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Epistemological and theoretical foundations of constructivist cognitive therapies: Post-rationalist developments

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The constructivist perspective has shed new light on the conception of psychopathology and the practice of psychotherapy, surmounting the shortcomings of behaviorism and rationalist cognitive thought, by abandoning the empiricist principle of associationism. In this field, Vittorio Guidano introduced the Cognitive Post-Rationalist model, influenced by attachment theory, evolutionary epistemology, complex systems theory, and the prevalence of abstract mental processes proposed by Hayeck. Guidano conceives the personal system as a self-organized entity, in constant development. The role of the post-rationalist therapist is to strategically upset the system in search of newer and more flexible ways to construct personal experience.

Key words: Constructivism, Post-Rationalism, Evolutionary Epistemology, Tacit knowledge, Selfhood

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INTRODUCTION

Therapeutic models usually derive their name from their object of study or their methodology. Such is the case of behaviorism, which – in its practical aspect – consists of the analysis and modification of behavior. It is also the case of classical cognitive therapies, which analyze and modify cognitive structures. This pattern also pertains to systemic family-therapy, which received its name as a result of applying general systems theory to the analysis and modification of communicational patterns between family members in treatment. However, this is not the case of constructivist therapies. Constructivist therapies' distinctive feature is the adhesion to a set of epistemological premises which do not necessarily relate to the object under investigation or the method in which the therapy is undertaken. This accounts for the dispersion of therapeutic-models that ascribe to this school of thought.

It is rare for a psychotherapist to inquire into the epistemological foundations of the theories, methods and techniques with which they tackle the problems they face on a daily basis. Although they would not deny that their praxis is determined by certain gnoseological premises, their methodological proceedings often tend towards the discovery of newer methods and

techniques that serve as a vehicle for attaining better results vis-à-vis the suffering of their patients. This practical inclination frequently occurs in lieu of a critical reflection upon de explanatory principles that support their clinical work. On the other hand, constructivist therapists set off on a fundamental revision of the epistemological premises that serve as the groundwork of their colleagues' models. Their aimed the critique is at fundamental underpinning of these models, especially the "associationist" postulate of empiricism, by which the mind is conceived as a passive system that gathers its contents from its environment and, through the act of knowing, produces a copy of the order of reality. In contrast, constructivism is an epistemological premise grounded on the assertion that, in the act of knowing, it is the human mind that actively gives meaning and order to that reality to which it is responding. In the same way that the associationist outlook deems perception to be a major middle-man in the interaction between the organism and its environment; constructivists believe that the organism's own activity is responsible for this coalescence. They thus ascribe to the motor theory of the mind, originally formulated by Walt Weimer (1977), who suggests that mental or cognitive domains are intrinsically motor, just like the nervous system (Balbi, 1994, 2004; Guidano, 1991, 1995b; Mahoney et al., 1995; Lyddon, 1995; Mahoney, 1991; Neimeyer, 1995a, 1995b).

Constructivism is an epistemological school of thought with a historical background that spans the works of Giambattista Vico, Immanuel Kant, Hans Vaihinger, other scientists in the field of psychology, and the genetic epistemology of Jean Piaget. In the last twenty years constructivist meta-theory has had a decisive in the cognitive branch influence of psychotherapy, an influence that has led to the development of alternative models which question the foundations of their forerunners and offer newer explanations and methodologies. Those who support constructivist meta-theory postulate that (Mahoney, 1995a, 1995b):

a) humans are not merely reactive and passive participants in their own experience, but are active in its construction;

b) the human mind is of a proactive nature, which means it behaves in an anticipatory fashion;

c) the majority of mental processes operate at a level of tacit consciousness, i.e. unconsciously or subconsciously;

d) personal psychological development is a continuous operation of individualized selforganization that tends to preserve, rather than modify, its own experiential patterns.

Constructivist models are presently in full evolution. In the context of this evolution, stand contributions of Post-Rationalist out the Cognitive Therapy, created by the Italian psychiatrist Vittorio Guidano over the last fifteen vears of the twentieth century. These developments and those of his followers comprise the most interesting advances in the evolution of constructivist therapies. In the following pages I shall expand upon such subjects.

