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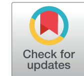
Trauma-related dissociation: An analysis of two conflicting models



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ABSTRACT

The author has been involved in the development of two conflicting theoretical models of trauma-related dissociation which has given rise to conceptual confusion—the more so because both models originally included the term 'levels of dissociation.' In one model, stemming from a so-called broad conceptualization, these 'levels' refer to a range of trauma-related phenomena which may or may not be dissociative in nature. The other model, developed within the so-called narrow understanding of dissociation, distinguishes 'levels' in terms of complexity of dissociation of the personality. This paper describes and discusses the origins of the two models, their contents, their use of the terms 'levels' and 'dissociation,' and their differences and similarities. Arguments are given why, in both models, the term 'levels' (of dissociation) was ill-chosen, as well as why the author prefers the second model stemming from the narrow understanding of trauma-related dissociation.
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"Dissociation is the essence of trauma."
Bessel van der Kolk (2014, p. 66)

1. Introduction

After a long period of neglect, the concept of dissociation is receiving ever more attention in the scientific and clinical fields of trauma-related mental disorders. In the 19th and early 20th century literature (cf., O'Neil, 2009; Van der Hart & Dorahy, 2009), dissociation referred to a division or doubling of the personality,[1] defined by Pierre Janet as a system of ideas and functions (1907, 1909a), and by Allport (1961) as "the dynamic organization within the individual of those psychophysical systems that determine his characteristic behavior and thought" (p. 28). In dissociation, the subsystems that together constitute the personality were, implicitly or explicitly, understood as having their own sense and idea of self, their own first-person perspective (e.g., McDougall, 1926; Mitchell, 1922; Nijenhuis, 2015; Van der Hart, Nijenhuis, & Steele, 2006).

In recent decades, the original understanding of trauma-related dissociation of the personality has been rediscovered and validated. However, at the same time there also has been a proliferation of new, often contradictory meanings of dissociation, resulting in a 'confusion of tongues' (Frankel, 1990; Marshall, Spitzer, & Liebowitz, 1999; Van der Hart, Nijenhuis, Steele, & Brown, 2004). While I am one of the authors proposing to adhere to the original meaning of trauma-related dissociation, I have also, in a few co-authored publications, contributed to this conceptual confusion. Even though the tide might not be turned anymore, this paper still constitutes another attempt to remedy this confusion. For this purpose, I critically compare two conceptual models of trauma-related dissociation in the construction of which I was involved. Both include the notion of levels of dissociation, which, on hindsight, were not such apt choices, as will be argued below (Section 5). In anticipation of these arguments, I will denote the levels in Model 1 as 'levels' and those in Model 2, as 'degrees.'

2. A brief history

While many 19th century clinicians—even those who treated patients with DID (e.g., Azam, 1876; Bourru & Burot, 1885)—ignored or overlooked the possible traumatic origins of dissociative disorders–over time, some found that traumatic experiences

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[1] Although it is possible that other than traumatizing events (such as hypnosis and mediumship) may produce a temporary or longer-lasting dissociation of the personality, the exclusive focus here is on trauma-related dissociation.

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played a major role in hysteria, that is, in the development of dissociation of the personality (e.g., Breuer and Freud, 1893/1895; Briquet, 1859; Charcot, 1889; Janet, 1889, 1898, 1911,1928). This was clearly established in the clinical studies of acutely traumatized WWI soldiers (e.g., Brown, 1920–1921a, 1920–1921b; Jung, 1921–1922; McDougall, 1920–1921, 1926; Myers, 1920–1921, 1940; Simmel, 1918). Some clinicians observed that earlier and more chronic traumatization led to, in the language of this article, more complex dissociation of the personality (e.g., Ferenczi, 1932; Janet, 1909a; Kluft, 1984; Severn, 1933; Simmel, 1918), that is, a larger number of conscious subsystems of the personality, here denoted as dissociative parts.

Janet regarded dissociation as a fundamental characteristic of hysteria—which is now understood as a broad category of trauma-related dissociative disorders, ranging in complexity from simple posttraumatic stress disorder (PTSD) to dissociative identity disorder (DID), in which it is most pronounced (Nijenhuis, 2015, 2017a; Van der Hart et al., 2006). Janet related the origins of dissociation to a mental state or condition which he called psychological misery (Janet, 1889) or mental depression (Janet, 1907, 1909a), that is, a lowered integrative capacity (“malady of personal synthesis” Janet, 1907, p. 332) in the face highly threatening events. This integrative impairment, more precisely, manifested in (a) a *retraction* or *narrowing of the field of personal consciousness*, and (b) a *tendency to the dissociation and emancipation of systems of ideas and functions that constitute personality* (Janet, 1907, 1909a). In the lowering of this integrative capacity, Janet observed that trauma-related “vehement emotions,” as substitutes of adaptive integrative action, are dominantly present (Janet, 1909b; cf., Van der Hart & Rydberg, 2019).

