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# Attachment Disorganization and Severe Psychopathology: A Possible Dialogue Between Attachment Theory and Control-Mastery Theory

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A good enough theory of psychological functioning and development, and of how psychotherapy works, should take into account recent scientific developments about emotional, motivational, and cognitive functioning. They show how human beings are "wired" to adapt to reality and share a set of evolutionarybased emotions, motivations and skills that are shaped by the cognitive-affective structures (schemas) developed on the basis of the emotionally relevant experiences, in particular of the first years of life. Attachment theory (Bowlby, 1969, 1973, 1980) represents the first real attempt in this direction, although the clinical implications of this theory are still fragmented and not specific enough. We think that control mastery theory (CMT; Weiss, 1993) could be useful for integrating attachment, psychodynamic, and cognitive-evolutionary thinking. Such an integrated model is based on the centrality of adaptation, sense of safety, and real experiences; on the central role of inner representations/beliefs/schemas in linking adverse developmental experiences and attentional strategies, perception organization, emotional reactions, behavior, and psychopathology; and on the necessity to modify this relational knowledge in order to help patients get better. To explore the possible integration between attachment theory and CMT, we will focus on a specific topic, the disorganization of attachment and its psychopathological consequences, and we will illustrate the implications of this integration with a brief clinical example. We chose to focus on attachment disorganization because it is the attachment category more consistently related to psychopathology.

Keywords: attachment theory, disorganized attachment, control-mastery theory, trauma, psychotherapy

A good enough psychodynamic theory of psychological functioning, development, and of how psychotherapy works should take into account recent scientific data<sup>1</sup> about emotional, motivational, and cognitive functioning developed by neuroscience (Panksepp & Biven, 2012), moral psychology (Cortina, 2017; Haidt, 2012; Tomasello, 2016), and social cognition (e.g., Bargh, 2017). Moreover, this theory should be coherent with the theory of natural selection as put forward by contemporary evolutionary theorists (Wilson, 1978; Wilson & Sober, 1994; Wilson & Wilson, 2008).

Bowlby's attachment theory (Bowlby, 1969, 1973, 1980) represents one of the first and best attempts to construct an evolutionary based and empirically validated theory of personality development that may explain important aspects of the psychological and relational functioning of human beings. "Bowlby was one of

the first psychotherapists to root human experiences in the inborn mechanisms of the mind, as they conceived by evolutionary biology and ethology" (Liotti, 2000, p. 232). The attachment behavioral/motivational system identified and investigated by Bowlby is innate because every young mammal needs the closeness and sensitivity of a caregiver to survive. Moreover, the child attachment behavior is shaped by the experiences of the first years of life because it needs to learn how to survive in *that* specific environment adapting to *that* specific parent. In accordance with these first experiences, the child builds a series of internal cognitive-affective structures (the internal working models [IWMs]) of the self, others, and the self in relation to others that will guide him in subsequent attachment experiences within his interpersonal environment.

These models then govern how he feels towards each parent and about himself, how he expects each of them to treat him, and how he plans his own behavior towards them. They govern too both the fears and the wishes expressed in his day dreams. Once built, evidence suggests, these models of a parent and self in interaction tend to persist and are so taken for granted that they come to operate at an unconscious level. (Bowlby, 1988; p. 130).

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<sup>&</sup>lt;sup>1</sup> By "scientific theory" we mean a theory that is based on empirical data or is consistent with what has been showed by empirical research.

Following these premises, and starting from the idea that psychopathology often derives or is supported by insecure attachment relationships between the child and his caregivers, Bowlby (1988) described the therapist's task in five points: first of all, the therapist has to provide the patient with a secure base from which s/he can explore the painful aspects of his life; second, s/he has to encourage the patient to consider how s/he relates to important others; third, s/he encourages the patient to explore the relationship between her/himself and the therapist; fourth, s/he encourages the patient to consider how her/his feeling, perceptions, expectations, and actions may be the result of her/his childhood and adolescence experiences; fifth, s/he helps the patient to consider how her/his models of self and others derive either from past painful experiences or from confusing messages received from parents.

This idea of the therapist's task is, in several aspects, different from the one that emerges from classical psychoanalytic theories; in particular, because it assumes that psychopathology derives from actual past experiences, not from fantasies, and because it stresses the therapeutic relevance of the real relationship between patient and therapist. The role of the therapist is to provide the conditions in which a patient can explore his IWMs and restructure them within the new "secure" relationship with the therapist.

However, Bowlby's theory is almost exclusively centered on the attachment system and only peripherally on care, exploration, and other emotional/motivational systems (see also Eagle, 2013). For these reasons, it would be very useful to integrate attachment theory with an empirically supported theoretical framework that considers attachment together with other emotional/motivational systems, in order to better understand psychopathology and how to modify IWMs in psychotherapy.

Both from a cognitive-evolutionary perspective (Liotti, 2000, 2017) and from a psychodynamic perspective (Lichtenberg, 1989; Lichtenberg, Lachmann, & Fosshage, 2011), there have been very good attempts to formulate evolutionary based clinical theories of normal and pathological functioning in which attachment and other motivational systems play a crucial role together with relevant developmental experiences. But the theories of psychotherapy technique based on these theoretical proposals (Lichtenberg, 1995; Lichtenberg, Lachmann, & Fossaghe, 1996) are not empirically supported.