THE EPISTEMOLOGICAL DIGRESSION FROM RATIONALIST COGNITIVISM

Vittorio Guidano's post-rationalist proposal is a carping reaction to the foundations of the models of classical cognitive therapy. After having shifted from behaviorism to the practice of the psychotherapeutic techniques of Beck (1967, 1976), Ellis (1962) and Meichenbaum (1977), Guidano realized he could not further his work as a therapist without undergoing a thorough revision of its epistemological premises. The conclusions that derived from his analysis were expressed by Guidano in the following manner:

"after almost three years of cognitive practice, once again a feeling of frustration began to harbour, springing from the discrepancy between the linear logic underlying the theoretical grounds and the multiform complexity derived from the practice. [...] It became increasingly clear that the elicitations of emotions implied in therapy, due to their intensity and value in the course of the therapeutic relationship, was capable *in its own right* of producing significant change, without the aid of cognitive restructuring techniques, and this was difficult to explain by applying the usual analysis. [...] it appeared that the personal meaning rooted in a system of individual beliefs, rather than concrete beliefs, was much less prone to significant transformation and would tend to remain unalterable in spite of the presence of consistent change. [...] The ponderings that could therefore be conferred revealed that the "black box" was much richer than what our initial enthusiasm would allow us to assume. [...] I was to change my stance once more, but it was clear that, unlike the previous year during my behaviorist crisis, this time it was no longer possible to either continue or broaden that same associationist-empiricist paradigm that until then had served as a reference. First of all, it was obvious that the empiricist paradigm had been pushed to its last limits, beyond which its own structure could not be sustained. Furthermore, the problem did not consist of introducing a novelty or a minor adjustment to solve this or that anomaly. Instead, it indicated the need to modify basic concepts such as 'organism', 'knowledge', 'reality', 'objectivity', etc." (Guidano, 1990, p. 118-120).

In fact, despite having been conceived as a critical response to behaviorism, the models of cognitive therapy that appeared in the 70's did not succeed in disengaging themselves from the associationist mark that was the foundation of the movement developed by Watson. The most common criticism against behaviorism is its mechanicism and reductionism. However, the conceptual nucleus of behaviorism was neither mechanicism nor reductionism. The strongest intellectual principle belonging to this model dates back to English philosophy and is found in empiricism, and the associationism that it puts forward. Granted the notion of mental passivity assumed by Locke, according to which the mind obtains its contents from its environment, behaviorist psychology flourished as an empirical discipline in order to study conduct in terms of adaptation to external stimuli (Brennan 1999). Following their adhesion to the scientific method in the study of basic mechanisms of individual functioning, behaviorists became torchbearers of the anti-mentalist pose that dominated the psychological field during the second half of the 20^{th} century. According to this position, subjective states, the conscience and its processes had to be shifted from the focus of attention in investigations and replaced by more practical phenomena, i.e. more observable and

prone to experimentation. The phenomena *par excellence* was behavior, and psychology adopted a meta-theory of prediction and behavior control. The basic postulates of this proposal can be summed up in the following way:

1) conscious processes cannot be scientifically studied;

2) psychology studies external, observable behavior. This can be reduced, in any case, to physical-chemical processes which are entirely composed of glandular secretion and muscular movements;

3) behavior, being composed of elementary responses, can be analyzed by natural scientific methods;

4) there is a strict determinism of cause and effect in behavior, since there is always an immediate response of some kind to every stimulus, and every response can be traced to a specific type of stimulus. This means that the basic program of psychological investigation should empower the scientist to predict a response from a given set of stimuli; or inversely, to infer the stimuli that have triggered the behavior taking place. In brief, the notion of "black box" allowed behaviorism to reduce the mind to an epiphenomenical condition, not because it were inexistent or unimportant, but rather because of the fact that it can only be subject to introspection and is inaccessible to third party observers.

Springing from empiricist-associationist epistemological foundations, behaviorism developed two explanatory principles that constitute the grounds for a potent therapeutic framework. These principles are: classical conditioning, based on learning by association, and operant conditioning, based on learning by the consequences of behavior, i.e. positive and negative reinforcement, in the terms preferred by therapists.