In line with Janet (1889), McDougall (1926) observed, using hypnosis, that these dissociative parts may be more or less complex. Referring to the “major cases,” as in DID, he stated that their “self-conscious purposive thinking” does not only characterize them: “we must interpret the minor phenomena of dissociation in the light of the major cases” (p. 544). Janet’s and McDougall’s views imply that simple dissociative disorders shared with complex dissociative disorders the occurrence of at least two dissociative parts. For example, when a patient presents a contracture, that is, a simple somatoform dissociative disorder (WHO, 1992), there is one part deliberately maintaining the contracture, while another part is unable to do anything about it and may even have a local anesthesia. In more recent literature, this original, structural understanding of trauma-related dissociation was mostly applied to DID, the most complex dissociative disorder (e.g., Kluft, 1985; Kluft & Fine, 1993; Putnam, 1989; Ross, 1989).

However, while the construct of dissociation became more and more an attractor for clinicians and scientists alike, the structural element was obfuscated; instead, the dominant usage became “dissociative responses” (e.g., Bremner, 1999; Felmingham et al., 2008; Lanius et al., 2002, 2010; Lanius, Brand, Vermetten, Frewen, & Spiegel, 2012). In contrast with the classical understanding, the idea became that a single overarching system may be an agent of ‘dissociative’ actions, rather than dissociative parts of the personality. The same seemed to apply to Marmar and colleagues’ (Marmar et al., 1994; Marmar, Weiss, & Metzler, 1998) view on acute ‘responses to trauma,’ a range of phenomena primarily involving a sense of unreality, which they labeled as *peritraumatic dissociation.*

The construction of the *Dissociative Experiences Scale* (DES; Bernstein & Putnam, 1986) may have played a major role in these conceptual developments. This widely used instrument includes some items which refer to a division/doubling of the personality and others which do not. The main areas assessed are: amnesia, depersonalization, derealization, absorption, and imaginative involvement—the latter two more specifically endorsed in nonclinical populations (Carlson, 2005). Bremner (1999), in his Editorial in the *American Journal of Psychiatry*, made a distinction between “two subtypes of acute trauma response, one primarily *dissociative* and the other *intrusive/hyperarousal* [italics added]” (p. 350)—implying that negative symptoms were dissociative, but positive (intrusive) phenomena were not. This was echoed in Allen, Console, and Lewis’s (1999) view of dissociation as a detachment phenomenon, i.e., a negative symptom. Thus, while historically two types of dissociative symptoms, positive and negative ones, were recognized as stemming from a dissociation of the personality, these more recent views only recognized negative symptoms as dissociative and did not consider the issue of whether the symptoms stemmed from a division/doubling of the personality.

This development opened the way for the creation of the so-called dissociative subtype of PTSD, with symptoms of depersonalization and derealization (e.g., APA, 2013; Dutra & Wolf, 2017; Ginzburg et al., 2006; Lanius et al., 2012)—overlooking the fact that PTSD has positive symptoms which are described as dissociative, including ‘dissociative flashback episodes’ (APA, 2013; c.f., Dorahy & Van der Hart, 2015; Nijenhuis, 2015, 2017a; Van der Hart et al., 2006). Perry (1999) and Schore (2003, 2009) took the most exclusive position, by limiting dissociation to ‘shutdown’ responses in the face of threat; a view adopted, to some degree, by Schauer and colleagues (Schalinkski, Schauer, & Elbert, 2015; Schauer & Elbert, 2010).

Further conceptual developments pertaining to the concept of ‘dissociative processes’ (e.g., Butler, 2006; Chefetz, 2015; Farina, Liotti, & Imperatori, 2019) included the notion of ‘dissociative absorption’ (e.g., Bernstein & Putnam, 1986; Soffer-Dudek, Lassri, Soffer-Dudek, & Shahar, 2015), as well as notions of ‘normal,’ ‘normative’ or ‘nonpathological’ dissociation (Butler, 2006; Dalenberg & Paulson, 2009). Another view involved the belief that every individual has been, to some degree, traumatized, and thus would be characterized by a division of the self or personality into self-states (e.g., Bromberg, 1998, 2006; Howell, 2011, 2020). However, it remained unclear if these self-states include their own sense and idea of self and environment, i.e., their own first-person perspective, or not (see Nijenhuis, 2015, for a detailed analysis).

One of the ways to resolve the lack of consensus about the meaning of dissociation was the proposition of two basic types of dissociation: *compartmentalization* and *detachment* (Allen, 2001; Cardeña, 1994; Brown, 2006; Holmes et al., 2005). *Compartmentalization*, which Cardeña (1994) regarded as a deficit phenomenon, is roughly similar to the notion of dissociation of the personality. Compartmentalization should not be understood as involving closed boundaries between dynamic dissociative subsystems of the personality, which is clearly not entirely the case. If it would, co-consciousness, intrusions, overlap, communications, and fusions among dissociative parts could not exist (Hart, 1926; Nijenhuis, 2019; Van der Hart et al., 2006). Furthermore, compartmentalization does not explicitly include the idea of a first-person perspective on self and environment as a key-characteristic of these subsystems.

