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TARGET ARTICLE

Dissociation in Trauma: A New Definition and Comparison with Previous Formulations

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Amid controversy regarding the psychobiological construct of dissociation, efforts to formulate a precise definition of dissociation are rare. Some understandings of dissociation are so broad that a host of common psychobiological phenomena would qualify as dissociative. Overly narrow conceptualizations of dissociation exclude phenomena that originally, and for good reasons, have been regarded as dissociative. A common lack of conceptual distinctions between dissociation as process, organization, deficit, psychological defense, and symptom adds to the current confusion. In previous publications, we criticized many of these perspectives and proposed a detailed psychobiological theory of dissociation in trauma. However, what has remained missing is a precise definition of dissociation in trauma. This article first presents such a definition and elucidates its various components. Next the new definition is compared with several other major definitions of the concept. The strengths of the new formulation are highlighted and discussed.

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It is better . . . to speak of dissociation of the personality.—William McDougall (1926, p. 234)

In the 19th century, dissociation constituted the essential feature of a class of mental disorders called hysteria. The construct was foremost developed by Pierre Janet (1889, 1907, 1911/1983), who defined *dissociation* as a lack of integration among two or more different "systems of ideas and functions that constitute personality" (Janet, 1907, p. 332). Janet proposed that this deficit was caused by a lowering or limitation of integrative capacity, leading to an inability to integrate experiences, to develop an awareness of reality as is, accepting it, and then reflectively and creatively adapting to it. He suggested that the lack of integrative capacity can be related to a genetic component, to severe illness and fatigue, and particularly to experiencing adverse, potentially traumatizing events. Janet also noted that dissociation of the personality manifests in dissociative symptoms, including those at a sensorimotor level (e.g., bodily anesthesia; see Nijenhuis, 2004; Van der Hart & Dorahy, 2009; Van der Hart & Friedman, 1989). Dissociation (of the personality) and the symptoms of hysteria (i.e., of this organization of personality) were thus two clearly different but closely related constructs pertaining to different logical levels.

After the 1980s, many often contradictory conceptualizations of dissociation were proposed. These conceptual revisions generally were both overinclusive and underinclusive in comparison to the original idea. The notion of dissociation of the personality often was lost, somatoform manifestations of dissociation were commonly seen as conversion or somatization symptoms, and positive symptoms of dissociation such as intrusions of traumatic memories were generally excluded from the domain of dissociative symptoms and recategorized as posttraumatic stress symptoms. Moreover, in contemporary psychology and psychiatry, the term *dissociation* can now pertain to (a) symptoms; (b) a presumed cause of symptoms, including a presumed function such as psychological defense (cf. Cardeña, 1994); and (c) normal and pathological alterations of consciousness, including hypnosis. It often remains unclear which of these possible uses is intended, and in most empirical and clinical studies the term goes undefined (see Van der Hart, Nijenhuis, Steele, & Brown, 2004, for a critique). A review of 53 empirical studies on the relationship between peritraumatic dissociation and posttraumatic stress did not bring forward even one definition of dissociation (Van der Hart, Van Echten, Van Son, Steele, & Lensvelt-Mulders, 2008).

We have suggested a return to the original 19th-century understanding that dissociation involves a lack of integration of the personality, manifesting

in the existence of two or more insufficiently integrated, that is, dissociative, parts of the personality. We have referred to this phenomenon as a *structural dissociation of the personality* (e.g., Nijenhuis, Van der Hart, & Steele, 2002; Van der Hart, Nijenhuis, & Steele, 2006; Van der Hart et al., 2004). We have also contended that the domain of dissociative symptoms is constituted by specific manifestations of these dissociative parts and that other alterations of consciousness such as retraction and lowering of consciousness do not belong to this realm per se (Nijenhuis, in press; Steele, Dorahy, Van der Hart, & Nijenhuis, 2009; Van der Hart et al., 2004, 2006). Furthermore, we have asserted that all structurally dissociated parts of the personality involve at least a rudimentary sense of self (Van der Hart et al., 2006).

The primary aim of this conceptual contribution is to propose and elucidate a definition of dissociation within the context of traumatization—in short, dissociation in trauma, whether acute or chronic. Another aim is to compare our perspective on dissociation with several other definitions of the construct and highlight how the new definition overcomes the flaws of these formulations.

THE PROPOSED DEFINITION

The definition, which is not self-evident, reads as follows:

> Dissociation in trauma entails a division of an individual's personality, that is, of the dynamic, biopsychosocial system as a whole that determines his or her characteristic mental and behavioral actions.
>
> This division of personality constitutes a core feature of trauma. It evolves when the individual lacks the capacity to integrate adverse experiences in part or in full, can support adaptation in this context, but commonly also implies adaptive limitations. The division involves two or more insufficiently integrated dynamic but excessively stable subsystems. These subsystems exert functions and can encompass any number of different mental and behavioral actions and implied states. These subsystems and states can be latent or activated in a sequence or in parallel. Each dissociative subsystem, that is, dissociative part of the personality, minimally includes its own at least rudimentary first-person perspective. As each dissociative part, the individual can interact with other dissociative parts and other individuals, at least in principle. Dissociative parts maintain particular psychobiological boundaries that keep them divided but that they can in principle dissolve. Phenomenologically, this division of the personality manifests in dissociative symptoms that can be categorized as negative (functional losses such as amnesia and paralysis) or positive (intrusions such as flashbacks or voices) and psychoform (symptoms such as amnesia, hearing voices) or somatoform (symptoms such as anesthesia or tics).

ELUCIDATION

We offer a clarification of each term or phrase this definition comprises.

Dissociation in Trauma

The word *trauma* means wound or injury. Thus, we do not understand "trauma" as an event but as a psychobiological "wound" evolved in relation to a variety of coupled psychological, biological, social, and other environmental factors. These psychobiological factors include limitations of the exposed individual's integrative capacity as revealed, for example, in dissociative reactions, affect dysregulation, and persistent avoidance of traumatic memories. Environmental factors include characteristics of present and prior adverse, potentially traumatizing events, caregiver dysfunction and unavailability, and lack of social support to integrate adverse experiences (e.g., Brewin, Andrews, & Valentine, 2000; Ozer, Best, Lipsey, & Weiss, 2003). Longitudinal and prospective studies have found a relation between exposure to adverse events, including low-quality early childhood care, and somatoform as well as psychoform dissociative symptoms (Diseth, 2006; Dutra, Bureau, Holmes, Lyubchik, & Lyons-Ruth, 2009; Ogawa, Sroufe, Weinfield, Carlson, & Egeland, 1997). The phrase *dissociation in trauma* thus denotes a division of an individual's personality that can evolve during or following exposure to adverse, potentially traumatizing events in combination with several other concomitant injurious factors.

It should be noted that studies of the relation between adverse event exposure and dissociation are troubled by including symptoms that, in our view, are not inherently dissociative (e.g., lowering of consciousness) and by excluding symptoms that are dissociative (e.g., somatoform dissociative symptoms) and two major symptom clusters of posttraumatic stress disorder (PTSD), that is, numbing and intrusion (e.g., reexperiencing traumatizing events; Van der Hart et al., 2006).