Another theory that is compatible with attachment theory but whose clinical indications are empirically supported is controlmastery theory (CMT; Gazzillo, 2016; Weiss, 1993; Weiss, Sampson, & the Mount Zion Psychotherapy Research Group, 1986). Unlike the previously mentioned attachment influenced theories of psychotherapy, in fact, CMT has conducted several research studies on the process and outcome of psychotherapy aimed at furthering understanding of psychotherapy change mechanisms and at optimizing therapeutic effectiveness (Bloomberg-Fretter, 2005; Curtis & Silberschatz, 2007; Curtis, Silberschatz, Sampson, & Weiss, 1994; Curtis, Silberschatz, Sampson, Weiss, & Rosenberg, 1988; Foreman, Gibbins, Grienenberger, & Berry, 2000; Fretter, 1995; Gassner, Sampson, Weiss, & Brumer, 1982; Horowitz, Sampson, Siegelman, Wolfson, & Weiss, 1975; Silberschatz, 1986, 2005, 2017; Silberschatz & Curtis, 1993; Silberschatz, Curtis, Fretter, & Kelly, 1988; Silberschatz, Curtis, & Nathans, 1989; Silberschatz, Sampson, & Weiss, 1986).

After a brief introduction of CMT, we will explore the possible theoretical integration (Castonguay, Eubanks, Goldfried, Muran, & Lutz, 2015) between attachment and CMT examining a specific topic of attachment theory—the disorganized attachment—and its psychopathological implications.

We have chosen to explore the possible integration of attachment theory and CMT from the vantage point of attachment disorganization because this is the attachment category more consistently related to psychopathology, and one of the main strengths of the integration of these two theories lies, in our opinion, in its implications for understanding and treating psychopathology.

A key point discussed later in this paper is that disorganized attachment can be seen as a manifestation of contradictory IWMs related to different motivational systems (i.e., as an attempt to adapt to a contradictory and unstable interpersonal world) and that identifying the related patient's pathogenic beliefs and resulting testing strategies provides a framework that allows the clinician to promote psychic growth more effectively.

#### The Basics of CMT

CMT is a cognitive-dynamic relational theory developed and empirically validated in the last 40 years by Joseph Weiss, Harold Sampson and the San Francisco Psychotherapy Research Group (Silberschatz, 2005; Weiss, 1993; Weiss et al., 1986). According to CMT every human being is guided throughout her/his life by a deep adaptive effort and by a search for safety in her/his environment, most crucially in her/his interpersonal environment. The first reality of the child is her/his family; and given that the child needs her/his caregivers' and siblings' love and depends on them for her/his survival and growth, her/his only possible adaptation strategy is to establish and maintain a secure enough relationship with them and make them as happy as possible.

In his effort to adapt to reality, the child builds reliable knowledge about her/himself and her/his world. This knowledge, that CMT calls beliefs, is quite similar to the IWMs. Beliefs guide the child in her/his adaptation, orient her/his attention, shape her/his perceptions and feelings, indicate how to behave in each circumstance, what to expect from others, which feelings and behaviors are the most likely to be rewarded and which should be avoided, inhibited, or changed. Beliefs represent both the reality and the morality of the child (Weiss, 1993).

Several peculiarities of a child's psychic functioning influence the formation of her/his beliefs. First, the child needs to see her/his family members as wise and good and to establish with them a secure enough relationship. At the same time, s/he needs to feel that they are well, happy, and satisfied with her/him. In fact, s/he is deeply interested in her/his parents' mood and behaviors, and whatever the parents say and do becomes a moral imperative that must be assimilated and respected (Gazzillo, Fimiani, et al., 2019). Moreover, the cognitive immaturity, lack of experience, and egocentric quality of young children's thought leads them to establish incorrect causal links with events, to overgeneralize the rules they infer from the experiences with their relatives, and to take responsibility for everything that happens (Davidov, Zahn-Waxler, Roth-Hanania, & Knafo, 2013; Hoffman, 1982; O'Connor, Berry, Lewis, & Stiver, 2012; Weiss, 1993; Zahn-Waxler, Radke-Yarrow, Wagner, & Chapman, 1992). While clearly influenced by childhood motivational, emotional, and cognitive peculiarities, the child's beliefs are heavily based on his actual experiences (Sampson, 1992).

According to CMT, a belief may be defined as "pathogenic" when it associates the achievement of a pleasurable and realistic goal with an internal danger (feelings of guilt, shame, anxiety) or with an external danger (suffering, expulsion, loss of loved ones). Pathogenic beliefs derive from shock or stress trauma, that is, from the child's efforts to adapt to single dramatic or catastrophic events (the loss of a parent, an abuse, an earthquake, a prolonged separation etc.), or to the continuous stress to which the child is exposed in chronically mis-attuned relationships. In general, "pathogenic beliefs are internalized cognitive-affective representations of traumatic experiences" (Silberschatz, 2008; p. 276) aimed at explaining why the trauma happened and what should be done in order to avoid retraumatization. Both adaptive and pathogenic beliefs may be encoded in language as explicit knowledge or as implicit emotional and procedural knowledge (Weiss, 1995). Weiss (1997, p. 428) assimilates procedural knowledge to the "representations of interactions generalized" which Daniel Stern (1985) thought as the building blocks of IWMs, even if they are not limited to attachment-related interactions.

