming a vehicle and instrument of thought, representing "ideas" contained within its referential orbit. It is this complete differentiation between verbal symbol and experience that lifts mental functioning to a higher plane. The symbol condenses within itself many possible meanings and while symbolic functioning is expressed through different symbol-systems, *only* linguistic objectification leads to conscious awareness -- an awareness of being aware.

With specialized speech patterns and an interpretive focus on *everything* unconscious, psychoanalytic situations generate a discourse-induced loosening, or temporary breakdown, of layers of semiotic organization and psychical defences, creating 'semantic fields,' or 'bio-semio-spheres,' of considerable multi-directional influence. Through a temporary situation-specific-regression, internalized interpersonal dynamics are transferred and projected into this 'unprejudicial space'; imagistic patterns and experiences are inductively transmitted; Ucs feelings, dreams, fantasies, and deeply repressed memories, begin to re-emerge permeating a fluid, porous situation and those in it. And the dream goes even deeper. Although superficially superseded by linguistic communication, less-differentiated bio-psycho-social strata remain vitally active, subliminally registering tonal nuances, intent, and unconscious dynamic/emotional dispositions which, we infer, belong to phylogenetically earlier modes of human interaction

These profoundly organic phenomena are particularly manifest in the formation, cohesion, and unconscious convergence-dynamics of analytic groups. Even with considerable semiotic overlay, layers of psychic defenses, and cultural norms, these deep bio-psycho-social strata, probably hard wired, continue to play a critical role in social behavior and group processes. Using the visual analogue of a multilayered orchestral score assists in conceptualizing this epigenetic quality of mental organizations through which phylogenetic hypotheses may be reconstructed. And this fundamentally *interactive* consideration, emphasizing the social role of communication, is very important when speculating on the co-evolution of language and mind in early groups and societies

Theoretical Summary and Conclusion

....we can know more than we can tell and we can tell nothing without relying on our awareness on things we may not be able to tell..... Polaynyi, 1964, p.x

My revision of Freud's first general model of mind preserves its deep biological roots and amplitude of applicability. The Freudian model is transformed into a seamless biosemiotic continuum originating in biological affect/signals, gradually mediated by gestural, behavioral, and linguistic social-signs which, through discourse, generate full symbolic functional organization. A preoccupation with feelings, meanings, and form, threads through both works anchoring psychological manifestations in natural biological roots.

In fact, this biosemiotic continuum is remarkable for its explanatory generativity: whether conceptualized as an epigenetic hierarchy or a developmental continuum of increasingly mediated organizations, this revised framework mirrors the evolutionary accretion of cerebral cortices layering over core brainstem and limbic systems enabling us to trace progressions in paths of conscious awareness in normal development, in microgenetic phases of treatment, in the disintegrative impact on metaphorical thought and the semiotic function by overwhelming anxiety, and in the dissolution of semiotic structuring of psychotic regression.

Both works (Aragno1997/2016, 2008/2016) subsume key contributions of major critical thinkers and theorists from within the field, spanning our 119 years of existence as well as an integration of interdisciplinary research encompassing early child development and genetic epistemology; contemporary neuroscience and cognitive psychology; the philosophy of language and of science; semiotics, narratology, and paleoneurology. From within psychoanalysis are integrated important studies subsequent to the war years on infant/childhood attachment and separation (which grew into the full-fledged research of Mahler (et all 1975) and the compelling separation-individuation paradigm. Encapsulating an important phasic-process of interpersonal/intrapsychic differentiation, first in infancy, later recapitulated in adolescence, this developmental passage has potentially momentous cognitive sequelae on the constitution and capacity of the symbolic function at key psychobiological developmental stages. This crucial underlying developmental line adds an extremely important new dimension to the already multidetermining mix of elements contributing to mental functioning and psychodynamic stability.