Division

Dissociation involves a *division* of personality rather than a *separation*, because dissociative parts of the personality are not fully separated from one another. Each dissociative part of the personality involves a particular organized set of manifest and latent mental and behavioral actions, not metaphorical pieces of a thing called mind. These sets are functional. For example, one dissociative part may care for a daughter or run a shop, and another part may defend the integrity of the body when there is real or perceived threat. However, in some cases, the part's actions involve unsuccessful *attempts* to exert one or more functions.

The corporation metaphor. Different dissociative parts can engage in the same actions (e.g., both can run), and two or more different parts can be activated in parallel. A corporation that encompasses several departments and temporary projects might constitute an apt metaphor for dissociation. Each division or department (dissociative part) of the corporation (the trauma survivor) exerts one or more functions, has a main goal to pursue, and includes several employees (actions). Particular employees but not all employees can be associated with more than one department (dissociative parts share actions and have unique actions), and the different departments and their employees can participate in one or more temporary projects that may run across different departments (two or more different dissociative parts may temporarily cooperate in particular circumstances). The corporation we have in mind is of a special kind: It lacks a central management but is organized by the interactions among all departments and employees. There is thus no hierarchically highest level dissociative part that guides lower level parts, which is an organization that can be described and understood in terms of nonlinear dynamic systems theory applied to human functioning.

The corporation metaphor reflects the fact that no matter how dissociated and different the parts of the personality may be, they are still linked, and together they constitute a whole system (cf. Braude, 1995; Van der Hart et al., 2006).

Personality

Personality can be defined as a biopsychosocial system that determines an individual's characteristic mental and behavioral actions (cf. Allport, 1961). This definition highlights the fact that personality includes perception and emotion; that perception, emotion, and thought involve mental actions, including decision making; and that behavior involves combined mental and motor action. Personality constitutes a whole system that has an ongoing tendency toward integration, that is, binding and differentiation of different components of experiences (e.g., perceptions, emotions, thoughts) as well as different experiences across time (Edelman & Tononi, 2000; Van der Hart et al., 2006). In dissociation in trauma, personality as a system includes two or more insufficiently integrated subsystems.

Consciousness cannot be divided. We do not speak of "dissociation of consciousness," a common expression in the literature, because normal cognition does not involve a compound of elements of consciousness capable of independent existence (cf. McDougall, 1926).

Consciousness is in fact a problematic notion in that the term can have many different meanings (Natsoulas, 1983). There is not a single paradigmatic theory of consciousness to date and no systematic and comprehensive catalogue of phenomena that belong to the domain of consciousness and require explanation (Metzinger, 2003). Consciousness "may turn out to

be a *cluster concept*, that is, a theoretical entity only possessing overlapping characteristics" (Metzinger, 2003, p. 107). However, it is clear that some mental and behavioral actions encompass subjective experience. Subjectively experienced, that is, phenomenal, mental contents exist in many different forms, intensities, and degrees of internal complexity (Metzinger, 2003).

Some dissociative parts may be rudimentary in that they may only encompass few mental and motor actions involving a very limited range of phenomenal experiences. However, other parts engage in many mental and motor actions that are associated with phenomenal experiences. Therefore, these parts have a far richer subjective life, that is, are more elaborated.

Biopsychosocial

This term conveys the idea that personality is an organization defined by a constellation of interacting biological, psychological, and social factors (for a review in the context of dissociation, see Nijenhuis & Den Boer, 2009). It also communicates the philosophical position that body and mind do not involve different substances or things but that mind is based on an integrative structural and functional organization of the brain and body (Edelman, 1992; Janet, 1889). Brain, body, mind, and environment only exist in relation to one another; that is, they are intrinsically related (Northoff, 2003). Mind is a broader concept than consciousness, because not all mental actions imply mental contents that are also phenomenal contents: Many mental contents are not subjectively experienced.

This Division of Personality Constitutes a Core Feature of Trauma

The division of personality is a key element in trauma because once survivors have overcome this division, they have largely overcome their traumatization (see below and Van der Hart et al., 2006).

Insufficiently Integrated

The division of the personality in trauma relates to limitations of an individual's integrative capacity that may be related in part to genetic factors (Xie et al., 2009). Given these limitations, and a lack of social support to compensate for them, such a division may enhance an individual's chance to survive. Consistent with this idea, some experimental studies have found directed forgetting effects regarding explicit memory between different dissociative parts (Elzinga, Phaf, Ardon, & Van Dyck, 2003). This lack of integration among dissociative parts, however, usually comes at a price: As one or more other dissociative parts, most of these individuals are bound to reexperience the traumatizing events (e.g., in recurrent nightmares and flashbacks) at some time in their life or will have other symptoms of mental disorder.

Dissociation involves a particular organization of the personality. Dissociation of the personality involves the capacity to organize or reorganize the personality into two or more dissociative parts. The maintenance of dissociation relates to the ability to keep two or more parts of the personality and the associated actions and phenomenal mental contents relatively divided. In this context, dissociative parts can gain more and more diverse actions and phenomenal mental contents, a trend known as the *elaboration* of dissociative parts (Van der Hart et al., 2006).

Dynamic But Excessively Stable

Personality and dissociative parts of the personality are a dynamic system and dynamic subsystems, respectively. Thus, most dissociative parts engage in different mental and behavioral actions across time and contexts, the interactions among different dissociative parts are not totally fixed, and the psychophysiological features of dissociative parts may shift with their order of appearance (Putnam, 1988).

However, dissociative parts are also excessively stable, involving a lack of systemic complexity (Edelman & Tononi, 2000). Adaptation requires systemic complexity, that is, the ability of a (sub)system to develop new actions that fit changed inner and outer conditions, as well as the ability to continue previously developed effective actions when conditions are unchanged. Living systems that are too stable do not adjust their actions to altered circumstances. As overly stable (sub)systems, dissociative parts often engage in fixed actions that may have worked previously but that do not fit transformed conditions (Nijenhuis et al., 2002; Van der Hart et al., 2006).

These Subsystems Exert Functions

We and others have suggested that dissociation in trauma involves different types of dissociative parts (e.g., Liotti, 1999; Nijenhuis et al., 2002; Nijenhuis & Den Boer, 2009; Van der Hart et al., 2006) that are mediated by one or more evolutionary derived action (sub)systems or emotional operating systems (Panksepp, 1998).

Action systems. Many human mental and behavioral actions constitute manifestations of innate but experience-dependent and in many cases maturation-dependent action systems (Nijenhuis & Den Boer, 2009; Panksepp, 1998). Based on evolution, these systems are founded in subcortical neural systems that human beings share with many other creatures and that have become linked with higher cortical functions (Panksepp, 1998). Some of these higher functions are specific to humans. For example, from approximately 9 to 12 months, humans start to understand that others make choices in their perception and other actions and that these choices are

guided by desired outcomes, that is, goals, which faculty is unavailable to primates (Tomasello, 1999). This also applies to the human ability to extend action tendencies in time and space (Panksepp, 1998). The major action systems are defense, attachment of offspring to parents, parental attachment to and care for offspring, procreation, sociability (also described as intersubjectivity), energy management, exploration, and play. Action systems involve particular *values* that define for an individual what is safe and attractive or dangerous and adverse. Values of action systems guide what an individual is likely to perceive, feel, think, and do.