The behaviorist system extended its conception to the realm of all psychology and conceived mental processes as internal forms of behavior; so that all mental functions, thought included, could be reduced to elementary types of behavioral response. In this sense, it would be possible to describe and explain individual personality as the result of long-term conditioning acquired by learning. In other words, the individual can be conceived as a system of responses or behavior, whether it be operative, verbal, visceral, etc.

The cognitive movement in psychology, which later gave birth to the cognitive models of psychotherapy, first appeared as a reaction to the anti-mentalism of behaviorism. The evolution of cognitive science is usually depicted with a first period associated to the computational metaphor of the mind, a second period in which connectionists condemned the distinctive feature of this model - its serial processing - and suggested parallel processing as an alternative. A would third period be hallmarked bv constructivism and a fourth would have a narrative or hermeneutic orientation as a main feature (Mahoney, 1995a, 1995b; Balbi, 2004). However, this evolution was not carried out in a linear manner, as would appear at a first glance. The so-called "Cognitive Revolution" was not initially oriented towards a computational perspective of the mind. In fact, it can be affirmed that it was constructivist in its beginnings. Firstly this movement attempted to access the contents of the "black box" and endorsed a renewal of the study of subjectivity. So much that in the 1950's the supremacy of the behaviorist age seemed to yield to the conception of the mind as an active process, allowing for the construction of meaning to replace behavior as the object of investigation. By that time the psychologist Karl Lashley (see Gardner, 1987, chapter 2) criticized the associationist premise of behaviorism and outlined some of the basic elements of a cognitive perspective for psychology. According to this author, any theory of human activity should explain a series of operations which simply could not be handled by associative chains. Complex and organized behavior, such as language, or even simpler activities, like playing a musical instrument or playing tennis, cannot be explained by associative mechanisms. In a complex sequence of behavior, when a pianist plays an arpeggio, for instance, there is no time for feedback: so

one note cannot depend on the preceding one. Therefore the sequences of behavior have to be planned and organized previously. Following Lashley, for this to occur one requires very broad. global "plans", responsible for orchestrating these actions. Lashlev put particular emphasis in exposing the basic fault of behaviorism: the belief that the nervous system is naturally in a state of inactivity and is activated only by a string of isolated reflexes under specific forms of stimulation. However, the nervous system is dynamic and in constant activity. It is composed of a group of interacting units that are hierarchically organized, and whose control is centrally located, rather than existing in peripheral stimulation. In other words, the organization of behavior is not externally imposed. It is not derived from environmental stimulation, but it is preceded by processes that take place in the brain and that determine the way in which an organism performs complex behavior (Gardner, 1987). In tone with these ideas, Jerome S. Bruner et al. (1956) published "A Study of Thinking" that defended the idea that psychology as a science should focus on the symbolic activities carried out by human beings in order to construct and construe the world and themselves. This means that during this period psychology seemed to incline to the study of active processes of meaning as a privileged object of study. However, what actually occurred was a different and contradictory case. In a short amount of time many of the chief researchers stopped focusing on the study of the construction of meaning and, instead, directed their attention to the notion of information. Psychology's theorists, following the analogy laid down by John von Neumann (see Gardner, 1987, chapter 2) and Alan Turing (1950) linking brains and computers on one hand, and mind and data-processing systems on the other, preferred to direct their efforts to the development of the so called "Information-Processing Paradigm", the most important premises of which are the adoption of the computer metaphor as the dominant figurative approach to the mind, and computability as a necessary prerequisite of a strong theoretical