Pathogenic beliefs support and, in turn, are supported by interpersonal guilt. In fact, children feel deep feelings of guilt when their behaviors, emotions, and motivations seem to produce suffering in their loved ones or threaten their relationship with them. As we have argued (Gazzillo, Fimiani, et al., 2019), the hypothesis of multilevel natural selection (Wilson, 1978; Wilson & Sober, 1994; Wilson & Wilson, 2008) and the data provided by moral psychology (Haidt, 2012; Tomasello, 2016) support placing the CMT model of interpersonal guilt within a theoretical framework that sees the human species as fundamentally eusocial and the evolution of human beings as basically groupish, with interpersonal guilt having the function of maintaining social bonds within the primary group.

Both adaptive and pathogenic beliefs are associated with manifestations of compliance, noncompliance, identification, or counteridentification with parents' behaviors, attitudes, and communications. For example, a child whose mother's depressed and vulnerable communications, behaviors, and reactions lead her/him to believe that his needs are too burdensome for her could comply with this belief by not asking anything for her/himself (compliance); alternatively, s/he may become extremely needy and demanding (noncompliance). A third possibility is that this child treats other people as the parent treated him, appearing depressed and overwhelmed by their needs (identification), or treats other people as s/he would have wanted to be treated (counteridentification).

Psychopathology can then be understood as the expression of (a) the pathogenic beliefs developed in the attempt to adapt to a traumatic environment; (b) the emotions connected to them; and (c) the compliances, noncompliances, identifications or disidentifications developed by the child together with these beliefs—that is, psychopathology can be read as the expression of different pathogenic schemas. Pathogenic beliefs and schemas, in fact, obstruct the attainment of adaptive goals which are expressions of different motivational systems (Weiss, 1993, p. 7): the wish to depend on, and trust other people (attachment), the desire to be independent (exploration and assertiveness), the wish to compete (social rank) and so on.

However, since these pathogenic beliefs are grim and constricting, a person is highly motivated to disconfirm them. In each important relationship, a person tries to test<sup>2</sup> (Horowitz et al., 1975; Silberschatz, 1986; Silberschatz & Curtis, 1993) her/his pathogenic beliefs with the hope that the other person might disconfirm them by behaving differently from the traumatic parents or from the way s/he reacted to them, so that the obstructed goal could be finally pursued.

CMT identifies two principal kinds of tests (Gazzillo, Genova, et al., 2019): transference test, and passive-into-active tests. In the first kind of test, the patient complies with, or rebels against, one of her/his pathogenic beliefs hoping that the other person will not react as the traumatizing person did. In the second kind of test, the passive-into-active tests, s/he behaves in the same traumatizing way her/his caregiver behaved with him (identification) or in the opposite way (counteridentification) in the hope that the other person will not be traumatized as s/he was and will show her/him a different way to deal with that behavior.

CMT proposes also that patients have simple unconscious plans<sup>3</sup> for disproving their pathogenic beliefs and pursuing their developmental goals (Weiss, 1998). Consistent with contemporary social cognition research (e.g., Bargh, 2017), CMT (Weiss, 1990) suggests that human beings carry out unconsciously the same kind of mental activities they perform consciously, such as setting goals, making plans, testing them, assessing risks, and so forth. In psychotherapy, they want to understand the origins and function of their pathogenic beliefs, to disprove them, and to master the trauma<sup>4</sup> that originated them. And they test their pathogenic beliefs with the therapist hoping that the therapist will respond differently from their traumatic caregivers and differently from how they reacted to caregivers' traumatizing behaviors and attitudes. Such different responses represent one important way that the therapist is able to pass the patient's test and to disconfirm the patient's pathogenic beliefs.

Consistent with the hypotheses of other research groups (see e.g., Boston Change Process Study Group, 2005), CMT suggests that since psychopathology often stems from knowledge acquired during the first years of life from the child's attempts to adapt to her/his environment and traumas, change in psychotherapy cannot be limited to the acquisition of new declarative knowledge (insight) or to the recovery of "warded-off" episodic knowledge. Psychotherapeutic change often requires a relational modification of procedural knowledge. It is important to stress that there is strong research evidence showing that when therapists pass patients' tests and intervene in ways that are compatible with the patient's plan for psychotherapy, patients show progress in psychotherapy (for a review, see Silberschatz, 2005; and Gazzillo, Genova, et al., 2019).

The centrality of adaptation and safety as well as the patient's use of the therapeutic relationship to modify procedural relational knowledge are perfectly in line with attachment theory. Attachment theory, like CMT, also emphasizes prosocial motivations and actual relational experiences in shaping the cognitive-affective

<sup>&</sup>lt;sup>2</sup> The testing concept was partially anticipated by Freud (1938/1964), Rangell (1969), and Loewald (1960), but has been most explicitly and fully developed in CMT.

<sup>&</sup>lt;sup>3</sup> The concept of plan has been partially anticipated by Miller, Galanter, and Pribram (1960).

<sup>&</sup>lt;sup>4</sup> The concept of trauma mastery has been partially anticipated by Freud (1920/1955) and Greenson (1965).

structures that mediate human motivations, emotions, and behaviors.

In the sections that follow, we will focus on disorganized attachment and its psychopathological consequences for exploring a possible path of integration between CMT and attachment theory for understanding and treating psychopathology.

#### The Disorganization of Attachment

According to Duschinsky and Solomon (2017), the term "disorganization" in attachment theory can be applied to three different concepts: the observable behavior of some children (D-behav), the psychological systems that can be inferred from these behavior (D-sys) and, finally, a category of the adult attachment classification systems (D-class).