Two major types of dissociative parts. One type of dissociative part is predominantly mediated by action systems for functioning in daily life. We metaphorically refer to this type as an *apparently normal part of the personality* (ANP). For instance, an ANP strongly influenced by the action system of energy management will look for food and eat it (one subsystem) or prepare for sleep (another subsystem). Another type of dissociative part—that is, an *emotional part of the personality* (EP)—is primarily mediated by the defense action system regarding threats to the integrity of the body and/or the action system for attachment cry, that is, crying for attachment upon the loss of an essential caregiver. The core values of the physical defense action system are avoiding or escaping from aversive stimuli, and the core value of the action system for attachment cry is attracting protection.

Action systems affect the meaning that a particular stimulus may have. Thus, a patient's evaluation of her abusive parent and her actions regarding this parent will depend on the action system that is dominant at a given moment. For example, as an ANP dominated by the action system of attachment, she will think well of the involved parent and will tend to approach him or her—the parent is "good"—but as an EP dominated by the action system of mammalian defense, she will be afraid and hide or run—the parent is "bad."

Overlapping abilities and traits in dissociative parts. As included in the corporation metaphor, different parts can involve, to some degree, the same abilities and traits (Braude, 1995; Dorahy & Huntjens, 2007) and thus can within limits engage in the same kind of mental and behavioral actions. For example, several different dissociative parts may all be able to walk, talk, or be afraid of loud voices.

These Subsystems . . . Can Encompass Any Number of Different Mental and Behavioral Actions and Implied States

Although dissociative subsystems are often described as "dissociative states" (see below), almost all dissociative subsystems encompass a *constellation* of mental and behavioral states rather than a singular state. Some dissociative parts encompass far more states than others.

These Subsystems and States Can Be Latent or Activated in a Sequence or in Parallel

Dissociative subsystems and particular states of these subsystems can be latent or activated. At times only one dissociative part is activated, and this will sooner or later be followed up by a different subsystem. We have called this phenomenon sequential dissociation (Van der Hart et al., 2006), commonly known as "switching." In parallel dissociation (Van der Hart et al., 2006), two or more dissociative subsystems are simultaneously activated, which implies the co-occurrence of at least two different mental or behavioral states. The phenomenon has also been described as "co-presence."

Each of These Subsystems Minimally Includes Its Own at Least Rudimentary First-Person Perspective

Everyone's personality includes some subsystems that are not fully integrated. For example, all people sometimes experience conflicts between thinking and feeling, or between different roles in life, and all know ambivalences. Furthermore, not all neurological subsystems are fully in tune, and some operate to an extent more or less independently from one another. This lack of psychological and biological integration applies in particular to individuals with mental disorders.

Looking for constraints for the construct of dissociation, Nijenhuis (in press) proposed delimiting the category to dissociative subsystems that entail a consciously experienced, that is, phenomenal, first-person perspective. This perspective pertains to the subjective feeling of being someone with a point of view, that is, of being an acting and experiencing self with a subjectively experienced outward perspective on his or her perceived world and an inward perspective regarding himself or herself (Metzinger, 2003).

When Nijenhuis's constraints are applied, an ego-dystonic phobia, for instance, counts as a dissociative disorder when there is at least one ANP and EP. In this case, the ANP knows that the phobic fear and avoidance are unfounded, the EP perceives the phobic stimuli as most threatening, and the ANP's experience and behavior are influenced by the EP. When the patient does not include two or more dissociative subsystems endowed with a first-person perspective, but only a singular first-person perspective, the disorder would not qualify as a dissociative disorder but as a (nondissociative) anxiety disorder (e.g., agoraphobia).

As described by Van der Hart et al. (2006), patients with dissociative identity disorder (DID) encompass more or less evolved ANPs and EPs with their own first-person perspectives. Patients with dissociative disorder not otherwise specified type I and patients with complex PTSD also have such parts, usually one strongly evolved ANP and more than one less evolved EPs,

all with their own first-person perspectives. The personalities of patients with (simple) PTSD tend to include one strongly evolved ANP and one EP. This singular EP also tends to have its own first-person perspective.

Dissociative parts of the personality are conscious subsystems because they meet at least the minimal constraints for consciousness that apply to any conscious system, that is, situatedness, phenomenal now, and transparency (Metzinger, 2003; Nijenhuis, in press). These constraints help to decide if a certain mental state is also a consciously experienced one, that is, a *phenomenal* state. Dissociative parts usually include more than one phenomenal state.

Situatedness. Consciousness is being-in-the-world (e.g., Gallagher & Zahavi, 2008). The first of the minimal constraints for consciousness in dissociative parts relates to this fact and holds that these parts, like integrated individuals, subjectively live in a world. That is, each dissociative part constructs his or her own subjective and singular world and situates his or her experiences in that world. This constructed world can be addressed as their phenomenal model of reality. This model can be preconceptual, which means that dissociative parts do not necessarily have concepts like "world," "reality," "past," or "future." For example, no concepts are needed to perceive color or temperature. Metzinger (2003) referred to this first constraint for consciousness as *situatedness*.

Phenomenal now. The second minimal constraint for consciousness involves the fact that whatever dissociative parts experience, they experience it *now*. This now is not a formal now or a now that is shared among different individuals but constitutes their subjectively experienced present, their *phenomenal now* (Metzinger, 2003). The phenomenal now generally encompasses a couple of seconds, and it may be displaced in objective time. For example, a dissociative part in an adult patient may be convinced that "now" is a moment in 1986 rather than a couple of seconds in the actual intersubjective present.

Transparency. The third constraint for consciousness that dissociative parts meet is that they do not necessarily have introspective epistemic access to (i.e., know through introspection) their mental actions that generate their phenomenal states. To the degree that they lack this access, they will experience their sensory experiences and phenomenal model of the world as given, real, and undoubtedly existing. Lack of this introspective access is known as autoepistemic limitation (i.e., a limitation in knowing how mental states are generated; Northoff, 2003) or, somewhat counterintuitively, transparency (McGinn, 1989; Metzinger, 2003). The idea is that we often "look through" (i.e., are unaware of) the fact that our experiences result from earlier mental actions. That is, in many cases we do not have introspective access to the medium (i.e., a component of the whole system that we are) that generates our experiences, and we are only phenomenally aware of the results of this medium's processing.

Dissociative parts meeting the three minimal constraints. Dissociative parts that meet only the three minimal constraints (situatedness, phenomenal now, and transparency) experience one unified world as given and frozen in an eternal now. Very few dissociative parts of the personality meet only these three minimal constraints for consciousness at times: Then they are consciously aware of a world (i.e., of some objects and/or subjects) that they experience as undoubtedly existing and given, but they lack a sense or idea of *who* they are, or even *that* they are someone, and they lack a sense of past and future. At these times, these dissociative parts are thus extremely depersonalized and disoriented in factual time. They do not experience themselves as being agents of actions or owners of experiences, and they do not have a sense of personal continuity or identity (i.e., the feeling that they are the same as the one they were before). For example, one dissociative part said that she was "no one."