Detachment, involving dis-association, was defined as an altered state of consciousness characterized by a sense of separation from aspects of everyday experience; this detachment would especially pertain to depersonalization and derealization. However, detachment understood this way contrasts with the original understanding of dissociation as a division or doubling of the personality in dissociative parts, that is, divided actions. Rather, it seems to pertain to the *absence* of mental actions, about which Janet (1927/2007) stated, “When one [i.e., an individual as a whole personality] doesn’t notice something, doesn’t make some associations with it, this is not dissociation. It is a suppression of work, of synthesis” (p. 375).

Another attempt to bring various phenomena under the denominator of trauma-related dissociation—one in which I was involved—was the creation of a model of *three levels of dissociation* (Van der Hart, Van der Kolk, & Boon, 1998; Van der Kolk, Van der Hart, & Marmar, 1996)—in this paper referred to as Model 1, presented (Section 3) and discussed (Section 5) below. However, around the same time, I was torn between thoughts; I also attempted to construct (in Dutch) another model, that is, Model 2 *in status nascendi* (Van der Hart, 1994). In subsequent discussions with Ellert Nijenhuis and Kathy Steele, we shared our growing conceptual dissatisfaction with the tendency to subsume an ever wider variety of phenomena under the label of dissociation. We became involved in the further development of this more purely trauma-related dissociation model—Model 2 in this paper—consisting of *three degrees of complexity of dissociation of the personality*. This model became an integrated part of the evolving theory of structural dissociation of the personality (e.g., Nijenhuis, 2015; Nijenhuis and Van der Hart, 1999; Nijenhuis, Van der Hart, & Steele, 2002; Steele, Boon, & Van der Hart, 2017; Steele, Dorahy, Van der Hart, & Nijenhuis, 2009; Steele, Van der Hart, & Nijenhuis, 2009; Van der Hart, 2000; Van der Hart et al., 2006).

In short, the existence of the two dissociation models discussed in this article reflects a widely existing Babylonian confusion with regard to the concept of trauma-related dissociation; one to which I have contributed, but which my colleagues and I have also tried to remedy (Moskowitz, Heinimaa, & Van der Hart, 2019; Nijenhuis, 2019; Nijenhuis & Van der Hart, 1999; Steele, Dorahy, et al., 2009; Van der Hart et al., 2004). By critically contrasting these two models, this paper is a further attempt at conceptual house-cleaning.

3. Model 1: three 'levels' of dissociation

Apart from the original notion of a division/doubling of the personality, several authors included different types of phenomena under the label of dissociation. As mentioned above, a milestone in this development was the construction of the *Dissociation Experiences Scale* (DES; Bernstein & Putnam, 1986), followed by influential overviews (e.g., Cardeña, 1994; Spiegel & Cardeña, 1991; Van der Kolk & Fisler, 1995). Here, I focus in particularly on the work of Van der Kolk and colleagues, since it represents an attempt to integrate these various phenomena in an all-encompassing model of dissociation. Model 1, as I call it, remains influential (Brand, Lanius, Vermetten, & Loewenstein, 2012; Meares, 2012; Meares & Barral, 2019; Lanius et al., 2002, 2010, 2012), while remaining mostly, but not completely, at odds with Model 2 presented below.

3.1. The notion of three 'levels' of dissociation

Van der Kolk and Fisler (1995) agree with Spiegel and Cardeña (1991) that dissociation refers originally to "a compartmentalization of experience: elements of the experience are not integrated into a unitary whole, but are stored in memory as isolated fragments consisting of sensory perceptions or affective states" (p. 510). They go on to state that the word dissociation is currently used to describe four distinct, but interrelated phenomena: (1) sensory and emotional fragmentation of experience; (2) depersonalization and derealization at the moment of the trauma, which they label as peritraumatic dissociation, following Marmar et al. (1994); (3) ongoing depersonalization and derealization and 'spacing out' in everyday life; and (4) containing the traumatic memories within distinct 'ego-states.' They state that the precise interrelationships among these various phenomena remain to be spelled out. The idea behind this classification seems to be that during and after traumatic experiences a number of typical responses or processes take place that are being referred to as 'dissociative' (Lanius et al., 2002, 2010; Meares, 2012; Meares & Barral, 2019; Van der Hart et al., 1998; Van der Kolk et al., 1996). Using the notion of "levels of dissociation," Van der Kolk and colleagues distinguished three such 'levels.'

3.1.1. Primary dissociation: memory fragmentation

Van der Kolk et al. (1996) state that trauma is often first organized in memory on a perceptual level. In their view, "memories" of the trauma are initially experienced as fragments of the sensory components of the event—as visual images, olfactory, auditory, or kinesthetic sensations; or intense waves of feelings that patients usually claim to be representations of elements of the original traumati[zing] event" (p. 312). Van der Hart et al. (1998) relate this "fragmentation" to the existence of "states of mind that are different from the normal state of consciousness" (p. 255).