Placing 'affects' at the fulcrum of human expression and responsiveness brings communication and mind in line with organismic/psychic functioning. As biological gateways to an organism's internal state and our primary innate mode of communication, taking the modulation of natural affect-expressions by signs and the mediation of communication by language as the central operative functions in mental development, continued the paradigm shift begun in 'Symbolization' (Aragno 1997/2016). Moreover, it encompasses and unifies within one system of ideas, principles of psychic maturation with the mediating speech processes by which psychoanalytic discourse makes conscious the unconscious, thereby integrating the practice of the method with its metatheoretical base.

The revision of our model of mind and analysis of the operative speech interactions of our discourse-process, then, subsume a major paradigm shift: *from transformations of energy to transpositions in form*, essentially a cybernetic framework within a broader contemporary information or *inter-action Weltanschauung* of pattern, organization, and interactions between mutually impacting, evolving systems. Our focus over the past century gradually shifted from a primary interest in *what* is known to *how* it is known, including the impact of the observer/knower: from content, to an awareness of the functions of form. The invitation in human exchange is to study the *forms* of interactions themselves which telescope back bringing into view earlier layers in the dialectics of the formation of mind and the development of conscious awareness.

Virtually *everything* that transpires in our semantic fields is taken as an index, or pattern of unconscious meaning, and many of these indices are expressed somatically, induced as moods, feelings, projected, pictured, conveyed metaphorically, enacted in contextual replays, or acted-out in life. This new *interpenetrative epistemology* instrumentalizes human responsiveness *in its totality* because methodologically it generates a 'bio-semiosphere' of proto-semiotic forms of interaction, that appear interspersed among narrative lines in manifestations that exhibit, illustrate, relive, and reenact, past personal experience. The only reliable "data" of psychoanalytic situations, I believe, are these elements and features of the discourse process itself; and the only objectifiable phenomena are its forms and transformations. This model categorizes these stratifications and systematizes their forms: it lays bare certain organizing principles of semiotic mediation and lays down a preliminary vocabulary through which to identify and refer to their different forms. More importantly, it provides some internally consistent principles for how the free associative verbal narration or recounting of experiences and events is also being re-enacted and shown at that very moment in another form. Unconscious communications and meanings emerge in the interrelationships between form, content and context, 'content' often a metaphorical reflection of narrative process, just as process often reiterates and echoes content.

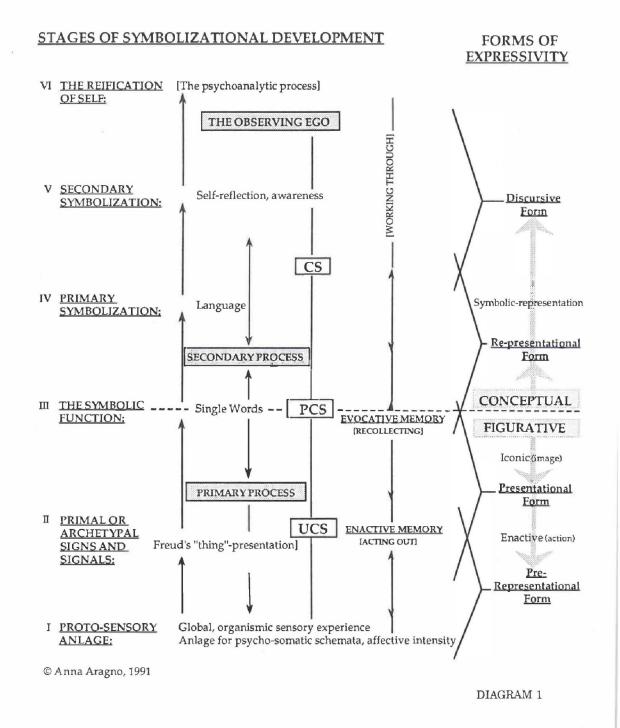
The interdisciplinary sweep underlying these studies provides broad enough foundations to examine the full implications of our methodology which, as Freud foresaw, reaches farther and deeper into the origins of mind than has thus far been supposed. When examining the protocol and phases of our clinical dialogues through a semiotic and discourse analysis of their interactional features and processes, we find an *interpenetrative epistemology* in a dialectical discourse that by its controlled regression *reactivates* earlier modes of pre-verbal interaction while simultaneously