We include these dissociative subsystems in the category of dissociative parts because they will generate at least some sense and idea of self once their level of mental functioning increases. This may happen, for example, when they become less fearful. For example, "no one" soon developed a limited sense and idea of self when she became more engaged in therapy.

First-person perspective. Most dissociative parts meet more than the three minimal constraints for consciousness because they continuously generate a *first-person perspective*, however rudimentary this perspective may be, when they are dreaming or awake (Nijenhuis, in press). A first-person perspective arises when individuals (or dissociative parts of an individual) who meet the three minimal constraints for consciousness also meet several other constraints for consciousness (Metzinger, 2003). These additional constraints are (a) integrating components of objects, whole objects, subjects, or scenes into larger wholes, so that each separate phenomenal experience fits a wider experiential frame; (b) experiencing flow and directedness of time (i.e., experiencing that time flows from the past to the future), as well as experiencing duration and change; and (c) having a point of view, a perspective. Regarding the second constraint, it must be noted that some EPs encompass only a very limited range of experiences and that their experience of duration and change is therefore also quite restricted. But even these dissociative parts will be consciously aware that the initial moments of an experience are different from later moments of that same experience.

We develop a point of view, the fourth constraint for consciousness, when we transparently generate within ourselves the subjective experience of *being someone* who is related to our phenomenal model of reality, that is, to objects, other subjects, or to the individual we are (Metzinger, 2003). We would cease to experience that we are or have a self if we would have introspective epistemic access to the fact that we construct our self. Such awareness would lead to an infinite regress that would disrupt any adaptive sense and idea of self: Epistemic access to the fact that our self

is a construction would involve another self that would have that access, but then that other self would also know and experience that it is a construction, and so on. Hence, it is highly adaptive that we (i.e., the whole system we are) generate our "I," "myself," "me" in a transparent way. Self, then, is a phenomenal model that a part of the whole system that we are generates for us as the whole system (Metzinger, 2003). Our phenomenal self (model) depends on our ongoing mental action and is not a *thing*, not an independent entity or substance that could live by itself, not an unchanging center or invariant set of intrinsic properties, not a unique and indivisible unity.

To have a first-person perspective, we must integrate our phenomenal self-model with our phenomenal model of reality in a specific way. This way pertains to the fact that consciousness is intentional. That is, it is "about" something beyond itself (Thompson, 2007). Every phenomenal perception, feeling, belief, desire, and so on, has an object that it is about: the perceived, the felt, the believed, the wanted. We are always conscious *of* something. A first-person perspective thus involves a phenomenal self that is intentionally related to something else, for example, "I (a phenomenal self-model) perceive a book (an intentional object)," "I believe in God," "I am a woman," or "I am afraid."

Self-consciousness. Apart from the exceptions mentioned above, dissociative parts also believe, like integrated individuals, that they have or are a self, and also have a first-person perspective. For example, they say or have the feeling that they exist, they perceive an external world and embed their experiences in this world, they distinguish themselves from that perceived world, and they intentionally relate their phenomenal self to other phenomenal mental contents. Thus, they might say, "I am a child," "This hand is mine," or "I want that doll." Many dissociative parts, like integrated individuals, also have a second-person perspective regarding other individuals (e.g., "I fear that man") as well as other dissociative parts (e.g., "I despise the weak one"). Thus, in dissociative disorders, what should be a quasi-second-person perspective (e.g., "I find it hard to accept I was vulnerable as a child") becomes phenomenally a second-person perspective ("I am not that weak child, I am tough"). The phenomenal self-model of dissociative parts and the first-person perspective and included second-person perspective of these parts are neither given nor fixed and require ongoing mental action under the transparency constraint.

Phenomenal self-models and world-models can differ greatly among different individuals in terms of complexity and richness (Metzinger, 2003). These dimensions also apply to dissociative parts. Some dissociative parts' first-person and second-person perspectives are simple and limited, in others they are more complex and full, and still other dissociative parts have a most differentiated and rich—or most elaborated—first-person and second-person perspective. Furthermore, the degree to which the first-person and second-person perspectives of different dissociative parts are dissimilar diverges.

Understanding that the first-person and second-person perspectives involve an individual's construction helps to appreciate that divisions of personality entail the appearance of two or more linked phenomenal selves and worlds (Nijenhuis, in press). This understanding also explains why full (re)integration of conscious and self-conscious dissociative parts implies the rapid (re)appearance of a singular first-person perspective, the swift disappearance of the different first-person perspectives that were associated with the now fully integrated dissociative parts of the personality, as well as the dissolution of the second-person perspectives that these previously existing parts had regarding other dissociative parts.

More and less rudimentary first-person perspectives. The generation of more than one first-person perspective is not an all-or-nothing phenomenon. The phenomenal ideas of self, world, and intentional relations of the phenomenal self to phenomenal models of objects and subjects can entail many different levels and degrees of mental action and related levels and degrees of mental content. The precise description of these different qualities (i.e., the level of the mental actions and contents that are involved in the generation of a first-person perspective) and quantities (the number of different though related mental actions and contents involved in this generation) is an important and complicated future task. This refinement will be helpful to distinguish among more and less rudimentary first-person perspectives.

The minimal difference in first-person perspectives between dissociative parts that we have in mind is captured in the words of Charlotte Delbo (1985), who survived Auschwitz. As the major daily-life part of her personality, that is, as the ANP, she formulated her first-person perspective regarding her traumatic experiences as follows:

> I [ANP] have the feeling that the "self" who was in the camp [EP] isn't me, isn't the person who is here, opposite you. No, it's too unbelievable. And everything that happened to this other "self," the one from Auschwitz, doesn't touch me now, *me*, doesn't concern me. . . . (p. 13)

This ANP's first-person perspective was interrupted or influenced by another "self," that is, an EP. Having its own phenomenal self-model and world-model, this is a part of her that was stuck in traumatic memories and reexperienced the traumatization in nightmares:

> Fortunately, in my [EP's] anguish, I cry out. The cry awakens me [ANP], and I emerge from the nightmare, exhausted . . . I become myself again, the one you know, who can speak to you of Auschwitz without showing any sign of distress or emotion . . . [ANP]. I [ANP] feel that the one who was in the camp [EP] is not me, is not the person who is here, facing you . . . (pp. 13–14)

These and similar shifts in the first-person perspective reflect a limited but nonetheless significant division of the personality in the context of traumatization. We have referred to this organization as primary structural dissociation (of the personality; Van der Hart et al., 2006). More complex prototypes of dissociation in trauma involve organizations of personality with one ANP and more than one EP (secondary structural dissociation) and with more than one ANP and more than one EP (tertiary structural dissociation; Van der Hart et al., 2006). Secondary structural dissociation is characteristic of complex PTSD and dissociative disorder not otherwise specified subtype 1 (American Psychiatric Association [APA], 1994). Tertiary structural dissociation marks DID.

