Onno van der Hart, Ph.D., is a Professor in the Department of Clinical Psychology and Health Psychology, Utrecht University, the Netherlands, and Chief of Research, Cats-Palm Institute, Bithoven, the Netherlands. Kathy Steele, R.N., M.N., C.S. is a psychotherapist with Metropolitan Psychotherapy Associates, in Atlanta, Georgia.

For reprints write Onno van der Hart, Ph.D., Riagg Z/NW, P.O. Box 75902, 1070 AX Amsterdam 5, The Netherlands.

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ABSTRACT
This paper addresses the time disturbances DID patients may frequently and intensely experience. Time sense is described as a subset of reality perception. In his pioneering work, Pierre Janet analyzed these time disturbances in terms of degrees of perceived reality. His normative hierarchy of time and related experiences (such as fantasies, ideas, and thoughts) is presented. Janet distinguished two basic ways in which patients manifest their disturbance of reality and time sense: placing accounts of episodes too high in the hierarchy, and placing accounts too low. This distinction is utilized in discussing some ways in which DID patients may suffer time disturbances. Special attention is paid to the ways in which reactivated traumatic memories interfere with the experience of a normal sense of reality and time. Therapeutic change is, in essence, the reorganization of the experience of reality and time. In this paper, therapeutic approaches that address this reorganization are presented within the context of a phase-oriented treatment.

"Time and memory are works of art."
— Guyau (from Janet, 1928b, p. 297).

Time is an organizing principle that provides essential psychological and social structure. It is a container that allows us to distinguish present from past and future experience. As such, it provides a screening function for overwhelming affects and sensory overload that would accompany too many simultaneous experiences. The passage of time is marked by every culture, giving history a place of central significance from which we may learn and direct the present and future. One’s unique identity is a developmental accumulation of experiences, both intrapsychic and external, that are sequenced and maintained in time. Severe time distortions create disorientation and disorganization, and at a fundamental level, disrupt one’s essential sense of identity.

Disturbances in a sense of reality and time characterize many psychiatric conditions, but are most prevalent and dramatic in trauma-induced disorders, including dissociative identity disorder (DID). Time sense is at least partly a function of reality. The space-time continuum is a fundamental and assumed background upon which we experience our perceptions of reality. This paper will address the various time disturbances manifested in dissociative patients. Pierre Janet’s major contributions regarding time disturbances will be integrated with the more contemporary works that relate time experiences and trauma. Following the construction of this conceptual framework, case material relevant to time distortion phenomena in dissociative patients will be described and clinical approaches and interventions will be offered. Because time and reality are inextricably related, both will be discussed in this paper. However, the emphasis will be on time distortions.

Time Distortions
A number of specific states may cause temporal disturbances. Time distortion is a common phenomena in hypnosis and in other primary processes, including psychosis and borderline fragmentation (Cooper, 1952; Hartocollis, 1978; Loomis, 1951; Cooper & Erickson, 1954; Erickson & Erickson, 1958; Hammond, 1990). Affective states such as anxiety, depression, and boredom may also produce time distortions (Hartocollis, 1972, 1976, 1978). Hypnotic and primary processes, as well as intense affective states, are often observed in severely traumatized patients.

Trauma itself has been hypothesized to create time disturbances. Terr argues that time sense is a relatively new evolutionary acquisition, and as such is fairly easily disrupted by trauma (1983, 1984, 1990, 1994). She further believes that time disruptions may be a good indication of the presence of trauma. Terr emphasizes the potential coping and defensive uses of time distortions in warding off stressful excita-
TABLE 1
Pierre Janet’s Hierarchy of Feelings of Reality

1. *The present reality* which applies to material as well as to mental entities and events.

2. *The immediate future* which interests us almost as much as the present, though with somewhat less vividness.

3. *The recent past,* to which is attached the affective memory with happy and unhappy recollections, illusions (deceptions) and regrets.

4. *The ideal* which we do not recognize as real, but which we wish to see realized.

5. *The distant future* which we hope to see realized, but which is too remote to greatly interest us.

6. *The dead or distant past* which is lost in affective character, but whose reality we still maintain as having occurred in time.

7. *The imaginary unreality* in regard to which we take the precaution of denying its reality. The dream, when it is recognized as such, is one variety of this type.

8. *The idea,* a verbal form whose reality we neither affirm nor deny.

9. *The thought,* a verbal form in regard to which we do not even ask the question of reality or unreality.

Adapted from P. Janet, 1925, (pp. 148-149)

Janet systematically observed his patients’ experience of reality and time and eventually developed what he referred to as a hierarchy of feelings of reality (Janet, 1925, 1928). Both intrapsychic and external events are included in this hierarchy, and one’s sense of time is a major determinant of event placement.

Janet not only related time experiences to this hierarchy of feelings of reality, but also intrapsychic experiences such as fantasies, dreams, ideas, and thoughts, which are sometimes confused with external reality. These distortions would involve a confusion about the locus of events. This is a crucial component of trauma response, and extremely relevant to the current debates on memory and dissociation. Therefore, it deserves more attention than can be given in this paper, and will thus be more fully discussed in a separate paper.

In Figure 2, Janet graphically showed how his hierarchy of feelings of reality applies to time experiences.

The degree of reality attributed to particular episodes in our lives is largely determined by the emotions connected to the episode. The dictum, “Time heals all wounds” is founded on the premise that the more distant the event, the less real – and subsequently the less emotional – it seems in the present. However, with dissociated traumatic memories, we find that time does not automatically heal. Whenever traumatic memories are (re)experienced, time has become confused or frozen (Bonaparte, 1940; Chu, 1991; Modell, 1990; Reis, 1995; van der Kolk & van der Hart, 1991).