model. Computational functionalism - the most radical form that this perspective has adopted postulates that the *mental* and the *physical* are in reality two descriptions of the same phenomena, and that it is possible, and even desirable, to study them separately. In other words, according to the functionalist perspective it is possible to study the mind at an autonomous level, independently of its physical support. Furthermore, since the mind is conceived as a data-processing device, mental activity can be credited to any system which complies with these criteria, such as a machine. Thus, with the birth of computational functionalism, the cognitive revolution was trapped in a new form of associationism in which the chain of stimuli and responses was replaced by input and output of information. Reinforcement, in its lack of affective tone, was conceived as a control mechanism, fed by the system's feedback on the result of its behavior (Bruner 1990, Balbi 2004). The premises of the data-processor paradigm provided the groundwork for the growth of pioneer models of cognitive therapy, created by Aaron Beck and Albert Ellis. As a result of their adhesion to the computational version of the mind, the founding fathers of this school of thought privileged rationality in human change processes. Their premises state that: a) thought and reason *can* and *must* guide the life of every person, their behavior and emotions; b) irrational thought is dysfunctional and is the main cause of psychopathology; c) psychotherapy consists of a process of detection of irrational thought patterns and their substitution for more rational ones. In classical cognitivism considers essence. rationality as a collection of universal normative axioms that constitute an objective, univocal external order. These axioms permit the therapist to assess the degree of inadequacy of every act under analysis, as well as the fine-tuning to be carried out in therapy. In these models the therapist's stance is that of a tutor, familiar with the univocal order of objective reality with which the patient's system of beliefs may not satisfactorily correspond. This role of privileged knower allows the therapist to criticize - with authority - the supposedly irrational source of the dysfunctional behavior and persuade the patient of the convenience of the implementation of more rational beliefs. As has been correctly affirmed by Vittorio Guidano (cited in Gardner, 1985, pag. 26) the classical models of cognitive therapy can be seen as an expansion of the traditional associationist paradigm. The main critique that this author performs on the classical perspective is that the version of the mind as a passive system and data-processor demands a relation of correspondence between reality and knowledge. The mind would therefore be a system whose purpose is arranging information in reality into logical available sets of information. In other terms, no matter how complex and abstract the mental order may be, it would only be the result of combining data with informative content and meaning provided by the environment. The post-rationalist perspective of Guidano, on the other hand, begins with the premise that in the fabric of reality there are only perturbations devoid of informative content or meaning, and therefore, the array of knowledge, and the meaning of its contents, depends solely on the structure and activity of the knowing subject (Balbi 1994; Guidano 1990, 1991; Maturana and Varela, 1987). Around the same period, beginning in the mid-80's, and based on similar criticism, though not always concurrent, other constructivist therapists also chose to advance in the development of therapeutic alternatives based in new non-associationist epistemological premises (Feixas and Miró, 1993; Fernandez Alvarez, 1992; Goncalves, 1989; Greenberg and Safran, 1987; Guidano and Liotti, 1983; Guidano, 1987, 1990 and 1991; Mahoney, 1985, 1995a y b, 1991; Miró, 1994; Neimeyer, 1995a, 1995b; Neimeyer and Neimeyer, 1987; Pascual-Leone, 1990; Reda and Mahoney, 1984; Reda, 1986; Safran and Greenberg, 1991).

BEYOND RATIONALISM

To understand the proposal of post-rationalist cognitive therapy developed by Vittorio Guidano, one must first embark on the study of the premises that guided his theoretical thought. These are: the prevalence of abstraction and tacit activity of the mind, the notions of selforganization and orthogenesis of complex systems, evolutionary epistemology, the analysis of intersubjectivity and the role of emotions in the organization of knowledge, Bowlby's attachment theory and the systemic relation between affective processes and personal identity experience.

The prevalence of abstraction and tacit activity of the mind.

As opposed to associationism, constructivism and the post-rationalist movement that began with Guidano defend the criteria expressed by von Hayek (1952, 1978) with regards to the prevalence of abstraction in the conformation of human knowledge. According to Hayek, the main aspect of mental functioning is not the creation and destruction of associative bonds but rather active processes of expectations, the formulation of hypothesis and theories. He affirms that sensations, contrary to what has been held true for centuries by associationism, are the result of the abstract capacities of the mind and not its basic constitutive material. Following this author's thesis, the mind creates a complex system of abstract rules responsible for the concrete and particular qualities of our conscious experience. In other words, the initial point from which the richness of the sensorial world we experience is derived, can be found contrary to empiricist belief - in a series of abstract rules that reflect the complexity and the autonomous capability for organization that the human mind has acquired throughout its evolution (Guidano, 1995b). Guidano, adhering to an original thesis by Polanyi (1958, 1966), and in full consonance with the aforementioned criteria, bestows a superior role to mental processes that occur in a tacit level. These are deep structures of organizational rules with the task of organizing present experience and anticipating imminent experience, operating bevond our conscious. explicit, verbal awareness. However, this does not only occur at unconscious level. but also at an а superconscious level, above conscience and regulating its activity, without appearing in it.