Nonintegrated subsystems of the personality with and without a first-person and second-person perspective entail different properties that are of theoretical, clinical, and scientific interest. For example, it is of major clinical importance to realize that it is possible to communicate with dissociative parts because they involve consciousness and self-consciousness, even when their first-person and second-person perspectives are rudimentary. Thus, dissociative parts can, at least in principle, communicate with one another and with the therapist, and enhancement of this communication is a crucial integrative component of phase-oriented treatment of dissociative disorders (International Society for the Study of Dissociation, 2005; Van der Hart et al., 2006).

Psychobiological features. The psychobiological features of these dissociative parts can be scientifically studied by successively activating them in an experimental context (e.g., Hermans, Nijenhuis, Van Honk, Huntjens, & Van der Hart., 2006; Reinders et al., 2003, 2006, 2008). For example, Reinders et al. (2006) found, as hypothesized, that ANPs and EPs recalling the same personal experience had statistically indistinguishable patterns of brain activity in terms of regional cerebral blood flow, indicating shared action and experience. However, parts that recalled a particular traumatizing event as a personal experience (EPs) and parts that did not recall this event or that did not recall it as a personal experience (ANPs) had very different patterns of neural activity when they listened to a description of this traumatizing event. The subjective and neural differences also existed for several psychophysiological variables. Reinders et al.'s studies provide strong evidence that there can be lack of explicit memory transfer between different types of dissociative parts regarding traumatic memories.

A related scientific interest is to compare individuals with authentic and with enacted self-conscious dissociative parts of the personality. For example, experimental studies have documented that different types of genuine self-conscious dissociative parts and simulated "dissociative parts" have different psychobiological reactions to experimental tests (e.g., Hermans et al., 2006). Another study found that mentally healthy women instructed and motivated to imitate ANPs and EPs in women with DID had very different psychobiological

response patterns to adverse memories than authentic ANPs and EPs whether the imitators were low or high fantasy prone (Reinders et al., 2008). These findings make a strong case against the belief that DID results from suggestive therapeutic interventions during which highly suggestible, fantasy-prone individuals learn to behave in ways that correspond with the therapist's idea of the disorder (cf. Lilienfeld et al., 1999).

Dissociative Parts Maintain Particular Psychobiological Boundaries That Keep Them Divided But That They Can in Principle Dissolve

Different parts maintain boundaries that keep them divided (Braude, 1995; Putnam, 1997). These boundaries depend on the mental actions of these parts, and these actions are open to change, at least in principle, so that the boundaries can become more permeable or disappear altogether. We have hypothesized that the boundaries among dissociative parts essentially relate to phobias of traumatic memories and phobias that these parts have regarding one another (Van der Hart et al., 2006).

Permeable boundaries

Dissociative parts can to a degree access or intrude upon one another's domains. This permeability can be two-sided—for example, two different parts may know each other—or one-sided. For example, one part (A) may know that another part (B) exists, but B may not be aware of A's existence. Or A may experience what B feels or does, whereas the reverse does not apply.

Dissociative Symptoms

For conceptual clarity, it is important to distinguish between dissociation as a particular organization of personality and the symptoms that stem from this organization, that is, dissociative symptoms.

Phenomenologically

The distinction between negative and positive symptoms, discussed below, is based on appearance, not on a principle. There is no vital difference between dissociative symptoms that manifest in the body and those that manifest "mentally." The difference is only phenomenological, hence the expressions *somatoform and psychoform dissociative symptoms*.

Negative Dissociative Symptoms

Negative dissociative symptoms refer to apparent losses, for example, of memory, motor control, skills, and somatosensory awareness. Negative

psychoform dissociative symptoms, among others, include dissociative amnesia and dissociative loss of affect and will. Negative somatoform dissociative symptoms, among others, involve dissociative analgesia, anesthesia, and loss of motor control, such as dissociative aphonia. In this negativity, some phenomena seem to be lacking that should be present. But the loss is not absolute: For a negative symptom to be dissociative, whatever experience of function is missing for one dissociative part should be available to another dissociative part (Janet, 1911/1983; Nijenhuis, 2004; Van der Hart et al., 2006).

Positive Dissociative Symptoms

Positive dissociative symptoms involve ideas, reactions, and functions of one dissociative part that intermittently intrude upon one or more other dissociative parts. The symptoms, among others, include dissociative flashbacks and full reexperiencing of traumatizing events, as well as intruding voices, thoughts, movements, and emotional or physical feelings, including pain, that stem from other dissociative parts. Such intrusions are very common in dissociative disorders (Dell, 2006).

In sum, to resolve current conceptual confusion, we propose that dissociation in the context of traumatization is best limited to a division of the personality into at least two dissociative parts that generate (or can generate) at least a rudimentary first-person perspective. As a consequence, the category of dissociative symptoms is limited to the manifestations of these dissociative parts.

LIMITATIONS OF OTHER DEFINITIONS OF DISSOCIATION IN TRAUMA

In the literature, a host of other definitions of dissociation in trauma have been proposed. (Several of these definitions also pertain to dissociation in other contexts, such as hypnosis and mediumship. This is briefly addressed in the Discussion and Conclusions.) Examining a sample of other definitions of dissociation in trauma, we argue that, in our view, each of them is wanting in some regard. We start with a definition that, in its simplicity, represents a common misunderstanding in the field (Cardeña, 1994; DePrince & Freyd, 2007; Steele et al., 2009; Van der Hart et al., 2006).

Dissociation Regarded as Narrowed Consciousness

Some authors conceptualize dissociation as "narrowed consciousness" (e.g., Hovens, 2007, p. 98). However, dissociative parts and many dissociative symptoms, such as hearing voices and other intrusions, cannot be

satisfactorily described or explained in terms of narrowed consciousness. Furthermore, these authors have not defined or operationalized the construct of consciousness, so it remains unclear *what* exactly would be "narrowed." There are at least 11 different constraints on consciousness (Metzinger, 2003), each of which can involve its own kind of psychopathology (Nijenhuis, in press). Also, the definition does not state how "narrowed consciousness" differs from attention. Attention by definition involves sustained phenomenal perception of a *selection* of stimuli or events. Furthermore, excessive and maladaptive selective perception is a major feature of many mental disorders. It would be curious to consider such a ubiquitous phenomenon as the essential feature of one particular group of mental disorders, that is, dissociative disorders, while the existence of dissociative parts and its symptomatic consequences are overlooked.