The concept of disorganization (Main, Kaplan, & Cassidy, 1985) stems from the analysis of 200 cases of children that were difficult to categorize within the three classifications of attachment available at the time: secure, insecure avoidant, insecure ambivalent. In fact, the D category was added in 1986 (Main & Solomon, 1986) to the classification of the strange situation procedure (SSP: Ainsworth, Blehar, Waters, & Wall, 1978). These 200 childrenwho could otherwise be classified as secure, insecure avoidant, or ambivalent-occasionally experienced a breakdown in the emotional control strategies normally seen with the SSP phases of separation and reunion, which appeared to be a consequence of a breakdown in their attentional (Atkinson et al., 2009) and behavioral systems. In addition to the absence of a coherent strategy, D children were characterized by conflicted, disoriented, and fearful behavior; they tended to avoid approach, showed fear and apprehension in the presence of the parent (Lyons-Ruth, Yellin, Melnick, & Atwood, 2005), and physiological indices of stress higher than those showed by children with organized attachment (Hertsgaard, Gunnar, Erickson, & Nachmias, 1995; Spangler & Grossmann, 1993; Willemsen-Swinkels, Bakermans-Kranenburg, Buitelaar, Van IJzendoorn & van Engeland, 2000). Hesse and Main (2000) described the disorganization/disorientation of attachment as the result of a collapse in the behavioral and attentional strategies of the child, which can lead to a D classification (Duschinsky & Solomon, 2017).

The indexes of disorganization identified by Main and Solomon (1990) are: (a) sequential display of contradictory behavior patterns; (b) simultaneous display of contradictory behavior patterns; (c) undirected, misdirected, incomplete, and interrupted movements and expressions; (d) stereotypies, asymmetrical, and mistimed movements, and anomalous postures; (e) freezing stilling, and slowed movements and expressions; (f) direct indices of apprehension regarding the parent; and (g) direct indices of disorganization and disorientation. These patterns, and the extent to which there is a collapse in the attentional and behavioral strategy, led to the D classification. In some instances, the disorganization was such that it made it impossible to establish a secondary classification category.

After the presentation of the protocol for D classification by Main and Solomon (1990), several studies tried to identify the peculiar characteristics of the parents of a disorganized child. The disorganization of attachment in children is statistically related to unresolved loss or trauma in parents (Hughes, Turton, McGauley, & Fonagy, 2006; Main & Solomon, 1990; van IJzendoorn, 1995). Several studies (e.g., Abrams, Rifkin, & Hesse, 2006; Hesse & Main, 1999; Madigan et al., 2006) found that these parents seemed to respond in a frightened/frightening or highly atypical ways to their children's distress and discomfort: for example, with moments of dissociative detachment. The unwitting revival of traumatic memories during parent-child interactions on the part of the parent may appear as an expression of fear on the face of the child or could make the caregiver more prone to became aggressive toward the child. This would result in a situation of fright without solution in the child, as the frightened or angry parent becomes, at the same time, the source, and the potential solution, of the child's fear.

In some cases, however, parents of disorganized/disoriented children do not seem to have unresolved loss and trauma. For this reason, several authors (e.g., Goldberg, Benoit, Blokland, & Madigan, 2003; Madigan et al., 2006) started to study the parent-child communication to better understand the origins of disorganized attachment. Lyons-Ruth and colleagues (Lyons-Ruth, Bronfman, & Parsons, 1999) have identified several indices of disrupted affective communication which are strongly associated with disorganized attachment in children, even when the effects of fright-ened/frightening behaviors were controlled, and have described these parents as hostile/helpless in regard to the child's needs of care and comfort (Lyons-Ruth et al., 2005).

Other authors identify the behavioral patterns of these parents as extremely insensitive and inconsistent with the child attachment signals (see Bernier & Meins, 2008 for a review). Last but not least, Solomon and George (1996, 2011) showed that these parents describe themselves as helpless, out of control, or emotionally dependent on the child.

What is clear from these data is that the need for care and reassurance of the children who will develop disorganized attachment clash with their caregivers' problematic responses; the caregivers, rather than responding to the child's attachment needs with a caring attitude, end up generating greater stress and fear in the baby (Tarabulsy et al., 2008). So, in many cases the trauma at the basis of disorganized attachment may be generally represented by a plurality of microrelational traumas (Dazzi & Zavattini, 2011).

#### **Precursors of Disorganized Attachment**

Several studies (e.g., Barnett, Ganiban, & Cicchetti, 1999; Cicchetti, Rogosch, & Toth, 2006; Lyons-Ruth & Jacobvitz, 1999) show that child maltreatment is the variable more strongly associated with disorganized attachment. Other authors (Belsky, 1993; Cicchetti et al., 2006; Lyons-Ruth, Connell, Zoll, & Stahl, 1987) add to it variables such as parents' intrusiveness, unpredictability, and hostility. One meta-analysis (Cyr, Euser, Bakermans-Kranenburg & Van IJzendoorn, 2010) found that disorganized attachment is frequent in a high-risk sample characterized by parent's addiction, depression, domestic violence, and marital discord.