That is, there are two distinguishable, different, and broadly interconnected levels of processes in the structure of knowledge: a) tacit processes constitute a set of idiosyncratic rules of deep organization that, in the continuous becoming of consciousness, provide the anticipatory frame on which the system orients its focus of attention and the activity of selecting and blocking perception; b) beliefs, desires, expectations, emotions and other states which, at a superficial level are available to our conscience and our verbalization, make up the material of our explicit knowledge, a system in which the contents that emerge from tacit knowledge are reflected and organized. In this way, the cognition that results from a constructive and interactive process continues to fluctuate between these two levels of knowledge. This conversion of knowledge, from tacit to explicit and vice versa, does not consist of a mere "translation from one language to another", but rather a complex generative process, both constructive and dialectic, in which both levels are interdependent and mutually influenced 1987. 1995b). (Guidano From а psychopathological point of view, regarding possible therapeutic change, it can be said that the functionality of a personal system is totally dependent on the degree of integration and plasticity in which the relation between the two levels of knowledge operates.

Self organization and orthogenesis.

Guidano conceived selfhood as a selforganized system, and consequently an orthogenetical system. In his own words:

"a self-organizing entity can be described as a system of growth whose development through life is regulated by the principle of orthogenetical progression; this means that the system heads towards more integrated and more complex levels of structural order. [...] the key property behind the autonomy of any form of self-organization lies in the ability of the system to transform into self-referential order the random disturbances that come from either the environment or internal oscillations (Guidano, 1987, p. 10).

According to Maturana and Varela (1987) living beings, as a result of a basic evolutionary constraint, are organized in order to preserve their identity as a system. In this type of systems, the fundamental constant consists of the maintenance of its own organization, defined as a specific web of relations. The organization of such a system is not defined by the properties of its components but rather by their relations and the processes that produce them. These systems are autonomous and closed on themselves, i.e. they cannot be informed. This premise shall be crucial in designing a therapeutic mechanism, since the system cannot be molded from its exterior, the only adequate procedure, rather than informing it, would be to create the conditions to strategically disturb it, driving its attention to its own processes and tacit contents. It follows that by adding information about itself into the explicit dimension, the system can be reorganized into a higher degree of complexity.

Evolutionary epistemology, analysis of intersubjectivity and emotions in the organization of knowledge.

From this perspective, the source and development of knowledge, in a broad sense, are analyzed especially taking into mind the evolution of life on the planet. An evolutionist perspective that conceives knowledge as a function of living beings, and that has therefore evolved with them, makes an analytic approximation of the structure of human experience possible, given that it integrates in its analysis our peculiar way of being animals. According Guidano, evolutionary to epistemology should be the foundation of any sound - congruent methodology of cognitive psychology. He affirms that it is possible to pose the problem of sameness in biological terms if the rise of consciousness is taken as a selfreferential imperative specific to our species in a determined moment of its evolution. In his words

stability in an ever-changing medium through the attainment of more complex levels of autonomous self-referent functioning." (Guidano, 1991, p. 21).

It is fundamentally important in this line of thought to take in account the fact that we humans are primates and as such, we are animals that live socially and in an affective bind throughout the entire course of our individual lives. In all primates a highly complex social world has been superimposed over the merely physical environment common to all animals. The distinctive trait of this "new world" is that it generates an intersubjective reality; that is, primates live in a world in which knowledge of one's self and reality always depends on the reciprocal knowledge of others (how I see others and how I feel perceived by them). The survival of an affective being that lives an intersubjective experience depends to great extent on its ability to recognize the emotional states of the others with whom it lives, and its capacity to express and simulate its own emotional states. This explains the central role of facial expression in primates; their high specialization and hierarchy as a terminal screen of emotional states. Primatologists have proven that the ability to distinguish individuals is innate to all primates and that the face is the body part that with most specificity represents precision and that distinguishable identity of the others. This aptitude constitutes an experience of critical importance in higher primates. Facial recognition seems to be a feature of neocortical processing, the evolutionary progression of which was accompanied by the emergence of an intersubjective dimension that became increasingly complex at the level of intense bonds, for instance a mother-son relation, or in the bonds with other group members (rivalry, alliances, friendship, courtship, etc.) These evolutionary changes rely on an increasingly stronger capacity to interrelate and coordinate with others to achieve a better adaptation, such as in the attainment of more secure attachment figures or higher social ranks. It can be said that in primates, as well as in individual human development, there is a co-evolution of intersubjective and individuation processes.