Dissociation Regarded as Alterations of Consciousness

Patients with dissociative disorders generally experience a wide range of alterations in consciousness, that is, different degrees and forms of being awake (cf. Natsoulas, 1983). For example, they may be disoriented in time or not centered in their body. They may misperceive the intensity of stimuli; engage in maladaptive images or trance states (i.e., altered states of consciousness rendering a subject hypersuggestible; Udolf, 1981); and confuse what is intersubjectively real, less real, or not real at all (Van der Hart et al., 2006). Several authors consider these and other alterations in consciousness, described as absorption, altered time sense, spaciness, daydreaming, imaginative involvement, trance-like behavior, derealization, and certain hallucinations, to be "normal dissociative" phenomena (e.g., Bernstein & Putnam, 1986; Butler, 2004). These phenomena are thus conceptualized as residing on a continuum, with "normal dissociation" at one end and "pathological dissociation" (i.e., symptoms that typically manifest from a division of the personality; e.g., identity alteration, dissociative amnesia) at the other end.

There are at least three major problems of this view. First, none of the alterations of consciousness that are listed as "normal dissociation" necessarily derive from a dissociative organization of the personality, and these alterations therefore belong to a different conceptual category. Grouping symptoms that do and do not specifically involve manifestations of dissociative parts of the personality together thus generates an overgeneral category. The dissociative symptoms as we define them are specific to mental disorders that involve a division of the personality, such as DID, dissociative disorder not otherwise specified–1, dissociative disorder not otherwise specified–4 (and probably most cases of –3 and –5 but probably not –6 and certainly not –2), and PTSD (for a description of the mental disorders involved, see Van der Hart et al., 2006; Van der Hart & Nijenhuis,

2008). Other alterations of consciousness, such as absorption, are *sensitive but not specific* for this group of mental disorders. Second, listing alterations in consciousness as instances of "*normal* dissociation" is inconsistent with the fact that these phenomena can reach pathological proportions (Van der Hart et al., 2004).

Third, the fact that manifestations of dissociation of the personality positively correlate with measures of absorption, imaginative involvement, and other manifestations of "normal dissociation" has been used to argue that these kinds of altered consciousness belong to the domain of dissociative symptoms (Dalenberg & Paulson, 2009). However, manifestations of a dissociation of personality are also moderately to strongly correlated with several other kinds of psychopathology, and high correlations between phenomena do not logically imply that these phenomena belong to the same class. For example, the very strong correlation between eyesight and hearing does not imply that there is no major difference between these faculties. Dalenberg and Paulson (2009) feel that excluding the phenomena of "normal dissociation" from the domain of dissociation would lead clinicians to overlook these "symptoms." However, clinical and scientific progress is often enhanced by theoretical and empirical distinctions, not hampered. Thus, we propose a careful distinction between dissociation of personality and its symptoms and other forms of altered consciousness. We also favor clear distinctions between different kinds of alterations of consciousness that do not specifically relate to the existence of dissociative parts of the personality (Nijenhuis, in press; Steele et al., 2009; Van der Hart et al., 2006).

Disruption in Usually Integrated Functions

The *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) defines the essential feature of dissociative disorders as "a disruption in the usually integrated functions of consciousness, memory, identity, or perception of the environment" (APA, 1994, p. 477). It is curious that the definition does not address the functions of motor control and sensation, even though these are equally fundamental to an individual's integrated functioning. Furthermore, it does not include a reference to the notion that these functions are organized in dissociative subsystems of the personality.

Coexistence of Separate Mental Systems

One of the definitions that Cardeña (1994) proposed is dissociation "as the coexistence of separate mental systems that should be integrated in the person's consciousness, memory, or identity" (p. 19). This definition adequately includes the notion of dissociative systems rather than dissociative states. However, Cardeña's definition lacks the notion of personality as a whole system. Furthermore, the definition lacks constraints on the concept

of dissociative systems, and the separateness of these dissociative systems seems to be overemphasized.

Detachment and Compartmentalization

Cardeña (1994), Holmes et al. (2005), and Brown (2006) joined other critics in stating that the dissociation concept has been overextended to encompass almost any alteration in consciousness. Cardeña suggested that dissociation should not be applied to ordinary instances of less-than-full engagement with one's surroundings, experiences, and actions but should be restricted to "qualitative departures from one's ordinary modes of experiencing, wherein an unusual disconnection or disengagement from the self and/or the surroundings occurs as a central aspect of experience" (p. 23). Following Cardeña, Holmes et al., Brown, and colleagues proposed a model of dissociation that includes two distinct categories of "dissociative" phenomena labeled *detachment* and *compartmentalization*.

Detachment. Holmes et al. (2005) defined *detachment* as "an altered state of consciousness characterized by a sense of separation (or "detachment") from aspects of everyday experience" (p. 5). Brown (2006) listed different detachment phenomena, such as the individual's emotional experience (as in emotional numbing), sense of self (as in some depersonalization phenomena), body (as in out-of-body phenomena), or the world around (as in derealization). He furthermore referred to phenomenological descriptions such as "being spaced out," "disconnected," "unreal," or "in a dream"; a sense of being an outside observer of one's body; and perceptions of the outside world as flat, lifeless, and "strange," as noted by a number of previous authors. Such experiences are commonly experienced during or immediately after potentially traumatizing events and have been subsumed under the label of *peritraumatic dissociation* (e.g., Marmar, Weiss, & Metzler, 1998; for a critique, see Van der Hart et al., 2008). Brown added that many individuals report mild and transient detachment experiences during periods of fatigue, intoxication, or stress. Detachment phenomena can be arranged on a continuum of increased distress and disability, ranging from mild and nonpathological experiences of detachment to extremely disabling symptoms, such as those seen in depersonalization disorder. We comment on this view below.

Compartmentalization. The other category that Holmes et al. (2005) and Brown (2006) distinguished is called *compartmentalization*, a term introduced by Spiegel and Cardeña (1991; see also Cardeña, 1994) who referred to dissociation "as involving at least momentarily unbridgeable compartmentalization of experiences" (p. 367). Following these authors, Holmes et al. defined *compartmentalization* as follows: (a) The phenomenon involves a deficit in the ability to deliberately control processes or actions that would normally be amenable to such control; (b) the deficit

cannot be overcome by an act of will; (c) the deficit is reversible, at least in principle; and (d) it can be shown that the apparently disrupted functions are operating normally and continue to influence cognition, emotion, and action.

Comments. We concur with Holmes et al. (2005) and Brown (2006) that the phenomena of detachment and compartmentalization are different. However, it is confusing to include conceptually and empirically different phenomena under one generic label (i.e., *dissociation*). Also, the term *compartmentalization* is not the best label to refer to a division of personality because it suggests less permeable boundaries among dissociative parts of the personality than those found in clinical practice and experimental research and than those Cardeña, Spiegel, and Holmes et al. have in mind.

Holmes et al.'s and Brown's four criteria of compartmentalization above are in line with but in part different from our definition of dissociation. A problem of Holmes et al.'s and Brown's criteria is that they miss the constraints that enable us to distinguish dissociative subsystems of the personality in dissociative disorders from other insufficiently integrated subsystems of the personality. As hinted at before, insufficient integration of the personality is a most general feature of psychopathology. It has long been recognized that any psychopathological "symptom is the expression of disorganization of a certain integration level of a functional system" (Farina, Ceccarelli, & Di Giannantonio, 2005, p. 289).

