Synthesis and Realization (Personification and Presentification): The Psychological Process of Integration of Traumatic Memories in EMDR Psychotherapy

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The theory of the structural dissociation of the personality proposes a precise description of the psychological phenomena involved in the integration of traumatic memories. According to this theory, memories are successfully integrated in a narrative—that is, stored in an adaptive memory network—when there has been synthesis of the different elements (affects, cognitions, images, sensorimotor reactions, behaviors) for each moment of a particular event, and when realization has occurred. Realization implies personification and presentification. Personification is the ability individuals have to feel that they have experienced (traumatic) events. Presentification is the ability to realize that the event took place in the past and is over now. In this article we present these concepts and how they relate to eye movement desensitization and reprocessing (EMDR) psychotherapy and its underlying hypothesis of adaptive information processing. The article describes how EMDR therapists can use these concepts to better understand the reprocessing of their clients and possible blocking of this reprocessing. Understanding the concepts of synthesis, personification, and presentification makes it possible for EMDR therapists to choose the specific supportive interventions and cognitive interweaves that will best support the adaptive information processing. Such psychological phenomena should attract more attention in the future in EMDR clinical research and practice.

Keywords: EMDR (eye movement desensitization and reprocessing); theory of the structural dissociation of the personality; integration of traumatic memories; synthesis; realization; personification/presentification

Eye movement desensitization and reprocessing (EMDR) therapy (Shapiro, 2001, 2018) is based on the adaptive information processing (AIP) model. The hypothesis is that in a traumatizing or stressful condition, when the person is overwhelmed and cannot naturally process the information, the memory of an event will be dysfunctionally stored in memory networks and this will lead to related symptoms. Under the activation of a natural curing mechanism called AIP, the memory of the disturbing event will be reprocessed, leading to its functional storage in adaptive memory networks and the decrease or disappearance of related symptoms. Shapiro's model is indeed a neurophysiological model. Normally psychotherapy research focusses on trying to define psychological processes to explain certain phenomenon, but EMDR's frequent rapid effect motivated researchers to raise questions concerning possible neurophysiological effects involved in EMDR therapy. Therefore, a great deal of research has been undertaken to understand the neurophysiology behind the curing effect of EMDR therapy (Harper, Rasolkhani-Kalhorn, & Drozd, 2009; Landin-Romero et al., 2013; Pagani et al., 2012; Rimini et al., 2016; Sack, Lempa, Steinmetz, Lamprecht, & Hofmann, 2008). Such studies are helpful in understanding the general effect of EMDR therapy and uphold the clinical observations of the positive and often rapid effect of this treatment (Shapiro, 2014). Nevertheless human beings are not simply brains. The neurophysiological mechanisms as observed with diverse medical observation machines are

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intertwined with the conscious and unconscious processes of an individual in a particular environment (Järvilehto, 2001; Nijenhuis, 2015). It may be beneficial for clinical practice to further explore the psychological processes active during EMDR psychotherapy. We need an understanding of *psychological* processes to be able to assess our clients, understand how the AIP model works for each individual, and develop more tools to adjust the EMDR therapy to each client, according to the psychological processes that we can observe in each of them.

The aim of this article is to present and discuss the clinical value in EMDR therapy of certain psychological key concepts in the theory of structural dissociation of the personality (TSDP; Van der Hart, Nijenhuis, & Steele, 2006), that is, synthesis and realization. Realization includes personification and presentification. A clear understanding of the concepts of synthesis and realization may help EMDR therapists to better understand how the AIP model works with each individual and to adjust their interventions when needed. Clinical vignettes will illustrate how these concepts can be helpful in EMDR therapy.