[&]quot;... if knowing is distributed along a continuum ranging from early rudimentary exploratory behavior to human self-consciousness, then evolution emerges as an essential regulatory strategy aimed at achieving

Meanwhile, the capacity to distinguish the self and others appears as the essential condition to structure a stable self-recognition.

This analysis allows Guidano to affirm that the intersubjective components of our experience should integrate the basic structure of our propositions about nature and the development of human mental processes and should not be absent from any congruent theory that intends to explain the phenomenon of personal identity, and its pathological processes.

Furthermore, if the main variable in the individual process of adaptation and survival is the development of the necessary abilities for reciprocal coordination with others, then human knowledge, in terms of complex selforganization of experience, is, like the latter, not only cognitive (in the sense of thought), but its structure is essentially affective-emotional. It is critical that this aspect be taken into account when analyzing, during therapy, whether a behavior or belief is apparently dysfunctional due to its irrationality. Among others, this is a key reason that makes the unique attention bestowed upon emotions in psychotherapeutic processes a distinctive trait of these models. According to this conception, the matrix of meaning that is processed by thought is always affective-emotional, since in humans, as in other mammals, emotions provide an immediate and global sense of the world and our stance in it. In other words, emotions consist of specific forms of knowledge; an archaic biological system of cognition that is easily activated and serves the purpose of survival. Those who defend these premises endorse the idea that it is basically emotions that regulate mental functioning, by organizing thought as well as action (Guidano, 1991; Greenberg et al., 1993; Greenberg and Pascual-Leone 1995; Reda 1998). It follows that, if emotions contribute to our adaptation, they be eluded the analysis cannot in of psychopathological processes and a therapeutic method that intends to control them is mistaken. Au contraire: being a central aspect of our system of knowledge, emotions should be examined with the aim of reorganizing them in their functioning.

John Bowlby's attachment theory and the systemic relation between affective processes and the experience of personal identity.

Attachment theory, created by John Bowlby (1973, 1979, 1980, 1988) has had a decisive imprint on the cognitive, systems and processoriented model of the self proposed by Guidano. Bowlby, a British doctor and psychoanalyst, carried out a profound revision of Freud's theory of the libido. Starting in 1958, he vowed to make his conclusions about the effect that early separation from caretakers has on children, congruent with modern biology and psychology. meta-psychology considered the He of psychoanalysis incapable of explaining the intense bind of babies and infants with their caretakers, as well as their emotional and behavioral responses to loss and separation. He therefore developed a new paradigm that meets the current standards of a scientific discipline and that proves compatible with neurophysiology and developmental psychology. This model implies a critical revision of the socalled "object relations", discarding many classical concepts such as psychic energy and drive. After many years of observing situations involving loss, grief, different types of emotional strain, and psychic disorders caused by in children, separation and affective loss adolescents and adults, Bowlby proposes his attachment theory. His thesis is that the tendency to establish intimate emotional binds with specific individuals - attachment figures - is a basic component of human nature that is present at birth and remains throughout the entire lifespan. Bowlby highlights the significance of the findings of modern developmental psychology that undoubtedly illustrate the fallacy of the supposed "autistic stage" during life's early stages, conceived by Freud. The new perspective is that attachment is a key function for survival and that this function is present at the very moment of birth, since the newborn shows an innate ability to establish social interaction and takes pleasure in doing so. That is, the basic motivation of the human baby does not consist in the discharge of drive but rather the search for bonding as means for protection.