According to Brown (2006), compartmentalization can pertain to a lack of integration between two cognitive structures, the primary and the secondary attentional systems (PAS and SAS, respectively) but can also occur within the SAS. For our current purposes, it suffices to say that the PAS does not involve self-consciousness, whereas the SAS does.

In Brown's (2006) view, DID involves compartmentalization within the SAS and implies the existence of two or more compartments that include their own sense and idea of self. Less complex dissociative disorders would involve a lack of integration between the PAS and the SAS (Brown, 2006). Patients with these disorders would therefore entertain a singular first-person perspective. However, patients with dissociative disorders that are less complex than DID can also include two or more different conscious and self-conscious dissociative parts (e.g., APA, 1994; Boon & Draijer, 1993; Dell, 2009; Nijenhuis, in press; Steinberg, 1995; Van der Hart et al., 2006; Van der Hart, Van Dijke, Van Son, & Steele, 2000).

Thus, Holmes et al.'s and Brown's "compartmentalization of processes" is overly general, and Brown's distinction between compartments with self-awareness (i.e., compartmentalization within the SAS) and between one compartment with (SAS) and one without (PAS) self-awareness does not seem to hold. Spiegel and Cardeña's phrase "compartmentalization of experiences" is more specific and closer to our definition, because experiences imply consciousness, and usually self-consciousness as well. Exceptions

aside, an experience is *someone's* experience. It should be emphasized, however, that more is compartmentalized than experiences. For example, as we already indicated, ANPs and EPs involve different psychobiological profiles.

A final problem of the distinction between "detachment" and "compartmentalization" is that there are alterations of consciousness that do not fit this categorization well. For example, the simple twofold categorization does not seem to accommodate the undue focus on a very limited number of perceptions that are not caused by mental detachment. Similarly, it does not capture confusions between fantasies and hallucinations on the one hand and generally shared perceptions of "reality" on the other. Such distinctions require a fine-grained catalogue of constraints on consciousness.

Dell's Five Kinds of Dissociation

Trying to come to terms with the elusive concept of dissociation, Dell (2009) has pinpointed a set of different phenomena and mental disorders that would be dissociative, that is, dissociation-potentiated repression, intrusions from dissociated structures, evolution-prepared dissociation, depersonalization disorder, type II normal dissociation, and conversion disorder. Each of these different phenomena and disorders requires recognition and study, but do they constitute one category?

In Dell's (2009) view, all dissociative experiences involve "unexpected, involuntary intrusions into one's conscious functioning" (p. 806). These automatisms are caused by a failure to keep mental and behavioral actions and their implied contents out of conscious awareness. It is hard to see why negative symptoms such as dissociative amnesia and depersonalization, as well as successfully repressed mental contents, would be automatisms (i.e., positive symptoms). In fact, negative dissociative symptoms are the *reverse* of positive dissociative symptoms (e.g., intrusions) and usually go together (Janet, 1911/1983; Nijenhuis, 2004; Van der Hart et al., 2006).

Dissociation-potentiated repression. It is also hard to see why dissociation-potentiated repression (whether or not repression exists is not under discussion here) would be dissociation. *Repression*, described as "a motivated mental effort to escape discomfort by pushing uncomfortable realities out of conscious awareness" (Dell, 2009, p. 808) is, according to Dell, potentiated by a "high level of dissociative ability" (p. 808). This statement pushes the conceptual and definitional problem back to defining dissociative ability, which Dell does not do. In our view, dissociative ability involves an individual's ability to divide the personality in two or more insufficiently integrated, hence dissociated, parts, each with, at a minimum, his or her own first-person perspective. Repression can be understood as the successful removal of particular mental contents from *any* first-person perspective (leaving them in some kind of dynamic unconscious condition). In this light,

it seems apt to say that repression requires an ability for repression whereas dissociation requires a dissociative ability.

However, Dell (2009) states that routine repression "may be transformed by the mechanism of dissociation into a full-blown splitting-off" (p. 808). This would happen when the individual is motivated to repress uncomfortable realities (a *sine qua non* for repression to occur) and has a high dissociative ability. Assuming that repression exists, it makes sense to say that in individuals with a high ability for repression but a low ability for dissociation, painful realities vanish from their singular first-person perspective when their repression is successful. It also makes sense to say that in individuals with sufficient dissociative ability, at least one dissociative part mentally avoids becoming (fully) consciously aware of the painful knowledge and experiences associated with at least one other dissociative part. But what is hard to understand is that an ability for dissociation would potentiate repression. We have suggested that many dissociative parts mentally avoid becoming consciously aware of one another but *realize* one another's existence in at least some regard. This avoidance can involve different actions, such as a lowering of the level of consciousness (e.g., engaging in trance-like and dream-like states, and avoidance of the mental action of full realization), retraction of the field of consciousness (e.g., excessive focusing on work and turning attention away from voices), self-mutilation generating endogenous opioids, and substance (ab)use (Van der Hart et al., 2006).

Intrusions from dissociated structures. Dell believes that dissociation-potentiated repression produces dissociated structures, that is, structures that we refer to as dissociative subsystems or dissociative parts of the personality. In his view, dissociated structures hold unaccepted or disowned aspects of life, the self, and significant others. There are several conceptual problems with this proposal. One problem was described above and concerns the question of why an ability for dissociation—rather than an ability for repression–would potentiate repression rather than a division of personality.

Another concern is that Dell limits dissociative structures to what we have called EPs. His statement that "[d]issociated structures are experienced by the person as operating with considerable autonomy" (Dell, 2009, p. 808) details that a dissociative individual is an experiencing, consciously aware person *plus* one or more dissociated structures. But in a divided system, insufficiently integrated structures are of logical necessity *all* dissociative parts of that whole system. Consistent with this, research has documented that these "persons," which other authors have referred to as "normal consciousness," are not psychobiologically "normal" (e.g., Reinders et al., 2003, 2006; Şar, Unal, & Ozturk, 2007): Their normality is apparent, hence our term *apparently normal parts of the personality* (ANPs). It must also be realized that ANPs can intrude upon EPs and also other ANPs when they have evolved as much as EPs can intrude upon ANPs or other EPs.

Another concern is the idea that the person (i.e., the ANP) pushes unwanted realities out of conscious awareness. This idea is confusing because an EP has at least his or her own first-person perspective. Thus, in dissociation nothing is removed from conscious awareness. Rather, there is a division of two or more different dissociative parts, each with, at a minimum, its own first-person perspective.

A final concern is that Dell, although acknowledging that the ANP does not accept and integrate the EP's first-person perspective, seems to overlook the fact that the same goes for EPs vis-à-vis ANP(s) and other EPs. For example, an EP of a patient with three children said, "I don't have children and I don't have a mother." In Dell's Freud-inspired vocabulary, EPs thus push subjectively unacceptable realities out of their conscious awareness as much as ANPs do. Each dissociative part tries to avoid actions that would result in knowing and experiencing, that is, integrating other dissociative parts completely or in at least some crucial regard.