Janet presented his hierarchy as rather fixed. This is, of course, not how most people deal with the different phenomena mentioned in this hierarchy. They can voluntarily and temporarily place them higher or lower, in accordance with specific goals they have in mind. For example, when individuals choose to remember a difficult event, they may weave a narrative that evokes the reality of that past event to a greater or lesser extent. If they were relating the story to a relative stranger, a lower degree of reality would be more appropriate. However, if they were relating the story to a therapist in order to resolve some unfinished business, a more intense, and thus higher degree of reality, would be appropriate. However, there is an element of conscious intent and manipulation inherent in this process, and the individual rarely experiences a confusion of time sequence, i.e., actually confusing the past and the present.

For many patients, not only dissociative disorder patients, this hierarchy of time is distorted more extensively and less consciously. Janet stated that “a very large number of men-

In Investigations into the neurophysiology of trauma have yielded the hypothesis that the temporalizing and contextualizing capacities of the brain are disrupted due to peritraumatic changes in the limbic system (van der Kolk, 1991, 1996).
tual troubles are nothing but a poor localization of events within the compass of this schema” (1928a, p. 149). When such patients report something, they place it involuntarily at a different level than most people do. And when they do so, they often indicate that they suffer with it. When perceptual time functions are disturbed – i.e., rhythm, duration, sequence, and temporal perspective (Ornstein, 1975) – alterations in the hierarchy of feelings of reality will ensue, and time sense will thus also be disturbed.

The ego is involved in regulating time disturbances. Modell, a contemporary psychoanalyst, stated that the ego “is a structure engaged in the processing and reorganizing of time” (1990, p. 77) and that the essence of therapeutic change is the reorganization of time so that the past, present, and future are contiguously aligned.

**Placing Accounts in the Hierarchy**

Janet distinguished two basic ways in which patients manifest their disturbance of reality and time sense: 1) placing accounts of episodes too high in the hierarchy, and 2) placing accounts too low. Usually when one account is too high (for example, a past event), it follows that another account (for example, the present) will automatically be too low. This holds not only for events in time, but also for various mental activities. A thought, idea, or fantasy may seem more real than external reality, and may subsequently be misplaced in time. For instance, a patient had the idea of killing his abusive father when he was eleven, and continued to believe in the present, 45 years later, that he was in the process of planning the father’s death, in spite of the fact the father had actually died seven years prior. Thus a fantasy may be too high and present reality be too low on the hierarchy, accompanying the time distortion. This is particularly evident in the strongly held belief in DID that various identities are separate and autonomous rather than manifestations of one’s own self.

**Placing accounts too high.** There are patients who always raise their account on the schema. Mental activities and/or the past or future are placed before external, current reality in the hierarchy. Such individuals “make out of the bygone past a recent past, an immediate future or even a present” (Janet, 1925, p. 149). An example is presented by his patient Léon, a 35-year-old man suffering from depression who is contemplating memories of an extremely happy period of his life:

"It is a very special memory, which, though a memory of the past, has attached to it a peculiar mark of the present. To be sure I almost always know that it is only a memory of the past, but it is a past which is so close to me...Of course, I know that these things have taken place more than a year ago, but when the image appears, it seems to me that it was yester-day, that only a month before I have been in this apartment... (Janet, 1925, p. 145).

In a word, these memories are extremely rich and Janet referred to them as “memories which are too real” (1925, p. 145).

A special category of past experiences is extremely elevated on the hierarchy when it dominates consciousness, i.e., traumatic memories. They are part of experiential recall, and must be distinguished from ordinary or narrative memory (Janet, 1904; van der Kolk & van der Hart, 1991). Modell also refers to this elevation of reactivated traumatic memories on the hierarchy of degrees of reality: “In cases of trauma, where the memory of the past is kept alive and is not assimilated, the past dominates and truncates present time” (1990, p. 80). However, we should note that however intense and overwhelming the re-experience of trauma is, it is never fully realized as such, because the traumatic memory is itself a state of non-realization which contains a disturbance in time functioning as well as a misplacement in the hierarchy of feelings of reality (van der Hart, Steele, Boon, & Brown, 1993).

**Placing accounts too low.** Other patients are characterized by the tendency to drop their accounts, and to place them lower in the hierarchy than would seem normal. Janet described asthenics who would relegate the recent past as
either imaginary or as distant past. “They present unreal memories. Some even go farther and transform the present into a dream or a fancy” (Janet, 1925, p. 149). Many DID patients report current depersonalization experiences as though they were a “dream” or “not very real.” Out of body experiences place accounts of reality lower in that the individual does not experience events as happening to him or herself, but rather to someone else. The development of separate identities during trauma is a way to place an event lower in the hierarchy of degrees of reality: “It didn’t happen to me, it happened to that other little girl.”

The emptiness of depersonalization and derealization is also at least partially a result of placing accounts too low in the hierarchy. A patient of one of the author’s said:

Nothing is really real, not me, not you, not this room. Oh yes, the pain is real, but it lives in some dimension that I am not really part of. It invades me and haunts me and hurts me more than I can say, but still I’m not real.

Janet (1925, 1928) described memories placed too low on his hierarchy as “unreal.” For the patients reporting such memories:

they are only empty reports, with no imagery or attitudes surrounding them, calling forth no feeling of joy or of sadness; and arousing no interest or desire for action, in the way of either drawing them out or cutting them short. Sometimes these unreal reports are not even accompanied by belief, and the patient cannot affirm that these visions have had a real existence in the past (Janet, 1925, p. 145).