The TSDP (Van der Hart et al., 2006) made a breakthrough in psychotraumatology in the early 2000s, going back to Janet's original work. This theory is often proposed as a way to optimize the use of EMDR therapy with patients who suffer from complex posttraumatic stress disorder (C-PTSD) and dissociative disorders, in particular dissociative identity disorder (DID; Van der Hart, Nijenhuis, & Solomon, 2010; Van der Hart, Groenedijk, Gonzales, Mosquera, & Solomon, 2013, 2014). Van der Hart et al. (2013, 2014) noticed that the AIP model and the TSDP use different vocabulary but have similarities. The precise understanding of how traumatic experiences involve a division of the personality into different parts is probably what has most attracted attention in the TSDP. Less attention has been directed in the EMDR community toward the concept of integration of traumatic memories, which is a core part of the TSDP. Because the TDSP, with its psychology of action, is a *psychological* theory, we believe it could be complementary to the neurophysiological AIP model of EMDR therapy.

In line with Janet, the TDSP postulates that, confronted with traumatizing event(s) and in absence of sufficient integrative abilities, an individual's personality will divide itself into several dissociative parts, failing to develop an autobiographical narrative memory of this event into the person's life. These dissociative parts are of two main natures: the apparently normal part (ANP) of the personality and the emotional part (EP) of the personality. The ANP is primarily mediated by action systems directed at dealing with daily life. EPs are primarily mediated by defense action systems such as fight, flight, feigned death, submission, hypervigilance, and attachment action subsystems such as attachment cry. EPs are fixated on traumatic elements. Both the ANP and EPs constitute the whole nonintegrated personality. The ANP engages in avoidance of the EPs that might regularly intrude into the ANP in different ways. At the time of the traumatizing event, the individual did not have sufficient integrative abilities, which brought about a structural dissociation, which is maintained over time by the avoidance by the ANP of the EP and its trauma-related elements (phobia of traumatic memories).

The concept of integration is a specific focus of the TSDP. *Integration* is a word often used in psychotraumatology but rarely defined. The TSDP takes great care to define this concept precisely. According to van der Hart et al. (2006), integrative actions pertain to synthesis—a lower-order action—and realization—a higher-order action. Realization includes personification and presentification. Successful synthesis and realization by an ANP of a traumatic memory will lead to its integration and to the subsequent simultaneous fusion of the ANP with the related EP(s) into an integrated individual. To achieve this goal, the client will need to overcome a certain number of phobias (Van der Hart et al., 2006), since these phobias allowed the structural dissociation to be maintained and possibly reinforced over the years. The main phobias common to all treatments, even if with different levels of intensity, are the phobia of trauma-derived mental actions, then of the traumatic memories, and the phobia of dissociative parts of the personality. Intertwined with these phobias are the avoidance of synthesis and the phobia of realization. Traumatized clients may refuse to accept that they have experienced the traumatizing event(s) they have survived. A patient stated, "'This cannot have happened, I am crazy to have such images!" The phobia of realization describes the avoidance tendencies of (mainly) the ANP toward the realization that the traumatizing event occurred and that the individual experienced the terrible event(s). This phobia (among others) may block the therapy. Furthermore, patients may embark on the difficult process of realization only to a certain point. Besides, one may not always be able to tell if a person has achieved realization to its full extent.

Because EMDR therapy is based on a neurophysiological model, EMDR therapists may lack a thorough understanding of the psychological processes also active in EMDR therapy. Therefore, in our opinion, EMDR therapists should pay closer attention to

the concept of integration according to the TSDP, because it provides a deeper understanding of the *psychological* processes active in the AIP. The concept of synthesis and realization can help therapists understand the phenomena involved in the treatment of trauma patients and may give EMDR clinicians tools to better conceptualize and finely adjust their interventions when needed.

EMDR therapy is based on an eight-phase protocol. Phase 1 (client history and treatment planning) and phase 2 (preparation and information about EMDR) are the preliminary phases. In phase 3, the EMDR therapist targets the chosen dysfunctionally stored memory in a structured manner. Phase 4 is the main part of desensitization and reprocessing, using bilateral stimulation (BLS). During phase 5, a positive cognition is installed, and in phase 6, the therapist verifies that all disturbances have been reprocessed with the help of a body scan. Phases 7 and 8 address respectively the closure of a session and the reevaluation of the previous session.