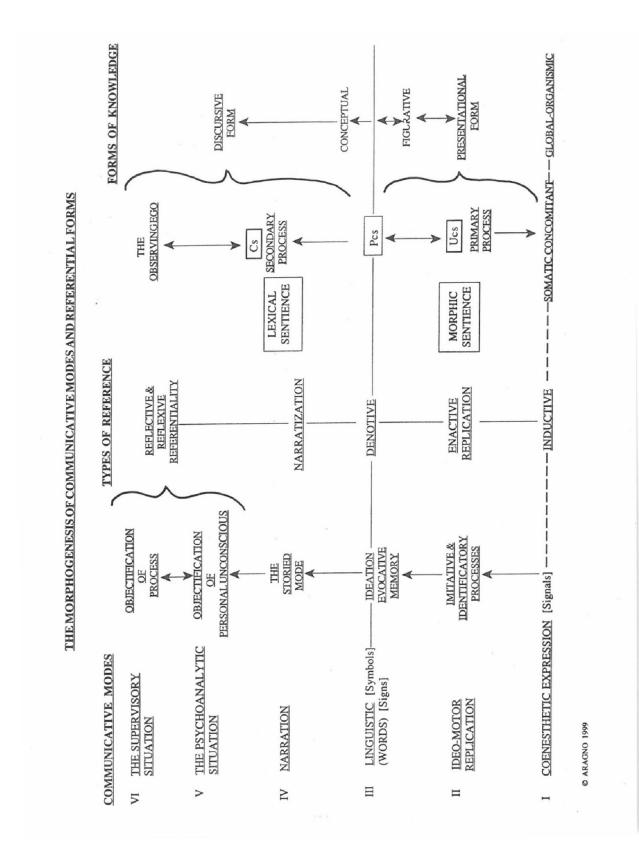
uncovering *how* we come to know. An epistemological approach generates a developmental paradigm that reaches back, both onto- and phylogenetically, recalibrating psychoanalytic phenomena that may be generalized within a conceptual paradigm that unifies metatheory with the therapeutic action of clinical process. Placing affects at the core of human intercourse provides an organic base for a comprehensive inroad into the morphogenesis of human meanings, interactive modes (Aragno, 2008/2016), possibly even the origins of 'representation' itself (Aragno, 2011).

These are therefore multidimensional studies filtered through the unifying template of a modern bio-semiotic model of mind, leading into the immensely complex polysemic domain of meanings, forms of reference, and sources of knowledge. Situating sensory-affective experience at the core of human intercourse provides an organic base for an overview of the morphogenesis of communicative competencies in a developmental continuum of non-discursive and discursive forms. This includes pre-semiotic and semiotic factors; narrative modes; analyses of speech forms and their functions, as well as the semantic and referential features involved in creating psychoanalytic semantic fields. Psychoanalytic dialogues are discussed in terms of their predictable phases, levels and modes of therapeutic impact, and the specific emergent phenomena that occur in them. An epigenetic, multistratal developmental model of nonverbal and verbal communication identifies inter-active phenomena through which phylogenetic hypotheses can be reconstructed.

In conclusion, the revised model of mind is corroborated by interdisciplinary knowledge. In particular it is undergirded by cutting edge neuro-scientific research (Damasio,1999) on different levels and states of consciousness providing a neuro-epigenetic map inviting reconsideration of phenomena uncovered by the early Freud. The advantage of studying human modes of interaction through the morphology of their communicative forms is that this conceptual lens eliminates the inside/outside dichotomy, neither reifying nor distorting direct manifestations of "mind." Most importantly, because the processes in question are observable phenomena, and the observer's experience is included as part of the interpretive understanding, principles of theory and practice are brought together and anchored in 'data' which can yield empirical hypotheses

And finally, the fundamental, underlying premise of both works is that semiotic processes give rise to both meaning and mind, and hence that meaning and mind are one, born of acts of signification.





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