The Defensive Nature of Time and The Role of Realization

The capacities to maintain perceptual time functioning and a reasonable hierarchy of degree of reality following trauma are intimately associated with the process of realization (Janet, 1935, 1945). Realization is the organizing psychological principle that allows trauma to be relegated to the space-time continuum, to a particular place and time in one’s history, thus allowing one to have life after the trauma. Van der Hart et al. (1993) stated that “realization requires putting the event into words, relating it as a narrative, and reconciling the experience within the personality, thereby restoring continuity to the individual’s personal history [i.e., the experience of time]. Non-realization of the trauma can exist to varying degrees” (p. 168). Janet (1935) stated that traumatized individuals have not “realized” the traumatic event, and referred to DID as a disorder of non-realization. Non-realization often results in a combination of amnesia and experiences that manifest major time disturbances. Realization is a necessary and crucial component of trauma work, and requires strong ego resources. Unfortunately, such resources are often disrupted by trauma, or in the case of long-term early trauma and neglect, may be non-existent or very poorly organized.

The defensive purpose of continuous time is to move the individual through trauma and put distance between the past and present even though realization may not yet have occurred. The gradual process of realization then paves the way to a future connected with, but not determined by, the past. However, in the traumatized patient who believes that knowing is intolerable, an ongoing disturbance of reality and time may be one manifestation of a resistance to realization—we might call a phobia for realization—and it may be treated therapeutically as such in at least some cases. In the case of DID, the difficulties with realization and with affect regulatory capacities, coupled with chronic time disturbances, disrupt the essential cohesion of identity (Reis, 1995).

It is important to note that the degree of perceived reality of an event and the level of realization may not coincide. Dissociative experiences have a very low degree of realization in general, with varying degrees of experienced reality. For example, one patient may be completely amnestic for a rape; another may experience it primarily as traumatic intrusion phenomena on a sensorimotor level and cannot provide a lucid narrative; another may report the facts without feelings. Well-integrated experiences hold a high degree of realization, but with varying degrees of reality delegated to them, depending on their appropriate place in the hierarchy. This is another way of describing the various ways of traumatic knowing and not knowing described so elegantly by Laub and Auerhahn (1993).

Amnesia: The Ultimate Degree of Unreality

Although it is clear that amnesia is a very complex and not always well-understood process, it does appear that disorders of time in DID patients are functionally connected with disorders of memory. Indeed, we might conclude that one has memory difficulties in the aftermath of trauma at least partly because time sense and perception and sense of reality have become so severely disordered.

Memory disorders are concerned with the quality, quantity, and categories of recall: whether events are recalled, and with what degree of accuracy and completeness, under what circumstances, and by what means. Reality and time disorders are concerned with the experience of reality and thus the memory of it. The question posed by such disturbances is: “How is memory experienced in relation to sense of reality and time?” Is memory experienced as present, as recent past, as distant past, as a dream, as unreal, or as never having happened at all? Are the perceptual time functions intact for the memory? Is there an undisturbed conceptualization of time in which to place the memory? Do intrapsychic mental activities replace memory within the hierarchy of reality?
Both time and memory disorders are characterized by a lack of realization. Janet (1925, 1928) linked "certain varieties" of amnesia to the way in which individuals evaluate their experiences in terms of his hierarchy of degrees of reality. Amnesia for traumatic experiences and other dissociated experiences implies the ultimate degree of unreality, i.e., non-realization (Janet, 1935).

Amnesia is at the lowest point of Janet's hierarchy of feelings of reality; it is the complete absence of the experience of time and thus, the complete absence of the experience of reality. It not only involves the absence of a sense of reality, but also a total lack of realization. A patient with amnesia fails to place an account of event anywhere in the hierarchy.

**Janet's Psychological Analysis**

Janet indicated that the more inherent richness accompanying psychological phenomena, the higher they are placed in the hierarchy, and that the more inhibited the actions accompanying psychological phenomena, the lower they are placed in the hierarchy. Thus, for the severely traumatized patient there is a paucity and shallowness of response, a lack of verbal clarity and emotional range that is associated with a sort of shrinking of the report which reduces it to its core. The numbing and denial phase of the PTSD cycle would be in evidence as the patient puts accounts too low in the hierarchy of degrees of reality, and when the accounts are placed too high, the patient would cycle into the intrusion phase. The inability to give proper weight to present experience severely impedes learning, and therefore, the patient has difficulty altering traumatic beliefs and expectations.

Treatment interventions are thus directed toward assisting the patient to relegate accounts to the proper place in time and resulting degree of reality, whether it means lowering the account or raising it on the hierarchy of feelings of reality. In any event, a primary goal of treatment would be to encourage full realization of traumatic events, which we have distinguished from abreaction or catharsis (van der Hart & Brown, 1992; van der Hart et al., 1993).

Janet (1928a & b) concluded that these different evaluations of events change the individual and form various aspects of personality. Thus an individual would be quite different during a period in which his or her accounts were higher than at a period when accounts were lower in the hierarchy. Janet stated that he had observed patients who thus "would establish a veritable split of personality. The unconscious, certain varieties of amnesia, multiple personality, are often only the results of these modifications" (Janet, 1928a, p. 149). We would not agree with Janet that DID, for instance, is the result of such modifications, but rather that such modifications may be the result of traumatic dissociation; the point being, in any case, that DID is often related to disturbed localization of events in time.