3.1.2. Secondary dissociation: peritraumatic dissociation

Model 1 proposes that once an individual is in a traumatic (dissociated) state of mind (which remains undefined), further disintegration of elements of the personal experience can occur (Van der Kolk et al., 1996). In other words, a more complex, secondary kind of dissociation takes place. (It remains unclear how this secondary dissociation would relate to the primary dissociation mentioned above; it is certainly not a sequential relationship; cf., Section 5) A "dissociation between observing ego and experiencing ego" (Fromm, 1965, p. 129) can take place. However, this is not all. Secondary dissociation may also involve alterations in the experience of time, place, and person, which conferred a sense of unreality on the event as it was occurring, Dissociation during trauma may take the form of altered time sense; time may be experienced as either slowed down or accelerated. Many victims experience depersonalization, out-of-body experiences, bewilderment, confusion, disorientation, altered pain perception, altered body image, tunnel vision, and immediate dissociative experiences (Van der Kolk et al., 1996, p. 313).

These acute trauma responses, including Fromm's "dissociation between observing ego and experiencing ego," have been called *peritraumatic dissociation* by Marmar and colleagues (Marmar et al., 1994, 1998). Van der Hart et al. (1998) stated that whereas primary dissociation limits people's "cognitions" regarding the reality of their traumatic experience, secondary dissociation or peritraumatic dissociation "puts people out of touch with their feelings and emotions related to the trauma—they are anesthetized" (p. 256).

3.1.3. Tertiary dissociation: development of dissociative disorders

Tertiary dissociation refers to the development of distinct 'ego-states' (Van der Hart et al., 1998): Some of them contain the traumatic experience and consist of multiple identities with distinct cognitive, affective, and behavioral patterns. Different 'ego states' may contain the pain, fear, or anger involved in particular traumatic experiences; other 'ego-states' may be unaware of the trauma and its concomitant affects and are able to carry out routine functions of daily life. To be discussed in more detail below (Section 5), and despite differences in terminology, Model 1's tertiary dissociation is equivalent with Model 2 as a whole.

4. Model 2: three degrees of dissociation of the personality

As stated above, the degrees (formerly inaccurately called 'levels') of trauma-related dissociation of the personality distinguished in Model 2 are an essential part of the theory of (structural)

dissociation of the personality, mentioned above; a dissociation theory rooted in the original views on dissociation as a division or doubling of the personality.[2] Theory of SDP essentially states that dissociation evolving during trauma—which, by definition, is beyond the individual's integrative capacity, entails a division of one's personality, that is, of the dynamic, biopsychosocial system as a whole that determines his or her characteristic mental and behavioral actions (Nijenhuis & Van der Hart, 2011). This 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. (p. 428)

The maintenance of these boundaries—which can be intruded upon by other parts—involves dissociative parts being prone to a series of inner-directed phobias, including the phobia of traumatic memory, the phobia of mental actions, and the phobias of some of the other parts (Van der Hart et al., 2006). As mentioned above, phenomenologically, and in line with Janet's (1893, 1894, 1901, 1907) distinction between mental stigmata and mental accidents, the dissociation 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 (cognitive-affective symptoms such as amnesia, hearing voices) or somatoform (sensorimotor symptoms such as anesthesia or tics).

Inspired by Myers (1940) concepts of apparently normal personality and emotional personality, the theory distinguishes between two types of dissociative parts: apparently normal parts of the personality (ANPs) and emotional parts of the personality (EPs). As ANPs, traumatized individuals' actions are mainly mediated by action systems, also known as motivational systems (e.g., Liotti, 2009), for daily life functioning including sociability (cooperation, collaboration), caregiving, attachment, play, and sexuality. ANPs are also characterized by the need to phobically avoid traumatic memories, EPs, and emotional and sometimes relational experiences. As EPs, an individual remains fixed in traumatic experiences and in one or more forms of failed defense action tendencies during the trauma. These defensive action tendencies may pertain to attachment cry, freeze, flight, fight, flag, or collapse (shutdown; Bracha, 2004; Fanselow & Lester, 1988; Nijenhuis, 2015; Nijenhuis, Spinhoven, Van Dyck, Van der Hart, & Vanderlinden, 1998; Schauer & Elbert, 2010). However, those EPs that identify with or imitate the perpetrator may be driven by an intense need for (often violent) power over other parts and/or people (Nijenhuis, 2015). EPs are mostly living in trauma-time and not very adaptively responsive to the present context. When reactivated, they often repeat the failed mental and physical actions of the traumatic experience. Intrusions into ANP, such as flashbacks and trauma-related voices, stem from these EPs.

4.1. Degrees of trauma-related dissociation of the personality

In line with Janet's and Ferenczi's clinical observations, the theory of SDP includes the understanding that, generally speaking, the earlier trauma starts in life and the more extensive it is, the more complex the dissociation of the personality tends to become. Thus, there is a continuum of complexity which is better served by the notion of degrees of systemic complexity than by levels, suggesting discrete distinctions (Nijenhuis, 2015, 2017a). The theory of SDP includes these ideas that are consistent with contemporary research findings (cf., Section 4.1.4). Model 2 distinguishes three prototypical degrees of complexity.