It is our understanding that the concepts of synthesis and realization are useful to EMDR clinicians working with all types of patients, not only when working in EMDR with complex dissociative patients. We will focus mainly on phases 3 and 4 of the EMDR therapy standard protocol and on the use of cognitive interweaves.

The Concept of Synthesis

Van der Hart et al. (2006) describe synthesis as the process by which "we perceive, link or *bind*, and *differentiate* (components of) our experiences" (p. 134). They differentiate core synthesis and extended synthesis. "Core synthesis involves binding together sensations, emotions, thoughts, behavioral action, and a sense of self within a given moment or situation, but also differentiating them" (p. 144). Extended synthesis relates to binding and differentiating situations and the subjective experiences of these events over time while creating a sense of self across time. Differentiating core and extended synthesis is relevant to psychotherapy and in particular to trauma therapy.

Core Synthesis

Core synthesis is achieved when the different elements of a traumatizing event—perceptions, sensations, emotions, thoughts, and behavioral actions—are bound together, allowing for a coherent sense of self at this particular moment. Core synthesis relates to the binding/differentiating of these elements *at each moment of a particular event*. If an individual has amnesia for a specific moment of a traumatic event, this means that there is no access to knowledge (cognitions, images), but the person may be aware of sensations or emotions related to this particular moment, and considers them as symptoms. In other cases individuals may remember the situation in the form of images and thoughts, but with no conscious connection to sensations or emotions (emotional disconnection). In trauma therapy, core synthesis will succeed when the client can bind and differentiate perceptions, sensations, emotions, thoughts, and actions for each moment of a traumatizing event. Treating the dysfunctionally stored memory of an event successfully means first of all achieving a core synthesis: binding/differentiating emotions, sensations, thoughts, and actions of each moment of the event (from the beginning to the end of the event). Then, the narrative of the event is achieved with the binding and differentiating of each moment of the event, together with a connection of perception, sensations, emotions, thoughts, and actions for each moment of this event.

Core Synthesis in EMDR

In EMDR therapy, one may often notice that this narrative develops naturally during phase 4 of the standard protocol. Sometimes, through the spontaneous associations occurring during the reprocessing, clients describe the traumatic situation, or its most important sequences, from the beginning until the end, as if they were telling the story of the event. Sometimes this happens in a less chronological way. Elements of the trauma (time fragments or specific emotions, sensation, actions, or thoughts) that have been covered by amnesia may emerge during phase 4, showing how core synthesis may develop on its own with the EMDR standard protocol.

EMDR therapists are taught to be aware of the different elements involved in the reprocessing during the channels of association: physical sensations (including sensorimotor actions and reactions), emotions, beliefs, and images (which often include seeing the actions of the participants and the scenario of the event). This differs of course from patient to patient. When the AIP works smoothly, one can notice that the client integrates these four elements spontaneously into the reprocessing: the core synthesis happens naturally, under the effect of the AIP and as predicted by the AIP model. For each sequence of the event, the client binds and differentiates emotions, sensations, thoughts, and actions. This may go on throughout the reprocessing of the whole target, until the event has been reprocessed successfully. In

other cases, it may be more difficult, and specific interventions should be used such as cognitive interweaves, as illustrated in the following vignette.

Clinical Vignette

Mrs. A. is a 25-year-old client consulting for PTSD and agoraphobia after a car accident which caused severe injuries to her legs and hips, leading to surgery and a long rehabilitation. At the time of consultation, her injuries are completely healed and she is back to work but the PTSD and the agoraphobia prevent her from driving or using public transport. Therefore, she walks from home to work, physiotherapy, and psychotherapy, which are all within walking distance. While targeting the car accident, the client spontaneously describes the accident from the beginning (hitting a truck) until the end when she is at the hospital. Here are some excerpts of the phase 4 of this EMDR treatment, where some difficulties arose.

Excerpt 1.