**Time Disorders in DID Patients**

Time distortions in DID are related to misplacing events in the hierarchy of perceived reality. Often there is a simultaneous series of high and low misplacements. For example, when an account is placed too high (a flashback), the events that properly belong in that category are automatically placed too low to some degree (awareness of the present moment). Similarly, accounts of intrapsychic reality may be confused with external reality, and may be placed too high in the hierarchy. The following categories of time distortion phenomena are present in DID when accounts are misplaced: 1) automatic shifts in experiences of past and present events; 2) distortions in experiencing the future; 3) dominance of developmentally fixated time perspectives in certain identities; 4) identities experience of the non-traumatic past as present reality; 5) reactivation and re-experience of traumatic memories, sometimes followed by amnesia; 6) complete loss of a sense of time, often persisting after traumatic re-experience; 7) amnesia for traumatic events; 8) amnesia for recent events; and 9) amnesia for the distant past.

Using the theoretical model developed by Pierre Janet regarding the relative feeling of reality in relation to different psychological phenomena (Janet, 1903, 1925, 1928), we describe and analyze these various disturbances in DID patients. Subsequently, we discuss various treatment implications. It is clear that many therapeutic interventions affect reality and time disturbances, as will be illustrated below.

1) **Automatic Shifts in Experiences of Past and Present Events**

Perhaps among the most frequent phenomena observed in DID patients are the automatic shifts in experiences of past and present. A DID patient reports about her monthly marital therapy sessions: "I know that there is a month in between them, but when I talk that month is taken out of it." Then she talks about topics raised in the last marital session as if they had just been mentioned yesterday and no developments have taken place since then. Not knowing this, the therapist has often remarked in these sessions that he does not know what the patient is talking about or referring to. She has placed her accounts of the past too high relative to her experience of the present, so that the past and present have equal psychological force. She also has little sense of the time passed between sessions, so that she is placing the account of that time too low in the hierarchy; it holds little relevance, and perhaps does not exist for her.

Current stressors or trauma can also cause a patient to revert defensively to time disorientation. A patient was told by one of the authors in session that her back-up therapist had suddenly and unexpectedly died the day before. In the following session the next day, the patient reported that she felt confused and disoriented. She had gone to sleep for several hours the previous afternoon and had awakened in the early evening, but had not known what time or day it was. Sometimes she believed it was several days earlier, and some-
times she believed it was farther in the future. This disorien-
tation had continued to the session. On exploration she
was finally able to say, "It's a wish of some of my alters. A wish
to control time, to push it back before [the therapist] died.
I want to go back before so I can make it not happen, or go
500 years in the future to get away from the pain and sad-
ness." In this case the therapist was able to intervene by assist-
ing the patient to realize her deep grief, and by facilitating
the expression of it.

2) Distortions In Experiencing the Future

DID patients may place the (probably) distant future too
high in the hierarchy. This is a disturbance in temporal per-
spective. A 20-year-old patient had just celebrated her moth-
er's 52nd birthday. Almost in tears, she told the therapist
that her mother was already so old that it wouldn't take long
before she would die. And she would terribly miss her moth-
er. Also, her own husband was only six years younger than
her mother, so his time would also come soon, and then she
would be completely alone. Another patient turned fifty and
experienced a major depression because she believed her
life to be nearly over, in spite of excellent health.

Attachment disruptions with the therapist are often feared and the patient projects him or herself into the future
that holds abandonment. One patient discussed her resis-
tance by saying, "Why should I change and heal? It just means
that therapy will end, and you will leave me." The patient
was experiencing the intense affects of panic and grief in
the moment of discussing this, though she and the therapist
had acknowledged that this was going to be a quite long-term
therapy. The therapeutic strategy in this case was one of grad-
ually assisting the patient to develop more tolerance and
experience of the present and real relationship in the moment,
to facilitate grieving of historical abandonment and loss, and
generally to build more effective coping skills for the losses
that are inherent in life. Questions such as, "What is it like
for you as we are here together in this moment?" can be help-
ful to ground the patient in the present.

Patients may also project the past into the future, and
of course, the above example could also be seen as a pro-
jection of past abandonment into the future. One patient
was terrified to attempt to remember a particular incident
because one identity firmly believed that "remembering will
make it happen again." Distortions in the experience of
future almost always focus on catastrophic expectations so
that the patient is living in a world of worst possibilities rather
than of probabilities. Such expectations form the core of the
patient's personal theory of reality, and color all experiences.
In such cases little weight is given to present experience, and
thus the capacity to learn from (new) experience is impaired.
Patients may be encouraged to re-focus on present experi-
ence, i.e., may be asked, "What is happening now?" Cognitive
work to challenge distorted expectations and beliefs about
what will happen is essential.

3) Dominance of Developmentally Fixed Time Perspective

Many DID patients have immature aspects of the mind
that exhibit at least partial, and sometimes more complete,
manifestations of early developmental levels, including experi-
ences of time sense. Identities who describe themselves as
children often express a child's experience of time: endless,
without boundaries, with an inability to "tell" time, or mark
the hours or days (Piaget, 1971/1927). Although the border-
line states contain elements of timelessness (Hartocollis,
1978), this process in dissociative identity states is quite con-
crete and literal. In this case an adult sense of time is placed
too low in the hierarchy and an historical child's experience
supersedes it.

An example concerns a therapist's promise to an DID
patient, made during a difficult session, to call for support
the next day. This promise was experienced by the patient
as much too unspecific. For instance, child identities had
already begun to ask early in the morning, "When will he
call?" A more mature identity had to reassure these child
states again and again, became irritated herself because of
it, and the waiting for the call became more and more stress-
ful for the patient. The outcome was that when the ther-
pist called at the end of the day, the patient was already fed
up with the issue of his supportive telephone call. It would
have been much better if the therapist had mentioned a spe-
cific time to call (and, incidently, keep his promise). In fact,
not making the promise to call would have been better for
this patient than the promise made in its original way.