4.1.1. Primary dissociation of the personality

Primary dissociation of the personality involves a prototypical division of the personality into a single ANP, which by definition functions more or less in daily life, and a single EP, by definition more or less living in trauma-time and trauma-place. The ANP may have watched the traumatizing event or sherds of it; it may also have been mentally absent from the event and have amnesia. In itself, an EP may be more or less complex or elaborated and more or less leading a life of its own. Many cases of simple PTSD and of dissociative disorders of movement and sensation (WHO, 1992) may be characterized by this primary degree of dissociation. However, when the EP is well-developed, according to the DSM-5 (APA, 2013), it may also characterize DID.

4.1.2. Secondary dissociation of the personality

In secondary dissociation of the personality there is typically a single ANP and more than one EP. This degree of systemic complexity sometimes includes an additional observer part of the personality, which may watch what happens during a traumatizing event from a distance. This phenomenon has been reported by many survivors of rape, traffic accidents, and combat. The division of the EPs is often based on failed integration of the defenses mentioned above. Other EPs may hold intolerable affect such as shame or existential loneliness, and still others may be driven by an intense need for control (in particular, in interpersonal contexts). Complex PTSD, some cases of Other specified dissociative disorder (APA, 2013), Partial DID (ICD-11; WHO, 2020), and DID (APA, 2013) according to the DSM-5, may manifest this degree of dissociation.

4.1.3. Tertiary dissociation of the personality

Tertiary dissociation of the personality involves more than one ANP and more than one EP. This degree is particularly characterized by the alternation of dissociative parts having complete or dominant control of consciousness and behavior, with an increase in autonomy and elaboration not generally seen in PTSD, Complex PTSD, and OSDD. Division among ANPs may occur when daily life challenges are beyond the individual's integrative capacity. In terms of the theory of SDP, this most complex degree pertains only to DID. DID may encompass, in McDougall's terms mentioned above, a whole range of major and minor "cases," that is, more or less complex dissociative parts of the personality; in Braun's terms ranging from "personalities," "fragments," to "special-purpose fragments" (Braun, 1968, p. xiii). However, the term "fragments," referring to rudimentary developed dissociative parts, may mistakenly imply that such parts can exist completely separated from other parts of the personality, which clearly is not the case (see also Hart, 1926; Nijenhuis, 2017a; Van der Hart et al., 2006). The same problem exists with regard to the concept of compartmentalization.

[2] There are other related models of a trauma-related dissociation of the personality which however do not include the criterion of dissociative subsystems having their own sense and idea of self and first-person perspective (e.g., Schimmenti & Şar, 2019). The implication of these models is that they rob the notion of dissociation of its specificity; for instance, they would not distinguish between individuals with dissociative parts and individuals with mood swings (Nijenhuis, 2019).

4.1.4. Empirical evidence for dissociation of the personality

In the last two decades much empirical evidence supporting Model 2, as part of the theory of SDP, has been collected. This includes functional biopsychosocial findings and the outcomes of research on structural brain abnormalities (reviewed in Nijenhuis, 2015, in preparation). Some key findings from this body of work are: (1) psychoform and somatoform dissociation correlate with intensity, duration and age at onset of adverse life experiences (e.g., Nijenhuis, Vanderlinden, & Spinhoven, 1998); (2) increasing complexity of dissociative disorder is correlated with increased severity of psychoform and somatoform dissociation (e.g., Nijenhuis et al., 1999); (3) mental disorders that are not seen and categorized as dissociative disorders are not associated with high psychoform and somatoform dissociation; PTSD and conversion disorders, i.e., the ICD-10 dissociative disorders of movement and sensation, are the exceptions (e.g., Nijenhuis et al., 1999); the theory of SDP regards the two as dissociative disorders (Nijenhuis, 2017a; Van der Hart et al., 2006); (4) PTSD and DID have many structural and functional neurophysiological and physiological abnormalities in common (Chalavi et al., 2015); (5) Reenactment of traumatic memories in PTSD is associated with a switch in first-person perspective. The reenactment involves a rudimentary or more developed EP, which ANP does not integrate for the duration of the disorder. See Nijenhuis (2015, 2017a), for extensive overviews.

5. Discussion: Model 1 and Model 2 compared

The two models of trauma-related dissociation mostly differ widely in operationalizations of the concept dissociation. In terms of Van der Hart and Dorahy (2009), Model 1 represents the so-called broad conceptualization: It includes trauma-related phenomena that stem from a division/doubling of the personality and others that are or may not. Model 2 is an exponent of the so-called narrow (and original) conceptualization of trauma-related dissociation.