Evolution-prepared dissociation. Dell claims that what he calls "evolution-prepared dissociation" does not pertain to repression but to *suppression*, a term he leaves undefined. This proposed kind of dissociation pertains to immediate suppression of fear and other emotions, altered information processing, and immediate execution of nonreflective actions that facilitate survival and that, Dell claims, instantly end when the danger is past.

It is certainly true that total submission to a predator (i.e., playing dead) is associated with limited experienced negative affect and a low level of consciousness and that some EPs engage in this animal defensive reaction pattern when feeling threatened. But why would playing dead in itself be a kind of dissociation? Some EPs engage in playing dead when confronted with real or perceived threat, but playing dead in itself is an animal defensive response including, among others, a low level of consciousness that can happen in individuals whose personalities do not encompass dissociative parts. As remarked above, a lowering of the level of consciousness is a different phenomenon than the existence of two or more dissociative parts of the personality and is therefore better not described as a dissociative phenomenon. Another problem of Dell's position is that the involved animal defensive reactions sometimes persist when the danger is past. These reactions, whether in EPs or in nondissociative individuals, do not immediately end when the danger is past but can linger for some time or can become fixed for years through classical conditioning.

The concepts of repression and suppression are used and defined in psychiatry and psychology in various ways. Although they are sometimes used as synonyms, repression is often seen as an unconscious mental action and suppression as a conscious one. It is very doubtful that animal defensive reactions such as total submission involve suppression (i.e., conscious mental avoidance) of emotional and physical feelings and that mental avoidance among dissociative parts (Dell's dissociation-potentiated repression) needs

to be an unconscious mental action. Clinically speaking, it is evident that dissociative parts (also) engage in conscious mental action to avoid or escape from one another.

Depersonalization disorder. This disorder is about chronic subjective (emotional and bodily) detachment from the self and sometimes also from the world. As discussed before, subjective detachment is a different phenomenon than dissociation of the personality and is better not referred to as a form of dissociation to avoid confusion of tongues. Depersonalization disorder can but need not involve dissociative parts.

Type II normal dissociation and conversion disorder. Type II normal dissociation is believed to involve voluntary, positively valued automatisms that can only be achieved by individuals with a special dissociative ability. Dell includes in this category (a) evolutionary-prepared, survival-oriented dissociation; (b) hypnotic performance; (c) psychologically healthy forms of possession; (d) creative automatisms; and (e) transcendent experiences. However, including a variety of different phenomena in the domain of dissociation is not helpful.

Defining conversion symptoms as unconscious self-hypnotic negations of bodily or mental functions, Dell regards conversion disorder as a separate form of dissociation and more specifically as the pathological form of type II normal dissociation. This position raises many concerns as well. For example, it is unclear why the pathological form of type II normal dissociation would be conversion disorder, if only because type II normal dissociation pertains to an indistinct class of phenomena. It is also unclear why the current *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) dissociative disorders would not also be a pathological form of type II normal dissociation. Still another concern is that conversion symptoms may not involve unconscious causes. For example, an EP may consciously decide to move the body in a certain way. The ANP may not understand why her leg kicks, but the kicking EP knows.

Many authors continue to use the terms *conversion symptoms* and *conversion disorders* uncritically despite major theoretical, conceptual, and empirical objections that have been raised against this terminology (e.g., Brown, Cardeña, Nijenhuis, Sar, & Van der Hart, 2007; Nijenhuis, 2004; Van der Hart et al., 2006). Many authors have described and documented the dissociative nature of these symptoms and disorders (e.g., Brown et al., 2007; Janet, 1907; McDougall, 1926; Nijenhuis, 2004). In empirical studies, for example, very high correlations between psychoform and somatoform dissociative symptoms have been found in different diagnostic groups, and somatoform dissociative symptoms are highly predictive of dissociative disorders not otherwise specified and DID. Thus, our definition of dissociation in trauma describes dissociative symptoms that manifest in somatoform symptoms as positive and negative somatoform dissociative symptoms.

DISCUSSION AND CONCLUSIONS

The value of scientific and clinical concepts relates to their specificity. Thus, the concept and definition of dissociation should not be so broad that a huge group of psychopathological symptoms would count as dissociative. However, neither should they be so narrow that phenomena that are best understood as dissociative would not be included in the category.

Strengths of the Proposed Conceptualization and Definition of Dissociation

There are two crucial differences between our definition of dissociation in trauma and other definitions of the concept. One difference is the constraint that dissociation pertains to a division of personality and, immediately related to this, that dissociative symptoms are manifestations of the existence of two or more dissociative parts of the personality. The other difference involves the constraint that activated dissociative parts of the personality engage in actions that, among other things, generate their own, unique consciousness of self and world and, when combined, consciousness of self-in-the-world. This consciousness of self-in-the-world constitutes the dissociative parts' first-person perspective. When dissociative parts also entertain a perspective regarding themselves, which many do, they also have a quasi-second-person perspective. They tend to have a perspective regarding other dissociative parts and other individuals, that is, a second-person perspective, as well.

In our view, conceptualizing and thus defining dissociation in this way has major benefits. One advantage is that it involves clear distinctions between dissociation as an organization of personality; dissociation as defense; dissociation as pathology; and dissociative symptoms, psychoform and somatoform and negative and positive. These distinctions can guide clinical practice and empirical research and more generally the discussion regarding dissociation in the literature. Furthermore, clear distinctions between dissociative symptoms and other alterations of consciousness guide a better understanding of each of these related but different phenomena and their causes and correlates.

Another advantage of our conceptualization and definition of dissociation is that it involves a clear delimitation of the category of nonintegrated or not fully integrated subsystems within the personality that count as dissociative parts of the personality. Constraining the category of dissociative parts to subsystems capable of actions that generate consciousness and self-consciousness provides much needed specificity of the concept of dissociation and, in its wake, equally needed constraints on the symptoms that count as dissociative symptoms.

Dissociation in Hypnosis and Mediumship

Our definition of dissociation pertains to a division of the personality in the context of trauma. We are aware that this division may also occur in hypnosis and mediumship, that several other definitions of dissociation also address these other contexts, and that there are some indications that dissociation in these other contexts is also best understood as a division of personality. For example, Hilgard's well-known "hidden observer," as found in some highly hypnotizable subjects, involves a dissociative part of the personality that is endowed with consciousness and self-consciousness, but the phenomenon is disputed (e.g., Kihlstrom, 1998; Kirsch & Lynn, 1998). Mediumship may involve conscious and self-conscious dissociative parts of the personality (Braude, 1995). However, dissociation in mediums is in several regards different from dissociation in DID (Moreira-Almeida, Neto, & Cardeña, 2008). The possible involvement of consciousness and self-consciousness in dissociated controls in hypnosis and in dissociative parts in mediumship needs to be examined in more detail before a conclusive general definition of dissociation can be formulated.

In this contribution, we have thus focused only on dissociation in trauma. Difficult as the definition of a construct can be, it is required for theoretical advancements, classification, the formulation of clear and effective approaches to treatment, the development of sophisticated measurement instruments, as well as the design and interpretation of scientific studies. The definition of dissociation in trauma and dissociation in other contexts is no exception.

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