Client: I feel a pressure on my chest. (BLS)
Client: This pressure on my chest. I can't breathe. (BLS)
Client: The back of my head hit something. (BLS)
Client: My chest hurts again (client anxious). (BLS)
Client: Oh, I understand; this was the seat belt. (BLS)
Client: Yes, this was the seat belt on my chest. (client is calmer) (BLS)
Client: The back of my head hurts again. (BLS)
Client: And my neck hurts too. (BLS)
Client: My head really hurts! (BLS)
Client: My head and my neck hurt so much! (client anxious)
Client: They really hurt! (client anxious and upset)

At this point, the process seems to be blocked. In the therapist's appraisal, the anxious and upset state of the client is not due to reliving the anxiety experienced during the event, but to the fact that she does not understand the reasons of the pain in her head and her neck (lack of synthesis). Therefore, an intervention with a cognitive interweave could be useful.

Therapist: At the time of the shock, when the seat belt is pressing against your chest, what may have happened to your neck and head?
Client: (Interrogative mimic).
Therapist: Stay with this. (BLS)
Client: OK, I get it. This is my head hitting against the upper part of the seat. (BLS)
Client: This tension in my neck is still there. (BLS)
Client: It is decreasing now. (BLS)
Client: It was really a strong shock that I had. (BLS) (At this point the client is experiencing personification and presentification, explained later in this article.)
Client: It is better now . . .

In the first part of this excerpt, at the beginning, only sensations came up in the associations' channel (pain in the chest), then a cognitive element came up spontaneously (the pressure of the seat belt), helping the client develop an understanding of the chest pain. The shock of the car against the truck led to the activation of the seat belt, which protected the client from more injuries but also provoked a strong pressure across the chest. The *binding* of the body *sensation* with the *knowledge* of the pain provoked by the seat belt came naturally, through the effect of the AIP. In the terminology of the TSDP, the patient executed an action of synthesis. Later the AIP seemed blocked around the feeling of pain in the neck and head. Because the client seemed highly disturbed by the process itself and was known by the clinician to be a somewhat avoidant person who could possibly interrupt the therapy, the therapist did not want to take the risk of a stronger blocking. A cognitive interweave was proposed with the aim to bind the sensation with some knowledge. This led to a successful binding and the process could continue. Here again, in the terminology of the TSDP, the therapist enhanced in the patient the action of synthesis, which also led to the actions of partial personification and presentification.

Excerpt 2. Here is a later excerpt:

Client: It smells like my car is on fire! (BLS)
Client: Oh my God, the car is on fire! (BLS)
Client: The car is on fire and I can't get out of it! (BLS)
Client: It smells like fire! My car is on fire! (client is more distressed)
Therapist: Did your car catch on fire?
Client: No. (BLS)
Client: The car is going to burn and I can't get out! (client is even more distressed)
Therapist (doing a cognitive interweave): I know that smell. It is powder from the airbag system.
Client: (surprised) OK. (BLS)
Client: This is OK.
Client: The smell doesn't bother me anymore.
Client: I see someone coming to help me . . .

In this excerpt, the first cognitive interweave did not help. The client had previously told the therapist that there had been no fire during the accident. Still, bringing this knowledge into the channel of associations did not free the AIP. The second cognitive interweave helped and released the process. Why did the second interweave help and not the first one? We believe that the second interweave helped because it targeted the *binding* of sensations (the smell of fire) to a knowledge that explained the smell, a knowledge that the client did not possess. It also targeted the process of *differentiation* of a smell that is associated with fire and fear (unconditioned stimulus) and facts (there can be a smell similar to the smell of fire but not leading to a fire). In this case, differentiation promoted synthesis. The fact that the car had not caught on fire was not useful knowledge to release the process in this particular clinical situation. The client was indeed trying to bind and differentiate different elements (sensations, emotions, thoughts, actions) in a need to execute the mental action of core synthesis. In our understanding, this is the reason why the second interweave helped but not the first one. The clinician had had a car accident himself in which he learned that the powder released from the airbag system when it is activated smells like fire. By adding "I know that smell," he made this information more personal, deepening the relationship as both client and therapist share some common experience. With Dworkin (2005), we believe that such a comment can help the client be more receptive to the knowledge that immediately follows.