Another example is related in the case of identities who
find it difficult to bear the time between session because:

It is endless and we don't know when we will
see you again, or if we will. We can't read the
clock, and even if we could, we don't under-
stand what it means. We don't know what
comes after Monday, or how long Monday is,
or even what Monday is. Time just isn't in our
brains, and when the others (identities) try
to explain it to us, it doesn't make sense.

It becomes clear in such cases that the development
of object constancy may depend to some degree on the develop-
ment of time sense in children, and that the development
of object constancy in patients may be facilitated by inter-
ventions to refine perceptual time functioning. In these cases,
the more functional identities are encouraged to assist
immature identities in gaining a more current experience
of time, or in giving them relevant information about time,
while the long-term work of attachment will more indirect-
ly affect time experiences of this nature.

A primary factor supporting distorted sense of time is
the hypnotic surround in which dissociated identities exist
in the intrapsychic world; it serves as a buffer from the pre-
sent world. The authors often ask during sessions that the
whole mind be present "in the present, for all parts of the mind to look and listen." Such consistent experience of the present will mitigate the trance distortions inherent in the deep and timeless intrapsychic structures of dissociative patients. One patient with whom the therapist consistently took this approach reported after a year of therapy: "We all come together now before most sessions and it's not scary. We feel safe for the first time; we are beginning to understand where we are, that things have changed. Even the children are beginning to understand this is a different place and time."

4) Identities That Experience Living in the Past

This is a frequently occurring phenomenon in the treatment of DID patients, i.e., when an identity previously being in a dispositional state is reactivated and begins participating in current life. An early example is provided by Breuer's famous patient Anna O., whose alternation between her two personalities was also an alternation between the traumatic year of 1881 and the then current year, 1882 (Modell, 1990, p. 77).

Léonie, one of our DID patients, provides us with an example of an identity who had previously been quite active, then finds that she has lost ten years between the time she was thrown out of her house and the current time. During one of the first nights she becomes aware again in her own [different] apartment, she wrote:

A long time is past. I don't know this life. That television. I don't know how we got here. Nobody comes here. But nobody can live here, either. Do other people not live here either? How does food come here? Who does so, who fetches it? . . . I do sit here but in this house I cannot live. However, it is rather safe here. The best thing is not to go away from here. Apparently someone is taking care of things. At least, it appears that way. There is food, there is electricity. I don't want to go away from here, although I don't think it is a nice apartment. I don't like the colors and the materials. Who would live here? Blue is my color, and I prefer cotton. I don't see those here. Bad taste."

Again, such identities will find that experiencing the present fully is a curative factor; it automatically reorders the hierarchy of perceived reality, as it is difficult to experience more than one level of reality simultaneously. The more the present is experienced, the less the past or future will be foremost in experience.

5) Complete Loss of a Sense of Time

This experience is conceptually related to the notions of depersonalization and derealization, and often persists after traumatic reexperiences. As one of Janet's patients complained: "Yesterday, today, tomorrow appear to me the same, as a great emptiness" (Janet, 1903, vol. 1, p. 300). Many DID patients remark occasionally that it is as if the previous session, earlier that week, took place a month or even longer ago. Often they also state that they don't live completely in the present: they are not yet completely "here." Such experiences result from the patient being absent from his or her real experience in the present (placing the account too low), and by not raising any other accounts in its place, resulting in what amounts to psychological suspended animation.

During a period in which a patient had increased contact with her siblings and discussed with them their past in their highly disturbed family, she reported having a hard time:

...Time doesn't fit in my experience; the week just passes by and I think, 'Again I didn't do a thing.' Then it happens to be only Monday or Tuesday... On the other hand, there is also a feeling of 'It's the weekend again, hurrah!' That doesn't fit either, because it is only Tuesday. But then I am going to behave as if it is the weekend, and I tell myself, 'For me, it is the weekend.' I start to behave like that: my son is allowed to go to bed later, I pleasantly watch T.V., and so on. Somewhere, there is indeed the idea that it is Tuesday, but it doesn't penetrate [non-realization].

The renewed contact with her siblings reactivated traumatic memories in some of the patient's identities. This reactivation caused a lowering of the mental level (psychological tension) and it subsequently became more difficult to correctly order reality and time.

The patient reported in her therapy session on Friday:

There is very much time in between now and last Monday [last session]: I do know what we have talked about and I have checked what I have done every day. I can also determine that the world continued as usual, that everything is alright with the children and that no disasters have occurred, and that I did not go on a trip, but I have only the idea. I miss the sense of time... I see that there was a certain atmosphere on a particular day, but I don't feel it... Recent weeks were terrible, in fact, but I don't know why." The therapist asks, "How do you experience it, then?" "How I felt this week was also terrible, but I don't know..."
that from inside myself. I am telling you this, because I planned to do so. Otherwise I would have said, 'I am tired, I know that I have slept little this week...'. When I think about these days, I do remember certain things. But they keep standing on their own apart from everything; Tuesday, Wednesday, it’s not a whole. Logically, I do know that Tuesday comes after Monday, and I know it is a series, but that’s about it.

Depersonalization involves a fundamental loss of sense of self, not only in present time, but more pervasively the patient experiences a peculiar lack of place on the space-time continuum. It is a dysphoric limbo in which most perceptual capacities are disturbed, including time functioning. As the above case illustrates, this acute sense of depersonalization may result as a defensive response to trauma or emerging traumatic memories. We also postulate that chronic and early neglect may contribute to depersonalization due to the presence of severe identity disturbances, lack of sensory stimulation that impedes sensory organization and healthy body image, and deficits in self-care capacities such as affect regulation and self-soothing.