#### Sequelae of Disorganized Attachment

Several studies suggest that attachment disorganization is considered a major risk factor for the development of psychopathology and difficulties in social adjustment. A meta-analysis of 12 studies (van IJzendoorn, Schuengel, & Bakermans-Kranenburg, 1999) showed the association between disorganized attachment and increased risk for externalizing problems in childhood (see also Groh, Fearon, IJzendoorn, Bakermans-Kranenburg, & Roisman, 2017; Lecompte & Moss, 2014). Other longitudinal studies show that disorganized attachment is also associated with internalizing problems at an early school age (Carlson, 1998; Moss & St-Laurent, 2001). Moreover, there is evidence that the two forms of controlling behavior which derive from disorganized attachment may have different adaptive consequences: controlling-punitive children were rated higher on externalizing problems from the preschool to school-age period and controlling-caregiving children were rated higher on internalizing problems (Cicchetti & Barnett, 1991; Lecompte & Moss, 2014; Moss, Cyr, & Dubois-Comtois, 2004).<sup>5</sup>

Some studies related disorganized attachment also to low selfconfidence at Age 6 (Cassidy, 1988) and problems in social adaptation (e.g., Bureau & Moss, 2010; Goldwyn, Stanley, Smith, & Green, 2000). Other studies (e.g., Jacobsen, Edelstein, & Hofmann, 1994; Moss & St-Laurent, 2001; Teti, 1999) indicate that during school age and adolescence the attachment classification is associated with differences in variables related to school performance.

Several studies (e.g., Dutra & Lyons-Ruth, 2005; Ogawa, Sroufe, Weinfield, Carlson, & Egeland, 1997; West, Adam, Spreng, & Rose, 2001) supported the association first hypothesized by Giovanni Liotti (1992) between disorganized attachment in infancy and the development of dissociative symptoms later in life. More in general, a disorganized attachment in infancy and childhood represents a risk factor for the development of a range of disorders that involves deficits in the integrative functioning of consciousness and in mentalizing capacities (e.g., Dozier, Stovall-McClough, & Albus, 2008; Liotti & Gilbert, 2011; Rutter, Kreppner, & Sonuga-Barke, 2009).

These data are coherent with the hypotheses that disorganized attachment plays an important role in the development of borderline personality disorder (BPD; e.g., Fonagy, Target, & Gergely, 2000; Holmes, 2004) even though this kind of attachment is not the only etiologic factor.

## Disorganization of Early Attachment and Construction of Multiple IWMs

Bowlby (1969/1982) showed how, starting from reflex patterns and simple behaviors, each human being develops complex, environmentally labile, and goal-directed behavioral systems influenced by what the individual learns from his actual experiences. As we have seen, during this process human beings develop cognitive maps of themselves, other people, and their environment (the IWMs). Even if IWMs originate as implicit memory structures, they may, over the course of development, become explicit and be translated into narratives of autobiographical memory and generalized explicit beliefs about the self and other people.

The specific style of attachment that a child develops, and the IWM that guides it, are so a function of real interaction experiences that the child has had during her/his life with a caregiver. Organized IWMs are coherent and stable because of the predictability of the relationship with the caregivers, while the disorganized IWMs are incoherent and variable due to an unstable, nonsyntonized caregiver-child relationship. In fact, Bowlby (1973) suggested that unfavorable attachment experiences may lead the child to develop multiple models of the self and the caregiver; and if the caregiver's behaviors are excessively contradictory, the child may not be able to integrate these incongruent experiences in a coherent map of himself and his world, leading to the creation of multiple, nonintegrated attachment IWMs.

Moreover, following the ethological ideas proposed by Robert Hinde (1966, 1970), Bowlby (1969) observed also that more than one behavioral system can be activated simultaneously, and these activated systems may also be incompatible with each other. The subject may, for example, exhibit behavioral sequences that derived from more tendencies (i.e., attachment and defense), from only one tendency, or, in some cases, not from the conflicting tendencies but from other ones, in turn (i.e., care or rage ones). In any case, Bowlby considered the conflicting behaviors as the result of the interplay among different systems associated with different cognitive maps (Solomon, Duschinsky, Bakkum, & Schuengel, 2017).

For all we have seen so far, we can say that organized and disorganized attachment can be understood as "conditional strategies" (Main, 1990) that the child develops to adapt to the environment. These strategies are based on the person's actual cognitive and affective experiences that have shaped their IWMs, and these IWMs shape behavior that becomes automatic with time. If the conditional strategies of organized attachment correspond to relatively stable patterns of behavior in response to relatively stable maternal sensitivity (Solomon & George, 2011), the conditional strategies of the disorganized attachment reflect the child's contradictory experiences with his or her caregiver that are simultaneously sources of danger and safety.

In short, the core of disorganized attachment may be thought of as the manifestation of contradictory procedural IWMs connected to different and segregated/dissociated behavioral systems and developed for adapting to a contradictory and unstable relational world (see also Fonagy, Luyten, Allison, & Campbell, 2017a, 2017b).

Liotti (2000) examined the relationship between disorganized attachment and parental frightening/frightened behaviors. He suggested that the child in such frightening/frightened interactions experiences an unsolvable conflict between two innate motivational systems: the attachment system, which drives him to seek comfort from the distress he experiences in the relationship with the attachment figure and the defense system, which drives his flight from the source of fear—the relationship with the attachment figure itself. Children taken care of by frightened/frightening parents build incoherent IWMs because of the contradictory cognitive and emotional messages received by their parents and stored in their implicit and explicit memory. The representations of the relationship between self and other people in disorganized attachment, therefore, are multiple, fragmented, mutually incompatible, dissociated, and changing.

<sup>&</sup>lt;sup>5</sup> Both controlling caregiving and controlling-punitive strategies may be considered as manifestations of "role reversal," and role reversal is also one of the possible indicators of caregiver-child relationships in disorganized attachment (Lecompte & Moss, 2014). Future studies from an integrated attachment and CMT perspective may investigate if role reversal in childhood is associated with stronger senses of interpersonal guilt in children, and if it facilitates the choice of a passive-into-active testing strategy.