5.1. The problem with 'levels of dissociation'

Both models included the term 'levels of dissociation,' which, in hindsight is problematic. Model 2 pinpoints three "levels of structural dissociation." With this phrase, Van der Hart et al. (2006) sought to indicate that the division/doubling of the personality can be more or less intricate or complex. However, whereas the term 'levels' suggests the existence of discrete distinctions, the authors actually had a clinically observed *dimension* of complexity with three prototypes in mind (Van der Hart et al., 2006, p. 5). This would make the use of the term 'degrees' more appropriate. Another related dimension, not considered in this article, pertains to the degree to which dissociative parts, as personality subsystems of ideas and functions (Janet, 1907, 1909a), are more or less elaborated, or "emancipated" in Janet's terms.

Model 1 does not involve a categorical division (nor a dimensional construct), but rather a hodgepodge of partly related and partly unrelated phenomena. Apart from this, the first two 'levels' refer, in a confusing way, to different points in time in traumatizing events. The first relates to memory of a past traumatizing event, while the second goes back in time as it relates to peritraumatic experiences, that is, which occur around the time of the event. The third 'level' pertains to (structural) dissociation of the personality, which is maintained by a range of phobias.

5.2. Conceptual confusion

The similarities and differences between these two models of trauma-related dissociation have never before been discussed, and my role in the construction of both of them has added to the existing confusion in the general understanding of dissociation. This was commented on by Cardeña (2011), when he critically discussed our article proposing a definition of trauma-related dissociation (mentioned above), that is, dissociation of the personality (Nijenhuis & Van der Hart, 1999):

> [a] phenomenon that one of the authors of the current definition [OvdH] has considered dissociative, that is secondary or peritraumatic dissociation (Van der Kolk et al., 1996, p. 313), would no longer be considered truly dissociative, or at least it would become unwieldy .... I cannot see how the authors'[3] previous model of structural dissociation as primary (or referring to "the fragmented nature of traumatic memories"), secondary (or referring to "peritraumatic dissociation"), and tertiary (or referring to "the sense of self") dissociation can be reconciled with their current definition insofar as it would seem that only their previous tertiary type would clearly count as *bona fide* dissociation. The authors' solution to the issue of considering some peritraumatic alterations of consciousness as indicative of true dissociation only if they refer somehow to a division of personality (Steele et al., 2009[b]) will likely confuse both clinicians and researchers. (pp. 458–459)

Indeed, Cardeña is right in stating that both models are—mostly—incompatible. The solution my colleagues and I proposed to clinicians and researchers is to return to and adopt, in Model 2, the original view of trauma-related dissociation, that is, dissociation of the personality (Nijenhuis, 2015; Nijenhuis et al., 2002; Steele, Van der Hart, & Nijenhuis, 2001, Steele et al., 2009a, 2009b, 2017; Van der Hart et al., 2004, 2006): This is a conceptual approach which provides clarity and specificity missing in Model 1. The question, then, is how many other 'dissociative' phenomena now subsumed under dissociation in Model 1 may be related to a dissociation of the personality when they do not stem from it. From the perspective of the narrow conceptualization of dissociation mentioned above, they can be better thought of as alterations of (field and/or level of) consciousness that do not necessarily stem from a dissociation of the personality (Steele, Dorahy, et al., 2009).

Below follows a discussion, of the respective forms/degrees of trauma-related dissociation in terms of the differences and possible similarities of both models.

5.3. Primary dissociation

One of the key ideas in Model 2 is that there is at least one particular dissociative part (EP) that keeps and reenacts a traumatic memory or memories. As Nijenhuis (2017a) argues, reenactment of traumatic memories involves a switch in the sense and idea of self, world, and self as a part of this world: More specifically, it involves a switch from ANP to one (or more) EP(s). If it were 'the person' who reenacts the traumatic memories, then why would that person not know that the horrors happened in the past, that he or she is currently safe, etc.? Why would they not be the person who existed presently? Why would they not be able to calm themselves during the reenactment and integrate the traumatic memories? Adherents of Model 1 could state that this is because people generally avoid their traumatic memories and that, when reenactments take place, they are confused in time and place. However, this also pertains to the sense and idea of self, etc.: Reenactments involve a different identity, different from the person who can say, "I remember such and such." In short, when

[3] For clarity's sake, my co-authors Ellert Nijenhuis and Kathy Steele were not involved in the construction of Model 1.

the DSM-5 (APA, 2013) describes the PTSD symptom of "[d]issociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were occurring" (p. 271), Model 2 states that it is an EP, however rudimentary, who is "continuing the action, or rather the attempt at action, which began when the [trauma] happened" (Janet, 1919/25, p. 663).

In the context of Model 1, Van der Hart and colleagues (1998) stated that in these reenactments a state of mind is involved that is different from the normal state of consciousness (p. 255). Apart from the question of whether a 'normal state of consciousness' can be present once a person has been traumatized, this view falls short of arguing that these 'states' have their own sense or idea of self, etc. Furthermore, it raises the pertinent question of the difference between these 'states of mind or consciousness' and the 'ego-states' characterizing Model 1's tertiary level of dissociation. Briefly, Model 1, and probably the PTSD field at large, ignore the fundamental point that having been traumatized involves the existence of at least two prototypical dissociative subsystems–in Model 2 called dissociative parts. Contrary to these dissociative parts, ego-states as such share a singular first-person perspective (Moskowitz & Van der Hart, 2020; Nijenhuis, 2015, 2017a).