6) Reactivation and Re-experience of Traumatic Memories

When a traumatic memory is reactivated, the person has lost his/her sense of time (Janet, 1903, 1904). There is no sense or full experience of the present (the account is placed too low). This “present” is the traumatic experience which occurs again, and in which there is no development of time.

Modell (1990) draws our attention to Schiffer’s (1978) study in which he described the effect of a massive trauma in a woman, who, during her adolescence, had been an inmate of Nazi prison camps. For her, “the past was experienced as the present; the nightmare of the past became the only prospect for the future” (1978, p.48). Schiffer described her experience of time as the “telescoping” of the past into the future (placing accounts of the past and future in simultaneous positions high in degree of reality), with the obliteration of present time (placing its account too low). He considered the “destruction of time” the most direct attack on her health.

Cohen (1967) states, “Without a tacit belief in a tomorrow nearly everything we do today would be pointless” (p. 38). The reactivation of traumatic memories causes a lowering of the mental level (psychological tension), which is related to an increased sense of fragmentation. This fragmentation impedes the capacity to maintain perceptual time functioning. Spiegel, Frischholz and Spira (1993, p. 773) state that “the immersion in the traumatic recollection is at times so intense that normal temporal orientation is lost—the trauma is relived as though it were occurring in the present, rather than simply remembered. This intense recollection tends to

suppress associations that would come from normal temporal orientation, thereby hampering associative retrieval.” The re-experiencing of traumatic memory may thus hamper the capacity to process current information except in the context of the trauma and the time of the trauma. It impedes realization, not only that the trauma happened in the past, but that it is over and not a part of the present; in other words, the realization that time has progressed.

One identity of a patient reported on her time experiences when she suffers from flashbacks:

It continues to rage in my head. A lot of noise. But also again continuously all kind of flashes, films sometimes. Am scared. Cannot look at it. Difficult to stop. Do not want to see it, cannot see it sometimes either. Do see it, but it does not penetrate. Have said this already so often. It makes me scared. Because it is scary that it happens suddenly. But also because it makes me completely confused. Confused about time, mainly. Not only about whether things are of this moment or of the past. It also becomes more and more difficult to keep a grip on the time of now. The clock appears not to be trusted. It is suddenly an hour later, and then again five minutes appear longer than three days. Try now to concentrate very much on clear things. Doesn’t help really. A little bit, in fact. Try to stop the films and put them away, as I was taught. That helps best.

On the same day, another identity writes:

In order to stay in touch with time, she [referring to the patient] falls again into old tricks: reading loudly from the telephone directory, counting the letters of newspaper articles, having two music pieces play at the same time and then follows one particular instrument in one of the pieces, and so on. All in all a rather chaotic situation.

Such coping strategies – compulsive as they may be – might be considered rhythmic activities that provide a short time sense, a marking of the passage of time and thus a comfort and reassurance (Terr, 1984).

Sometimes time disturbances may be quite clear manifestations of resistances that defend against attachment and loss of attachment, affective intolerance, change, and the meaning of traumatic events. In the following case, a patient had tied her deepest identity to the affects and vivid experiences of the past trauma, and had great fear about attempting to live in the present. These re-experiences had a high
degree of reality, but a very low degree of realization, and thus continued to be unassimilated; her accounts of the trauma were very high in Janet’s hierarchy because of the defensive purpose they continued to serve. However, after many years of therapy, the patient was able to discuss for the first time her reluctance to live in the present rather than continuously re-experience her traumatic past.

It’s a comfort, and familiar back there. It goes on and on, and thus do I. Then is who I am. The pain of then is my core and it doesn’t fit very well in the now. I really only exist then. I am attached to it like Siamese twins who share major organs. If I try to live in the now for more than a few moments at a time, I will leave me behind and I will be no more.

The management of traumatic memories has been discussed extensively elsewhere, and is mentioned later in this paper under the section discussing the stage of treatment of traumatic memories. The techniques involved in grounding, reorienting, containing, suppressing, and fractionating are all relevant to the restoration of an ordered hierarchy of reality and perceptual time functioning.

7) Amnesia for Traumatic Events

Amnesia for traumatic events is quite common in dissociative patients, and involves a total lack of perceptual time functioning for the period, as well as lack of realization. The alleviation of the dissociative barrier will restore some, if not all, of this time functioning, provided that realization ensues. A primary defense of dissociative patients is to prevent realization, thus the resistances to remembering must be thoroughly analyzed in order for the amnestic barrier to erode. Events for which there is amnesia are placed so low in the hierarchy of perceived reality that they no longer exist except in sensorimotor, non-verbal form.

A patient often walked in the middle of the night in extremely dangerous places. She said she “needed” to be raped. She had no memory of being raped previously. In the course of working through this very destructive habit, she recalled that as a child she had often played in a nearby park without supervision until all hours of the night. She was brutally raped one night by a stranger when she was ten years old. She was subsequently able to obtain a copy of a police report that corroborated this memory, although her family refused to discuss it with her.

Another patient was an extremely bright and functional lawyer who recalled a very traumatic history with his mother. He denied abusive involvement by his father. However, on a visit his sister revealed to him that their father had been brutally abusive to him. The sister had no memory that the mother had been abusive to her, but the patient could describe memories of the mother’s abuse of the sister. Two other siblings confirmed both of their memories several years later when contact was re-established among all the siblings, and the other siblings confirmed that the parents as well as several aunts and uncles had been brutally abusive. All siblings were highly dissociative and although they shared some memories, they were often amnestic for events that other siblings remembered.