Extended Synthesis

As Van der Hart et al. (2006, p. 149) state, extended synthesis "helps us create our life history and a consistent sense of self because we are able to bind, differentiate, and coordinate not only single action systems, but a complex constellation of them over long periods of time." Traumatic experiences, with their related impaired core synthesis, may have a long-lasting effect. Individuals may be activated so regularly by trauma-related stimuli that their views of the world and themselves have changed over time. For example, women who have been sexually assaulted may avoid intimate contact with men (avoidance of trauma-related stimuli). Their self-presentation may be so impacted that some survivors believe they may never be able to defend themselves in general and particularly if assaulted again. Their representation of the world may also be disturbed to such an extent that some may subsequently believe that all men are dangerous. The lack of extended synthesis lies in the inability to bind and differentiate the needed feeling of safety (avoiding contacts with men) and other needs such as attachment and sexuality.

Extended Synthesis in EMDR

A complete EMDR therapy implies working on three prongs within the standard target sequence plan: the past, the present, and the future. For EMDR therapy to achieve optimum efficiency, therapists should target past situations, then present triggers, and finally future scenarios. By doing so, EMDR therapy focusses on what is called extended synthesis in the TSDP.

Extended synthesis often develops naturally during EMDR treatment. In simpler cases, clients may change their perspective after working only on one unique or several past traumatizing situation(s). In such cases, after core synthesis has been achieved on one or more targets of the past, extended synthesis occurs spontaneously. This may show when targeting present triggers and the future scenario: it takes little time in such cases, and the client shows rapidly functionally adapted reactions and anticipations. The client's positive cognition installed while working on the past traumatizing situation(s) has generalized to present triggers and the future scenario. This is an indicator that extended synthesis has been achieved.

However, in other cases, after targeting with the EMDR standard protocol several past situations (dysfunctionally stored, disturbing memories), appropriately targeting the present triggers and the future (negative anticipations) may need more time to achieve a complete extended synthesis.

In any case, in our experience, working on the future scenario allows the client to realize that her sense of self has changed. For example, while checking whether he felt anxious or not while visualizing a presentation he had to do in a few weeks in front of his colleagues, a man who had suffered from being bullied at school realized that he felt good and was not scared anymore. "This is really over now. I learned from this experience that I should be cautious of certain nasty people but I am confident that I can deal with them and there are so many other nice positive people that I can trust." We see here how the client integrated the changes in a different self-representation and another view of the world, therefore with a new sense of self. This is what extended synthesis is about (in this case this involves also extended realization). A complete EMDR therapy targeting past, present, and future situations, as proposed with the standard target sequence plan, is needed to achieve extended synthesis.

When extended synthesis occurs successfully in EMDR therapy, a sexually abused woman will be able to open up to an intimate relationship with a respectful partner, a person maltreated as a child will develop self-confidence and achieve related successful actions in life, and a phobic person will be able to change his self-image to a courageous individual daring to do things he did not dare try before treatment.

Clinical Vignette

We will now describe a case where extended synthesis is blocked and then released by a cognitive interweave. In the case of Mrs. A. described above, more difficulties emerged later in the EMDR therapy, targeting the car accident, during phase 4. Here is an excerpt.

> Client: My legs are stuck. (BLS)
> Client: I can't move my legs. (BLS)
> Client: I can't move my legs! (BLS)
> Client: My legs are paralyzed. I need to check my legs now to see if I can move them. (client starts to stand up)
> Therapist: Please, keep seated. How did you come to the session today?
> Client: (surprised) Oh! I see. I walked to your office.
> Therapist: Stay with that. (BLS)

Her legs and hips had been broken in the car accident and, during this session, the memory of being unable to move her legs emerged, together with the high distress of the time of the accident, and the distress of reexperiencing this again during the session. This time, contrary to the above excerpt 2, the client knew why she had been unable to move her broken legs during the accident, but the adaptive memory network and the dysfunctional memory network were lacking connection at this very moment in the session. It appeared that the client greatly lacked extended synthesis. The cognitive interweave helped connect these two memory networks and helped also for *extended* synthesis, by binding/differentiating the situation of the broken legs in the past and the current healthy condition in the here and now.