5.4. Secondary dissociation

Model 2 includes the notion that secondary dissociation of the personality consists of one ANP and more than one EP. As mentioned above (Section 3.1.2), Model 1 proposes that once an individual is in a traumatic (dissociated) state of mind, further disintegration of elements of the personal experience can occur (Van der Kolk et al., 1996); in other words, at this 'level' a more complex, secondary kind of dissociation takes place. At this 'level,' Model 1 includes an out-of-body experience that Fromm (1965, p. 129) called a "dissociation between observing ego and experiencing ego." This phenomenon clearly refers to a trauma-related dissociation of the personality, with the "experiencing ego" being an EP; thus this phenomenon fits within Model 2. Here, it may pertain to primary dissociation of the personality, that is, when the ANP is also the observer. However, if the ANP was absent during the traumatizing event, the observer part, if having been observing, was another one: the basic complexity of secondary dissociation.

In Model 1's 'level' of secondary dissociation, pertaining to "acute dissociative experiences" (Van der Kolk et al., 1996, 1996, p. 313; cf. Section 3.1.2), a range of other phenomena are included. Under the label of "peritraumatic dissociation," it lists altered time sense (time may be experienced as either slowed down or accelerated); depersonalization; bewilderment; confusion; disorientation; altered pain perception; altered body image, and tunnel vision (narrowing of field of consciousness). The question is whether these phenomena can be regarded as being dissociative in nature. The fact that many empirical studies (but not all) have found that peritraumatic dissociation (PD) is a significant predictor of subsequent PTSD (Lensvelt-Mulders et al., 2008; but see Van der Velden & Wittman, 2008), does not imply that PD is indeed dissociative in nature. Even when the notion of dissociation as detachment phenomenon is adopted, not all of these experiences can be seen as such.

Perhaps a return to Janet's analysis of these acute 'peritraumatic' phenomena (Janet, 1905, 1909b, pp. 1552–1555; cf., Van der Hart & Rydberg, 2019) can shed light. According to Janet, they are manifestations of the '*vehement*' *emotions* inherent in experiencing traumatizing events, and they can take the form of agitations (characterized by *hyperarousal*) and depressions (characterized by *hypoarousal*). Being confronted by such extremely threatening events, individuals are, by definition, mentally and physically unable to perform adaptive actions, given their limited integrative capacity and related compromised adaptive action vis-à-vis the threat. It should be noted that the actions of mammalian defense under threat, such as freezing, flight, fight, 'playing dead,' are defensive strategies, depending on an estimation of the survival chances in a particular context (Nijenhuis, 2015), with no pathology involved. It is the development of threat-related vehement emotions which manifest and further influence low integrative capacity.

Vehement emotions, then, are lower-order substitutes for such adaptive actions; they involve, according to Janet's analysis, (1) modifications of affect and of the state of consciousness, e.g., fear, anger, shame, despair; (2) cognitive modifications, e.g., doubt, confusion what is real and imaginary; (3) disturbances of visceral functions, e.g., agitated disturbances of the intestines and respiration, constipation; and (4) disturbances of motor function, in particular of action, e.g., tics, grimaces, attenuation of actions, trembling (cf., Van der Hart & Rydberg, 2019): altogether a very wide range of responses and certainly not all of them involving detachment. Present in varying degrees in individuals becoming traumatized, they reflect the disintegrative effects of this inescapable confrontation, which may or may not lead to a temporary or chronic dissociation of the personality, i.e., the formation of a division among dissociative parts.[4] Thus they should only be considered being dissociative in nature if they become symptoms of an emerging division/doubling of the personality, such as could be the case of amnesia and anesthesia. The same would be the case with depersonalization and derealization. Curiously, in their notion of a "dissociative subtype of PTSD" or "PTSD with dissociative symptoms," other sources almost exclusively label only these two symptoms as being dissociative (e.g., APA, 2013; Ginzburg et al., 2006; Lanius et al., 2010, 2012; see, for critical analyses, Dorahy & Van der Hart, 2015; Nijenhuis, 2015, 2017a). However, in their more recent publications, Lanius, Frewen, and colleagues are heading in the direction of a more structural understanding of trauma-related dissociation with their 4D model of dissociation, in which they acknowledge the possibility of different first-person perspectives (e.g., Frewen et al., 2019; Frewen & Lanius, 2015).