8) Amnesia for Recent Events

Patients may completely dissociate current events. This is often related to the inability to realize some difficult aspect(s) of present life. It is quite usual for patients to be unable to recall the contents of the previous session, particularly if the session was intense. This may serve as one of the many cues about pacing the therapy. But also, on a more mundane level, highly dissociative individuals often cannot remember routine daily experiences, contributing to a chronic emptiness, confusion, and sense of missing out on life. One patient gave very vague accounts of her daily routine, until it became clear to her and the therapist that she really did not remember most of what she did every day, and merely assumed certain activities had occurred.

On a more pervasive level, one patient was unable to recall the previous day, including the fact that she had seen a gynecologist for the first time the day before. The doctor had told the young woman that she was sterile because of severe internal scarring. She was defending not only against the difficult news that she was sterile, but also against the reason she had become sterile, which was directly related to sadistic abuse she had endured for several years as a pre-teen, as well as against traumatic memories that were triggered by the gynecological examination.

When switching occurs, amnesia often follows. Many patients report that they lose time, but find evidence of behaviors during the amnestic period. Generally, the individual who experiences the amnesia is avoiding some difficult issue, either intrapsychically or interpersonally, or is responding to particular triggers. Switching should be minimized through therapeutic interventions, but must not be confused with suppressing alters.

9) Amnesia for the Distant Past

In addition to amnesia for traumatic events, many patients report long periods of amnesia extending for months or years in early childhood. Often there is pervasive neglect during these periods that may have accompanied the more assaultive episodes of abuse. One patient reported she had absolutely no memory before the age of twenty-two, and in fact, did not know where she was born, what college she had attended, etc. When a particular identity is in executive control for extended periods and then relinquishes dominance to another identity, there is often amnesia for the period of time that identity was in control.

Patients may have amnesia for the past as a way to avoid
triggering traumatic memories. One patient could not remember any interactions with her father from childhood. This selective amnesia was clearly a defense that protected her from remembering the abuse she suffered by him. Once she was able to remember the abuse, she was also able to gradually piece together a more complete picture of her interactions with him in general. Another patient suddenly realized in session that she was trying to remember and work through her past in the present. She had previously believed that she was attempting to do it in the past where it was too frightening to think about.

TREATMENT

This section is necessarily brief, providing a mere overview of basic treatment principles that may be related to time distortion difficulties in the DID patient. Therapeutic change is in essence the reorganization of the experience of reality and time (Modell, 1990). Adequate reality testing, including locus of events, will occur through maturation of self-object relations. Development of the capacities to tolerate and regulate affect, to self-sooth, and to manage intrapsychic conflict through secondary mental process are critical to the ability to increasingly discern reality. The increasing capacity of the patient to directly engage in the therapeutic relationship without a trance state will enhance both reality perception and time sense. Therapy is most often directed towards other changes which naturally bring about the reorganization of time. Therapeutic improvement is indicated with a gradual but frequently interrupted approach to the normative hierarchy of time, with the patient being more and more able to stay in the present while feeling connected with his or her past and future experiences. In other words, progress is shown by an increasing sense of continuity.

A 38-year-old DID patient provides an example of how therapy begins to help her in this respect:

In many regards I live in a world which is not complete... On the one hand I live continuously in the past: then I continuously don't react to the present but to something from the past. But on the other hand, I have a lack of that same past, a shortage... that is one of the reasons I feel so lonely. I don't lack people, but what is missing is that my life starts every day all over again. The therapy sessions give me something of: 'all of it still belongs together.' The therapist answered, 'Although it isn't felt yet, it is known.' 'This gives a less lonely feeling,' she replied, 'Because one knows it already a little... a kind of reassurance, I don't see all of it, but all of it is there'.

Given that Terr (1983, 1984, 1990, 1994) has suggested that time disturbances may have defensive purposes, it follows that major resistances may be deeply embedded in particular organizations of time and in degrees of perceived reality regarding particular traumatic episodes. Identification and analysis of such resistances can be particularly helpful in the treatment process.

According to both Janet and modern clinicians (Brown, Schefflin, & Hammond, 1998; Herman, 1992; Horevitz & Loewenstein, 1994; Kluit, 1993a; van der Hart, Brown & van der Kolk, 1989), the treatment of DID and other trauma-induced disorders can be divided in three basic stages: 1) stabilization and symptom reduction; 2) treatment of traumatic memories; and 3) reintegration and rehabilitation. In actual treatment, these basic stages often succeed each other a number of times. Therapeutic approaches and specific interventions that facilitate movement toward a normative time experience will be considered briefly within each of these stages.

Stage 1: Stabilization and Symptom Reduction

When beginning treatment of DID patients, it is often obvious that they suffer tremendously from re-experiences of their trauma, with all related symptoms. The first stage is geared as much as possible to reorient them to the present and to help them structure their daily lives. Reorientation to the present entails, among other things, that the therapist must help the patient to experience the traumatic past as little as possible as actual reality. Reduction of triggering phenomena are helpful, as well as grounding and orienting to the present (van der Hart & Friedman, 1992). The use of medication often plays an important part in early treatment of PTSD symptoms (Davidson & van der Kolk, 1996; Saporta & Case, 1991).

Since the ego organizes time and perceives reality, various ego deficits in self-care functions should be assessed and aggressively treated during this stage (McCann & Pearlman, 1990). These include the capacity to modulate and tolerate affect, the ability to self-sooth, the capacity to regulate self-hatred, and the ability to tolerate aloneness. Such abilities are necessary precursors to the establishment of realization.