Other interventions could have been proposed, such as reorienting the client in the present by letting her check that she was indeed able to move her legs and hips. For example, the therapist could have let the client walk around in the office and check by herself concretely that she could walk. This type of intervention could have also been helpful but would not have made use of the fact that the knowledge that the client's legs were fine now was already stored in her memory network. If we had reoriented the client to the present, the reprocessing would have stopped and the client would have missed the opportunity to execute the mental action of extended synthesis.

This moment of EMDR therapy happened to be close to the end of reprocessing the car accident. It may be possible that such developments of extended synthesis occur more frequently in the last associations' channels of phase 4, and during phase 5 while installing the positive cognition, but this proposition needs more systematic observation.

Realization: The Concept of Personification

Based on the lower-order integrative actions of synthesis, realization pertains to the higher-order integrative actions with regard to traumatic experiences. Realization implies personification and presentification (Van der Hart et al., 2006). Personification is the clients' ability to feel that they have experienced these traumatic events, "to take personal ownership of [their] experience" (Van der Hart et al., 2006, p. 153). Presentification consists of "being firmly grounded in the present and integrating one's past, present, and future" (Van der Hart et al., 2006, p. 12).

Core and Extended Personification

The TSDP distinguishes core personification from extended personification. In core personification, taking personal ownership of the past experience is done in the present time. Extended personification relates to "mental activities by which we bind and differentiate with our sense of self across time and situations" (Van der Hart et al., 2006, p. 155). Extended personification is highly relevant to EMDR therapy, as we will see in the following clinical vignettes.

In the terminology of the TSDP, in a case of structural dissociation an EP holds elements of the traumatic memory while the ANP does not or does only partially. According to Van der Hart et al. (2006, p. 156), "each dissociative part personifies some actions and experiences, but regards other actions and experiences as 'not me' to some degree, including one or more other parts." To achieve optimal personification—that is, in order to make these experiences feel like her or his own—the patient, in her or his ANP, should personify the dissociated actions and experiences that are held by the EP. In this manner, the patient develops a more unified integrated personality step by step. When personification occurs while working on a traumatic memory, the client realizes *on an emotional level* what he or she has been through

and he or she will therefore show emotions related to the type and severity of the traumatizing event, indeed sometimes strong emotions (Nijenhuis, personal communication, 2015). Personification is not merely a cognitive process, it is also and possibly foremost a deep emotional process, as well as a process of grief. It develops often step by step, parallel to the increasing level of mental energy and to the decreasing phobia of realization.

Personification in EMDR

In EMDR therapy personification may occur spontaneously, most of the time during phase 4 and sometimes as well in between sessions when the AIP is still active. When emotions (in particular grief reactions) are accompanied by words such as "Now I realize how it felt," "I never realized how frightened I was as a child;" "Oh! I can feel that pain I felt as a little boy," and so forth, this should be seen as a sign of newly gained personification.

However, personification may not always occur spontaneously during the reprocessing. In EMDR therapy, the cognitive interweave gives a large variety of possibilities to promote personification, which should be a foremost goal, nevertheless taking in consideration the ability of the client at the time. We present several clinical vignettes that illustrate this.

Clinical Vignette

Mrs. C. is a client with C-PTSD who experienced repeated sexual aggression from an older brother over several years. While reprocessing a situation of sexual abuse for which the negative cognition was "I am in danger," the AIP is blocked during phase 4 on the theme of safety. Here is the excerpt of this moment in the session:

> Client: I feel unsafe. (BLS)
> Client: I feel unsafe and I'm trembling. (BLS)
> Client: Still unsafe, very much so. (BLS)
> Client: I was never safe, never. (BLS)
> Client: I will never be safe.