Bowlby also stresses that the attachment system is primary, does not derive from any other function and, given its own dynamics, this behavior differs from nurturing and sexual activity and is, at least, of equal importance to human life. In the context of the aforementioned theory, Bowlby sought to explore the processes by which these affective bonds are established and broken. According to Bowlby, the infant's attachment does not imply a single type of conduct, but is constituted by an organized system of diverse types of behavior - clinging, crying, visual tracking, smiling - pursuing the same ends: to preserve the physical and emotional proximity of the caretaker. This behavioral system operates in a balance that environment-exploring fluctuates between behavior and behavior that aims to keep the The oscillation between caretaker close exploration and approximation to the caretaker is given in terms of the perceived accessibility of the caretaker and the dangers perceived in the environment, as well as other requirements (hunger, thirst, cold, sleep, and discomfort in general) that demand care, satisfaction and solace. Furthermore, childhood attachment is the source of a set of social interaction conducts that appear later during adult life. This group of conducts includes seeking a mate and coupling, mutual care, and sexual intercourse. According to Bowlby, these actions have been developed by evolution in order to guarantee the survival and procreation of the species. The important similarity between human attachment behavior and the attachment behavior of non-human higher primates drove him to conclude that attachment is an adaptive trait of the species and has therefore evolved by going through a process of natural selection.

Guidano assumes that attachment can be considered more than a mere disposition or spontaneous response driven to maintain the physical and emotional proximity of others. Given that perception of other people is such a significant regulator for self-perception, attachment can be deemed a self-referential process necessary for the gradual construction of a continuous and unified sense of oneself. It seems evident that interdependence and reciprocity of psychophysiological rhythm between a child and its caregiver are inherently co-dependent and guide the child's activity - as well as the structure of its self-perception and world-perception - from the earliest stages of life. Each perception and recognition of others is a source of direct influence in self-perception. This formula is expressed in the "mirror effect", where the child becomes increasingly self-aware as he sees his own reflection in the "mirror" of the idea that others have of him – very much in the same way we recognize our image in a mirror (Cooley, 1902; Popper and Eccles, 1977). In this sense, the self-referential processing of the emotions that are set off as early attachment processes in terms of proximity-separation (attachment, exploration) of significant figures, would constitute the basic organizing principle in the development of identity in the first stages of life. Hence, through affective reciprocity with significant others, an individual emotional realm is created, and it shall serve as the material support upon which - through the course of development – a viable unified, continuous personal sense shall arise (Arciero, 2002; Balbi, 1994, 2004; Guidano, 1987, 1991; Guidano and Quiñones, 2001; Reda, 2005). On the basis of these premises on the consolidation and development of self-awareness, Guidano's model basically conceives psychopathological phenomena as sudden and unmixed changes in the sense of personal continuity. These changes are always attributed to affective disarray, i.e. considerable change in (tacit or explicit) experience, in the reciprocity with significant in post-rationalist cognitive others. Thus, therapy, the manner in which patients experience and process these disarrays is of vital importance, as is its linkage to the symptoms of the patient. As can be clearly appreciated, this outlook differs considerably from that of classical cognitive therapies.

The narrative structure of identity.

The rise of language – both as an evolutionary process of hominization and in the development of each individual is definitely the key event in

the origin and expansion of the experience of personal identity. The lexical and semantic rules that typify this form of social interaction allow for the restructuring of immediate experience in terms of propositions, thus human language triggers a new experiential dimension, free from the propinquity of experience. The distinction carried out by Dewart (1989) between factual language, characteristic of non-human animals, and thematic language, exclusive to human beings, constitutes a considerable contribution to the understanding of the importance that this has in the species' evolution and in individual growth. Factual language consists of a system of signals which most living beings command. The animal world renders very complex and articulate systems for transmitting information. These communication systems generally consist of the emission of sounds and in some instances - such as higher primates - relatively complex vocalizations. The peculiarity of factual language is that it specifies only what is going on at the time of the verbalization. This is, factual language is tied to the immediacy of experience and cannot add any novel information; it defines an event but is always contingent and simultaneous to that said event. By contrast, thematic language is a type of social coordination in which every event can be structured as a story. This is the prime trait of semantic language: it elicits the ability to connect and integrate a group of experiential elements that have already occurred into a theme, with a beginning, middle and end. With the use of thematic language, events are disengaged from the contingency of immediate experience, and it becomes possible to separate in each experience two types of content: affective content, disparate and completely distinct from informative content. In this way the imprint of the subjective world is vastly amplified and this leads to the development of self-awareness. Being able to separate affective content from informative content, language stimulates the evocation of immediate experience without depending on the presence of the situation that produced it; this helps foster the expansion of diverse viewpoints regarding the protagonist of the story occurring, i.e., the subject. Guidano takes Dewart's thinking into account in his explanation of the dynamics of the self. He contends that thematic language has completely changed the dimension of human life and, therefore, the structure of its experience. This new instrument of social coordination has generated the possibility for experience to occur on two simultaneous levels: the level of immediate experience and a further level which reorganizes this experience. The ability to create a sequence and observe experience that has already taken place sets off a new experiential facet in which temporality is a basic structural component. The intersubjective components that occur in thematic language make possible the construction and development of a narrative frame of human experience. The faculty to sequence one's experience generates an increase in the sensitivity to make out the details of the subjectivity of others and oneself, and induces the development of a differentiated sense of personal identity. When a child begins to structure thematic language and to sequence his own experience – with a beginning, middle and end – his conscience changes, shifting from an instantaneous or factual conscience - typical of animals - to a thematic consciousness; a more stable continuous organization and of consciousness, in which autobiographical events are arranged in chronological, causal and the matic order.