We find it useful to regularly "invite" all parts of the divided mind to be present, to remind other alters that it is the present, and for the individual to be monitoring him- or herself for signs that the past is superseding the present. Hypnotic interventions that "transport" the patient from the past to the present may be useful at times, particularly when accompanied by grounding techniques. Asking particular alters to "look around and see where you are" and specifically make eye contact that may reduce the trance state may be helpful.

The essence of what can be attained in this stage is a relatively restricted life in the present, based on a "covered" past. The patient lives to some degree – not fully – in the present but does not dispose of or metabolize a past (see
Appelfeld, 1993). This continues to be a precarious balance, which may be disturbed by new stressful life events. The patient continues to be vulnerable, and continues to experience a large degree of time distortions and lack of realization.

**Stage 2: Treatment of Traumatic Memories**

The treatment of traumatic memories is very demanding. Refining and re-owning the lost traumatic time is a painful challenge. The use of fractionation techniques reduces the burden only partially. The goal of this stage is to place the respective traumatic memories into their proper place in perceived reality (past rather than present experience), thereby transforming them into normal, narrative memories of the trauma. The procedures for reaching this goal are described elsewhere (e.g., Kluit, 1996; Sachs & Peterson, 1994, 1995; Steele & Colrain, 1990; van der Hart et al., 1995). It can be expected that time disturbances may temporarily increase during this time, as do other symptoms. However, when a treatment approach utilizing pacing and fractionation of this process (e.g., Kluit, 1996), time disturbances can be minimized.

When a patient is re-experiencing a traumatic memory, it may be useful to hypnotically progress the time from the beginning of the memory, to the middle, to the end, and then ask the patient to move completely into the present. This can all be accomplished to the count of ten. A patient may also be instructed to experience a particularly difficult memory in a set time period, such as ten seconds. At times it may be useful to ask a functional alter to “gently pull the part of you that is in the past into the present.” After each intervention to allow aspects of the mind to be more in the present, it is essential to do grounding techniques to solidify their sense of present reality.

Although the patient suffers with each new traumatic re-experience from disturbances in the hierarchy of time experience, it is apparent that she or he is increasingly able to live more fully in the present in between episodes, and to relate the past and future to the present.

**Stage 3: Reintegration and Rehabilitation**

Even when most traumatic memories have been integrated, it seems that the patient still does not live completely in the present. When one alter participates in daily life, the other parts do not participate in it to the same degree. Kluit (1993b) reported that patients who did not choose for complete integration (unification) and who suffered from stress or unresolved traumatic memories relapsed into a dysfunctional fragmentation. Most patients he studied who were fully integrated reported an increased quality of life. We may add that this should include the ability to maintain a relatively stable perceptual time function. As mentioned above, it is important to encourage all alters or “parts of the mind” to “be present in the present.” Once this goal has been attained to a large degree in therapy, it will naturally follow in the patient’s larger world.

Throughout all treatment stages of DID patients and other traumatized patients careful attention should be given to the resistances and defenses inherent in time and reality distortions, as in all other aspects of treatment. We have found it useful to map these out in great detail, then work through them by pairing careful cognitive work with current experiences. The particular resistances to realization are especially difficult in trauma patients and may be complex, involving the participation of numerous aspects of the mind. Such resistances are often related to fear of loss of attachment, fear of overwhelming affect, fear of realizing the trauma, and fear of change. One of us has employed hypnotic imagery of the “river of knowing” that flows throughout one’s life, coursing strongly and surely throughout the DID system. The patient is reminded that this “river” has been in place, providing nourishment and replenishment for the patient’s whole life. The patient may begin by simply acknowledging its presence, and gradually grow to appreciate its meaning and wealth of information.

It cannot be emphasized enough that any work on traumatic memory must be placed in the context of the therapeutic relationship, with close attention to the transference and countertransference process. Both the yearning for and the fear of attachment, and the attendant needs that emerge in the patient, will play decidedly important roles in the manifestations of traumatic memory and their subsequent resolutions.

**DISCUSSION**

In addition to the obvious distress that time disorders and distortions in perceived reality cause the individual patient, the broader implications of these difficulties have been briefly mentioned. These phenomena control the trauma victim’s personal theory of reality to a great extent, which we discussed in a paper elsewhere (Steele & van der Hart, 1994; [see also Janoff-Bulman, 1985] 1992). The survivor cannot truly heal without establishing some balanced view of life, with some measure of safety and pleasure in the present. When the past holds more reality than the present, and when time function is disrupted so that the present is difficult to experience, an individual cannot fully establish a sense of self in the present, and thus relies on the past. So the correction of time disturbances is crucial to the ultimate healing of the individual.

Because perceptual time functions are disturbed in trauma, the victim’s eyewitness accounts may contain descriptive inaccuracies. This has important implications not only for the therapist, who must find a balance between uncritical belief and skepticism, but also for the current disputed memory controversy and the legal system. The trauma may be described as longer or shorter than was actual. Distortions
in the degree of perceived reality may place accounts so low in the hierarchy that they are dismissed as fantasy, dream, or hallucination, or perhaps even considered to have happened to someone else.

There is also a special implication for placing accounts too high in perceived reality. It is important to note that hallucinations or incorrect ideas or fantasies (such as those about previous lives) about alleged traumatic events may also be placed in the realm of experienced reality, as well actual traumatic events, so that individuals genuinely may be confused about the difference between external events and intrapsychic phenomena. It is important not only to consider the experience of a traumatic event, but also to explore perceptual disturbances and degree of reality assigned to the event. This more thorough exploration may lead to the individual reordering the account to a higher or lower level in the hierarchy of perceived reality.

Reality and time distortions play a significant role in the confusion and suffering of many DID patients. The recognition and treatment of such disturbances are paramount within the overall treatment process for such individuals.

REFERENCES