At this moment, the clinician has several options as to which cognitive interweave should be used.

First Option: A Cognitive Interweave Enhancing Present Safety. Because the theme is about safety, a possible cognitive interweave could target the feeling of safety in the here and now. Using a well-known metaphor in EMDR therapy, the underlying idea would be that the client might have both feet in the past and one foot should be brought back in the present. The connection to the memory network of safety in the here and now would allow unblocking the process.

> Therapist: Are you safe right now?
> Client: I am safe now, yes.
> Therapist: Stay with this. (BLS)

Such an interweave might bring emotional relief and phase 4 may continue.

Second Option: A Cognitive Interweave Enhancing Defense. Some therapists might be tempted to intervene in a manner which would give the client some feeling of mastery. They may therefore introduce a cognitive interweave that will connect clients to their ability to defend themselves, like fighting back the aggressor. The assumption is that the feeling of danger stems from the fact that such clients as children could not defend themselves. A possible interweave could then be as follows:

> Therapist: What if the child could defend herself?
> Client: Yes. That would be good. I never could.
> Therapist: Imagine you are defending yourself. Visualize this. (BLS)

Then, the client describes how she beats up her brother. The blocking of the AIP is released and the phase 4 can continue.

This imaginary scenario activates the defense action sub-system of fighting. With such an intervention, the client will not realize that she could not defend herself back then and was helpless, with no means to get out of the abusive situation, for example, because she was little and the brother strong and tall, or threatening her.

Third Option: A Cognitive Interweave Enhancing Imaginary Resources. Another way to unblock the process could be to develop an imaginary scenario, involving possible resources, just like in the following example:

> Therapist: What did the child need to feel safe?
> Client: She needed her mum to comfort her.
> Therapist: Imagine this. (BLS)

This interweave activates the care action system (and soothing) instead of the action subsystem of fighting, as in the previous option. In this third option there might be several possibilities. If the mother was clearly not protective at all in real life, this cognitive interweave ("What did the child need to feel safe?") may not help or not enough. For example, the client, might continue by saying, "But my mother was never there for me," and we would be back at the starting point. If

the mother was a protective figure except in the case of the sexual abuse by the brother, then the client may be able to imagine herself as a child being protected and comforted by her mother and the client would probably calm down and feel safer. But this presents a dilemma. In our understanding, a mother who is not aware that her child is being sexually abused by her other child over several years is not protective, or at least not enough. If the child does not dare say to her mother that she has been abused, this means that the child–mother relationship is not good enough. Therefore, a next possible intervention of the therapist could be, "Yes of course, as a child you needed your mother on your side, but your mother didn't see anything and could not help." Immediately the clinician should make a proposition: "Can you imagine another person to help you as a child feel safe, maybe the grandmother you liked so much, or an animal, or an imaginary good-hearted figure?" We could as well skip the first sentence that may sound harsh; in fact, it triggers the theme of feeling unsafe even more, which brings us to the fourth option.

Fourth Option: A Cognitive Interweave Promoting Personification More Specifically. The process might be blocked on the safety issue because the client has not yet realized the deep feelings of helplessness and despair when feeling unsafe *endlessly* when she was a child. In this case we propose another type of cognitive interweave.

> Therapist: How is it to feel unsafe for so long?
> Client: It feels like it will never end! (client cries)
> Therapist: Stay with this. (BLS)

In such a situation, clients usually are in contact with the intense related emotions and may cry a lot. This intervention helps the client execute more of the mental action of synthesis, allowing a specific personification ("I did experience this unbearable feeling of endless danger and helplessness"). At the same time, the client integrates that she has experienced some unbearable enduring feeling of danger and helplessness, which brings emotions of grief, typical for personification. The clinician should make sure that the client stays oriented in the here and now while in contact with the intense feelings.