In order to clarify the peculiarities of IWM in disorganized attachment, Liotti (2004) proposes the idea of using as a reference the "drama triangle" (Karpman, 1968). In the drama triangle, the protagonists shift constantly between the roles of "rescuer," "persecutor," and "victim." In fact, the disorganized IWMs comprise a representation of self and other as helpless, loving, or hurting. Thus the baby can quickly move from a situation in which s/he perceives her/himself as the victim and the parent as the persecutor, to one in which s/he her/himself is the persecutor and the parent the victim, or can see her/himself as the rescuer of a fragile parent, or in the role of the victim to be saved by the parent and so on, using all the combinations that the three stereotypical roles allow.

Within Liotti's theoretical framework (Liotti & Farina, 2011), the preschool controlling-caregiving and controlling-punitive strategies may be thought of as an attempt to resolve the contradictory activation of the attachment and defense systems, typical of disorganized attachment, through the shift toward another behavioral/ motivational system: rage in the first case and caregiving in the second case.

#### **Disorganized Attachment Through the Lenses of CMT**

If we consider disorganized behaviors within the CMT framework, we could describe them as expressions of multiple and often contradictory pathogenic beliefs derived from polytraumatic early relationships and tested with different strategies.

Though highly compatible with attachment theory, CMT broadens the understanding of disorganized attachment suggesting that, at least in some instances of these disorganized behaviors, there could be an implicit attempt and hope to receive a response from the other person that is more attuned with one's needs than the one received by caregivers in the traumatic interactions. In other words, disorganized behaviors are at the same time conditional strategies developed for adaptive reasons and attempts to elicit more attuned cares—that is, as tests.

Moreover, the CMT conceptualization of the function of dissociative compartmentalization fits well within this theoretical frame: it can, in fact, be understood as a strategy to manage contradictory pathogenic beliefs. As suggested by Weiss (1993, p. 77), speaking of a patient who was sexually abused during his childhood:

If the child is sexually abused by a parent, he will blame himself for the abuse and develop a sense of shame. If the parent denies the abuse, the child will infer that he must not remember it. His sense of reality may be impaired with the following problem: in order to adapt to his world, he must both forget the abuse and remember it. He must forget the abuse in order to adapt to the members of his family, who insist on denying it, for he cannot be friendly and close to a parent who he knows is abusing him (the underling motivation is attachment). However, he must remember the abuse in order to prepare for further abuse (the underlying motivation is defense). If abused while quite young, he may deal with this problem by dissociating, or in certain instances by developing several personalities—one or more of which has no memory of the abuse, and one or more of which remembers it.

Given the diffent, previously described, elements of compatibility between attachment theory and CMT, we think that a dialogue between these two theoretical frameworks may be possible and clinically useful. And it is worth noting that, already in the nineties, Weiss (1995) and Migone and Liotti (1998) stressed the compatibility between CMT and Lichtenberg's and Liotti's theories about human motivations and psychotherapy.

#### Disorganized Attachment and Severe Personality Pathology Through the Lenses of CMT

As noted above, disorganized attachment in infancy has been associated with the development of several psychosocial problems and mental disorders in adolescence and adulthood: posttraumatic stress disorder (PTSD), BPD, and dissociative disorders are connected to a disorganized attachment in childhood and are the clearest, but not the sole, expressions of disorganized psychopathology. Among the others, we can also include the recently proposed diagnostic category of complex posttraumatic stress disorder (cPTSD; Cook et al., 2005; Herman, 1992; Van der Kolk, 2005), which is characterized by symptoms and problems such as alterations in regulation of affect and impulses, alterations in attention or consciousness, somatization, alterations in selfperception, alterations in the perception of the perpetrator, alterations in relations to others, and alterations in systems of meaning.

cPTSD is currently described as a mix of features of PTSD and BPD (McLean & Gallop, 2003). The description of psychic functioning of patients with cPTSD and severe personality pathology/ borderline personality organization (Kernberg, 1993; Lingiardi & McWilliams, 2017) seems to substantially overlap with the description of these "disorganized" psychopathology syndromes. In fact, these patients are characterized by:

- (a) confused and contradictory representation of self and other people;
- (b) difficulties in regulating emotions and impulses;
- (c) abandonment anxieties and sense of inner void;
- (d) feelings of intense rage and suffering;
- (e) self-harm and risky behaviors, and suicide threats or attempts; and
- (f) momentary failures in reality testing.

CMT (Gazzillo & Mellone, 2016) conceives the main features of patients with severe personality pathology as the result of the interaction among several factors. First of all, often these patients had to adapt to a confused and pathological family environment that exposed them to a mixture of shock and stress traumas. As a result, they typically developed multiple and often mutually contradictory pathogenic beliefs obstructing the goals of multiple motivational systems. Because their pathogenic beliefs are based on real, traumatic experiences, holding these beliefs is felt as necessary in order not be retraumatized. Furthermore, their pathogenic beliefs are supported and, at the same time, support strong interpersonal senses of guilt, predominantly self-hate, burdening guilt, and survivor guilt. Self-hate according to CMT (O'Connor, Berry, Weiss, Bush, & Sampson, 1997; Gazzillo, Fimiani, et al., 2019) means a deep sense of inner worthlessness, badness, and meaninglessness; burdening guilt is based on the belief that expressing own needs means becoming a burden for other people; while survivor guilt refers to the sense of not deserving a healthier and more fortunate life compared to the people they love and care for. Moreover, due to the polytraumatic environment from which they came, these people feel an urgent need of safety in any close relationship and for this reason they impose many tests on their significant others. These tests, aimed at disconfirming pathogenic beliefs, are very strong, occur in rapid succession and often involve acting out. Fort these very traumatized patients, in whose families emotions were much more acted out than communicated, actions speak louder than words.