5.5. Tertiary dissociation

Model 2 reserves this degree of dissociative complexity of the personality to the existence of more than one ANP and more than one EP, and proposes that this complexity is typical of DID. (In DSM-5 understanding, however, DID could also manifest at the model's primary and secondary dissociation.) Model 1 does not indicate what the relationship is between 'level 3,' 'level 2' and 'level 1.' Tertiary dissociation refers to the development of distinct 'ego-states.' As mentioned above, it remains also unclear what the differences are between 'ego-states' and the 'states of mind or consciousness' that characterize the model's primary dissociation. Model 1 does mention 'ego-states' that are mainly stuck in particular traumatic experiences, while it remains unclear whether or not they have their own sense and idea of self. In

[4] There exist differences in opinion regarding the relationship between disintegration and dissociation. While Janet (1904, 1911) used the terms "desaggregation" and "dissociation" interchangeably, Meares and Barral (2019) restrict the former to disintegration and the latter to groups of psychological phenomena which together start to live a life of their own. Other authors differentiate between disintegration as de-composition of the personality and dissociation as re-composition of the personality (e.g., Farina et al., 2019; Şar, 2017). For Nijenhuis (2017b, 2019) and Van der Hart and Rydberg (2019), dissociation of the personality encompasses both de-composition and re-composition of the personality. In other words, when particular dissociative parts but not all dissociative parts engage in vehement emotions, these disintegrative substitute actions qualify as dissociative substitute actions. When all dissociative parts[agents] engage in particular vehement emotions, these substitute actions are not dissociative, but disintegrative they are.

Model 2, having their own sense of self, first-person perspective is an essential characteristic of all prototypical dissociative parts of the personality.

The term 'ego-state' emerged as a key concept in Ego State Therapy (e.g., Phillips & Frederick, 1995; Watkins & Watkins, 1997). Ego state therapy is clearly based on a model of dissociation of the personality and has much in common with our own therapeutic approaches. A problem with the terms "ego state," and likewise with "self-state" (e.g., Bromberg, 1998; Chefetz, 2015; Howell, 2011), having more or less the same meaning, is that these concepts do not differentiate between dissociative and nondissociative subsystems of the personality. Watkins and Watkins (1997) define an ego-state as: "an organized system of behavior and experience whose elements are bound together by some common principle and which is separated from other such states by a boundary that is more or less permeable" (p. 25). In their view, ego-states may range from "normal, well-adjusted ego states" to those which are characteristic of multiple personality (DID). In their view, not only traumatized individuals but all individuals have ego states. What is missing is an essential and exclusive characteristic of those ego-states that are dissociative in nature, as in DID. When equaling dissociative parts, of the personality, they have their own sense of self and first-person perspective, however rudimentary, which "normal" ego-states don't have. Furthermore, dissociative parts of the personality may comprise any number of psychobiological states, which implies that labeling them ego-states or self-states is giving them a too low degree of reality (Moskowitz & Van der Hart, 2020; Nijenhuis, 2017).

5.6. The heart of the matter: can dissociative symptoms exist without an underlying dissociation of the personality?

According to a broad understanding of trauma-related dissociation, as represented in Model 1, the answer would be an unequivocal "yes!" Thus, it has widened the domain of dissociation to encompass a wide range of omnipresent phenomena such as selective attention, forgetfulness, lack of concentration, losing track of time, absorption, daydreaming, fantasizing, absentmindedness, and forgetfulness (Frankel, 1990; Marshall et al., 1999; Nijenhuis, 2015; Nijenhuis & Van der Hart, 2011): an oceanic category of dissociation, in the terms of Nijenhuis (2015). He furthermore stated that, as this conceptual domain lacks sensitivity and specificity, it remains

> unclear what useful classificatory, clinical, or scientific purposes the inclusion of phenomena involving low levels of consciousness and selective attention in the province of dissociation serve. It is also unclear what principle or structure would link these phenomena and the (symptoms of) dissociation of the personality. (pp. 101–102)

Theoretically, these phenomena are in need of their own, specific conceptualizations; clinically, they may be in need of differential treatment. Merely stating that all these phenomena are dissociative in nature, while abandoning the specificity of trauma-related dissociation as a division/doubling of the personality, does not seem to hold cocneptually. Regarding them all, for instance, as "dis-association," which would consist of a continuous series of "dissociative phenomena," is incorrect. On the other hand, Model 2, with its original narrow understanding of a division/doubling of the personality, respects conceptual specificity. Thus, its answer to the question, *can dissociative symptoms exist without an underlying dissociation of the personality?*, is an unequivocal "no!"

6. Conclusion

The last three decades are characterized by a sharp increase in interest in clinical practice and research in trauma-related dissociation and its key role in a range of trauma-related disorders. This development has, on the one hand, inspired a return to the original narrow understanding of trauma-related dissociation of the personality, on which Model 2—with its levels—here corrected into 'degrees'—of complexity of dissociation of the personality—is based. The conceptual differentiation inherent in this model can be seen as a theoretical, clinical, and empirical enrichment. On the other hand, this increasing interest stimulated a broad but unclear and conceptually inconsistent understanding of dissociation, as exemplified in Model 1. In this Model a wide range of phenomena, involving different dimensions, are regarded as 'dis-association'—whether or not divided actions are involved. However, an positive effect of this broad conceptualization is that it has attracted a wider range of scholars and clinicians than it might have done otherwise. Still, this development has made the challenge of conceptual house-cleaning more opportune than ever.

Conflict of interest

The author declares that he has no competing interest.

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