The distinction between the experience of a self as a protagonist and a self as a narrator facilitates the organization springing from self-referential modules (sensorial, emotional and especially affective) in relation to a unified and continuous personal meaning.

A THERAPY OF THE SELF

A crucial aspect of these new models of cognitive therapy lies in the way they underscore the fact that we humans permanently process a personal identity. It is often said that in the last few decades psychology has rediscovered the self. In fact, just like in general psychology and many other therapeutic orientations, constructivists and post-rationalists also bestow a

particular interest to the study of the self. These branches emphasize that with self-awareness, personal meaning becomes the organizational nucleus of every other meaning, which explains why it is the rules of self-identity that regulate all possible types of constructions, and therefore what information shall be excluded or integrated into the system of the meanings of reality and the self. As we have seen, Vittorio Guidano (1991, 1995a) conceives selfhood as a complex selforganized system, an experiential system with two distinct levels that are mutually regulated: immediate experience, independent of our intentionality, and the subsequent experience of a sense of selfhood in which all that occurs is processed in a narrative manner. Following this perspective, the continuous array of personal experience in a unitary and coherent dimension is made possible as long as the generation and assimilation of affective information can be regulated by the rules of self-identity that have been structured in a narrative dimension up to that point. This is, self-organization in terms of internal coherence of the self means that the possibility for assimilation of disturbances that arise as a consequence of the permanent exposure to new experience is subordinated to the likelihood of this experience to be integrated into the preexistent experiential order, with which the sense of unity of personal meaning is maintained, without generating excessive disorder, always as long as it contributes to the generation of a new order, perceived as seamless to the previous one. In other words, by means of this continuous auto-organization, the self is autonomously constructed by incessantly developing more complex and integrated levels self-identity and self-awareness. This of orthogenetic process of feed-forward is regulated with scrutiny by the dynamic balance between experiences of discrepancy and consistency. On one hand, the search for consistency is the basic procedure to structure and stabilize the available levels of self-identity and self-awareness. Furthermore, emotional alterations, which arise from the perception of discrepancy, constitute

the main regulators of restructuring processes of more integrated levels of self-identity and selfawareness (Balbi, 1996, 1997, 2004; Guidano, 1995b). Instead of incurring in the analysis of rational structures of paradigmatic thought, Post-Rationalist Cognitive Therapy takes into mind the organizational function borne by affective processes and narrative thought in the experience of personal identity, especially when considering the nature of psychopathological processes and the strategy of therapeutic change (Bruner, 1986).

This perspective proposes a psychotherapeutic method based on the emotional examination of the patient, with the therapist as a guide. In an experiential therapeutic approach, in which the construction of alternative emotional meaning is supported – such as in this model - the therapist's task basically consists of sharing the subjective experience of the patient while he explores it, and in aiding in the unambiguous processing of this experience while it occurs, in its full complexity and variety. Thus, the therapist carries out the role of a strategic emotional disturber, who can - through his questions and remarks - guide the patient towards critical areas of emotional experience and actively cooperate in its reconstruction and reorganization. The objective is to bring into being more plastic and integrated levels of selfawareness.

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