In short, the multiplicity and confusion of self/other representations and the chaotic interpersonal behaviors of these patients may be attributed to the contradictory nature of their pathogenic beliefs and to their use of different testing strategies in rapid succession.

A brief clinical example will clarify what we mean. This example is drawn from the caseload of one of the authors (FG), a male psychoanalytic psychotherapist with 10 years of clinical experience working in an outpatient setting. He is a control-mastery therapist and had developed a "plan formulation" (Curtis & Silberschatz, 2007) of this patient during the first four sessions of her treatment. The exchange described took place in the fourth month of therapy.

Jane was a 23-year-old patient with a BPD, preoccupied/disorganized attachment (based on the Adult Attachment Interview), and a history of heroin addiction, academic failure, and poor relational life. In one session during her fourth month of psychotherapy she asks her therapist if she can skip her sessions the following week because she has to study for a university exam. The clinician, thinking that she is trying to see if he trusts her ability to take care of herself and recognizing her right to be autonomous (transference test by noncompliance of her pathogenic belief that becoming more autonomous she would have hurt the people she loved), replies that she can, adding that, in any case, during the hours of her session he would have been in his office and free. Jane seems relieved and keeps on talking about her hope to pass the exam and her interest in what she is studying. Her response shows that the therapist's hypothesis about the testing nature of her request was right.<sup>6</sup>

However, later in the same session she abruptly becomes enraged and tells the therapist that he agreed to her request because he does not care about her (a transference test by compliance of her pathogenic belief of being unlovable and a burden to other people). At this point, the clinician replies that while in the first part of the session she was trying to understand if he could acknowledge her ability and right to be autonomous, now she seems to be dealing with her painful belief of being a burden for him.

Jane says that this is true, but she continues being enraged and suffering, implying that the cause of her suffering is the clinician's uncaring attitude reflected in his so readily agreeing to her request. Jane's accusation and the intensity of her suffering make the clinician feel guilty for her pain and rage. After some minutes of disorientation and pain, the clinician connects in his mind this exchange and these feelings with several memories of the patient, of when she was a child and her mother made her feel responsible for the rage and suffering she felt (i.e., the clinician interpreted her behavior as a passive-into-active test by compliance with her belief of being unlovable and a burden). After about 10 min of silences, accusations, and crying, the clinician tells Jane that she now is trying to make him understand how she felt when the mother blamed her and told her she was the cause of her rage and suffering, even though she did not understand how or why she was at fault. He felt anxiety, fear, and guilt just as she did. This interpretation sooths Jane, who replies after some moments of silence recollecting one of those memories with all the painful guilty feelings involved and adds that she was sorry to have caused the same pain in the therapist. The fact that Jane was able to recollect those memories was evidence that the clinician had passed her passive-into-active test. The session ended in a less painful mood.

Both the pathogenic beliefs worked on and tested during this session derived from real traumatic interactions between Jane and her mother. In fact, since she was a little child her mother would frequently devalue and attack her both when she was in pain and needy and when she felt self-confident or strong. Two model scenes (Lachmann & Lichtenberg, 1992) are the following: the mother started to tell Jane that she always had very poor posture because her shoulders were always curved in. Jane initially felt hurt by her mother's criticisms, but after some days she decided to try to comply with her parent's remark, walking with a straighter posture. When she approached her mother in this way, her mother said: "What are you trying to do? You want to show me that you are taller than me?!" A second model scene occurred when she was 8 years old. Jane accidentally fell over while running and skinned her knee; when her mother heard her crying and saw what had happened, she started to shout at her saying that she was the cause of her anxiety and pain, and added that she needed to stop crying immediately.

This brief clinical exchange shows how a patient with severe personality pathology may test two contradictory pathogenic beliefs in the same session-in this case, "If I am autonomous, the people I love will feel belittled," and "If I ask for care, the people I love will feel burdened"-using different testing strategies (transference test by noncompliance, transference test by compliance, and passive-into-active test). Her behavior, apparently contradictory and "unstable," may become more meaningful coherent if viewed through the lenses of CMT concepts such as pathogenic beliefs and tests. These concepts, and their clinical applications to the understanding of the specificities of each clinical case at the beginning of her/his treatment-that is, the formulation of the patient's plan and the ability to follow and support it-enables the clinician to "tailor" case specific treatments and to deal more effectively with the challenges/tests that the patient will propose to her/him. This understanding, whose reliability has been extensively empirically tested, may help the clinician respond to such contradictory behaviors, typical of patients with severe psychopathology, in ways that help the patient feel more secure, understood, and to work through his or her difficulties. Such a perspective may help clinicians remain more hopeful even during the very tumultuous periods of a treatment. According to CMT, in fact, these very difficult, disorganized behaviors frequently represent the patient's efforts to test and disconfirm grim pathogenic beliefs. They are, in other words, attempts to get better and resolve painful conflicts and

<sup>&</sup>lt;sup>6</sup> It is worth noting that the criteria for understanding if a test has been passed or failed have been empirically verified (for a review, see Gazzillo, Genova, et al., 2019).

are not simply resistances and acting-out behaviors. Finally, CMT empirical research on process and outcome of psychotherapy provide clinicians with empirically validated indicators for understanding how to pass patients' tests and if their interventions help patients disconfirm their pathogenic beliefs (see Silberschatz, 2017 for a review of this research).

#### Conclusions

We have proposed that a good enough theory of psychological functioning, development, and of how psychotherapy works, should be consistent with scientific data about emotional, motivational, and cognitive functioning developed by neuroscience, moral psychology, and social cognition. It should take into account that human beings are "wired" to adapt to a specific social environment and share a set of evolutionary-based emotions and motivations that are shaped during the first years of life by what they actually experience in their environment. These experiences are "encoded" in cognitive-emotional structures (schemas) that mediate the influence of these motivations on perceptions, emotions, cognitions and behaviors.

Bowlby's attachment theory represents the first real attempt in this direction, followed by other models developed by authors with different theoretical perspectives. However, the main problem of these theories is that their clinical approaches are still fragmented or quite general, and their technical implications are not empirically supported. For this reason, we propose a possible theoretical integration between attachment research and CMT.

We think that attachment theory and CMT have much in common, and that CMT could be useful for integrating attachment, psychodynamic, and cognitive-evolutionary thinking. The focus of CMT is the idea that patients' psychopathology stems from certain maladaptive beliefs about reality and morality that patients acquire in infancy from actual traumatic experiences with parents and siblings. These pathogenic beliefs obstruct patients' pursuit of healthy and adaptive goals and, for this reason, they are grim and constricting. Consequently, patients are highly motivated to disprove them and work to do so by testing these beliefs with their therapists and significant others.

As we have seen, the centrality of real relational experiences, adaptation, safety, prosocial motivations, and internal cognitiveaffective structure such as working models/schemas, and the necessity to modify via the patient-therapist relationship the patients' procedural relational knowledge in order to help them, are perfectly in line with attachment theory. To further explore the integration between attachment theory and CMT for understanding and treating psychopathology we have focused on a specific topic, the disorganization of attachment and its psychopathological consequences. Disorganization/disorientation of attachment can be seen as the result of a collapse in the behavioral and attentional strategies of the child and is strictly related to a polytraumatic environment in which the child experiences unresolvable conflicts between basic human motivations. According to Bowlby and Liotti, these kinds of traumatic experiences with caregivers lead to the development of multiple and contradictory IWMs that represent a conditional strategy of adaptation.

Along similar lines, CMT suggests that severe disorders stem from polytraumatic environments to which the child tries to adapt

by developing multiple and often contradictory pathogenic beliefs connected with different adaptive motivational systems. Disorganized attachment, like severe personality disorders, can be understood as the child's attempt to adapt to a traumatic and frightened environment where the multiplicity and inconsistences of the messages and responses received and the mismatch between the child's needs and expectations and what s/he receives leads to contradictory pathogenic beliefs. From this perspective, the apparently confused and incoherent relational behaviors that the patient shows with the therapist and significant others can be seen both as a conditional strategy developed during infancy in the relationship with the caregivers and as ways for testing and disproving pathogenic beliefs. The role of the therapist is to understand the functions and purposes of these behaviors in the light of the patient's developmental experiences and to respond in a way that disconfirms her/his pathogenic beliefs.

Attachment theory and research may help CMT authors develop more empirically grounded hypotheses about how specific caregiver-child relationships, and their evolution and changes over their development, may shape the IWMs of their patients, and how different IWMs may, in turn, be translated in pathogenic beliefs and schemas, strengthen specific kinds of interpersonal guilt and favor the "choice" of different testing strategies.

The plan formulation method developed by CMT authors (Curtis & Silberschatz, 2007), which is the systematic application of CMT concepts to the understanding of what each patient is looking for when s/he asks for psychotherapy, may, in turn, enable attachment-oriented clinicians to offer case-specific treatments to their patients, and may give to clinicians empirically supported therapeutic indications about how to deal with their patients, from the beginning of the treatment, and, in particular, in the more troublesome moments of their therapies.

#### 摘要

个足够好的心理功能与发展的理论,关于心理治疗是如何工作的理论, 应该考虑到关于情感、动机和认知功能的最新科学进展。它们展示了人 类是怎样适应现实,并分享一套基于进化的、由认知-情感结构(模式)形成 的、在生命最初几年情感相关经验基础上发展起来的情感、动机和技能。 依恋理论(Bowlby, 1969, 1973, 1980)代表了这个方向上的第一次真正的尝 试,尽管该理论的临床意义仍是支离破碎,不够特定的。我们认为控制-掌 控理论(CMT, Weiss, 1993)可能是有助于整合依恋与精神动力的和认知进 化的思考的。这样一种整合模式是建立在适应性、安全感和真实体验的 中心的,是建立在内在表征/信念/模式在连接相反的发展体验、行为及精 神病理学上的核心角色上的,是建立在修正这一相关知识以更好地帮助病 人的必要性上的。为探索依恋理论和CMT可能的整合,我们将重点研究一 个特定的话题,即依恋的紊乱及其精神病理学的后果,我们将以一个简要的 临床案例来说明这种整合的含义。我们选择关注依恋紊乱,因为依恋种类 与精神病理学更一致相关。

关键词:依恋,依恋紊乱,控制-掌控理论,创伤,心理治疗

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