We notice that the theme changes from safety to helplessness. During phase 3, the choice of the negative cognition (NC) is indeed central and it may happen that during phase 4 the NC changes. This is what happened in our example: the NC "I'm in danger" could be considered correct during phase 3, but in fact it does not correspond exactly to the core pain, which is the helplessness, and which came out later during phase 4.

In cases of violence on children, the theme of helplessness should be given due consideration. Safety might seem to be central, since many such clients come to therapy to treat anxiety disorders. Nevertheless, the central concern for human beings, and even more so for children, seems to be the feeling of loneliness while they are unprotected and also after they are out of danger. Research has shown that social support from caregivers is a strong protective factor of PTSD after the occurrence of a potentially traumatizing event on children (Marsac, Donlon, Hildenbrand, Winston, & Kassam-Adams, 2014; Meiser-Stedman, Yule, Dalgleish, Smith, & Glucksman, 2006; Stallard, Velleman, Langsford, & Baldwin, 2001; Wise & Delahanty, 2017). Children in dysfunctional, traumatizing, or traumatized families lack these protective actions of caregivers. Many clients say that the worst part of a traumatizing abusive situation is not actually the abuse itself but the fact that their parents did not react appropriately to the situation.

Substitute Actions and Adapted Cognitive Interweave. Substitute actions is a concept developed in the TSDP by Van der Hart et al. (2006) and based on Janet's work (1903). Substitute actions are maladapted mental or behavioral actions that survivors engage in when they are not able to engage in more adapted actions. For example, a client under strong emotional arousal could hurt himself instead of doing a relaxing activity or writing in a therapeutic dairy. In certain cases, the concept of substitute action is useful to address the right cognitive interweave to promote personification more specifically. To illustrate this, let us go back to the previous case of Mrs. C. with the following excerpt:

> Client: I feel unsafe. (BLS)
> Client: I feel unsafe and I'm trembling. (BLS)
> Client: Still unsafe, very much so. (BLS).
> Client: I will never be safe. (BLS)
> Client: I want to do something. (BLS)
> Client: I can't get away. (BLS)
> Client: I want to hit him. (BLS)
> Client: Yes, I want to beat him up. (BLS)

Here we may have two options. The first option often used by EMDR therapists is the following interweave: "Imagine you beat him up" or "Let's pretend you beat him up." This intervention might help the client to get over this feeling of being unsafe and helpless. Nevertheless, the client could neither escape nor fight in the past situation, because she was too small

and the brother tall and strong or threatening. Imagining beating up the molester might be helpful to make the client believe she can defend herself now. But it could also be a substitute action for the more difficult mental action of realization (personification and also presentification) that as a child, she could do nothing. In such cases we propose the following cognitive interweave:

(. . .)
Client: I want to do something. (BLS)
Client: I can't get away. (BLS)
Client: I want to hit him. (BLS)
Client: Yes, I want to beat him up. (BLS)
Therapist: At that time, were you able to do anything?
Client: No!
Therapist: Stay with this. (BLS)

At this point the client might or should cry. The process of personification involves the contact with the deeper pain of the past, and the following grief. This leads to related emotions that can be strong with tears and possibly sobbing, depending on the severity of the traumatizing event, the emotivity of the client, and intersubjective elements of the therapy. Emotion of profound sadness is a sign that the client is executing properly the mental action of personification.

Realization: The Concept of Presentification

According to the TSDP, realization implies, besides personification, also presentification. Presentification refers to an individual's ability to integrate that (potentially traumatizing) events took place in the past and are over now, that he or she can be and can fully act in the present moment. As Van der Hart et al. state (2006, p. 157), "presentification is more than being aware of the present moment. It involves our creation of the present moment from a synthesis of personified experiences stretched over time and situations, from the past, the present and the projected future. Ultimately, presentification is our construction of the context and meaning of the present moment within our personal history." Here again Van der Hart et al. (2006) differentiate core and extended presentification.

Core and Extended Presentification

Core presentification refers to the mindful awareness of self and the environment by the individual. In EMDR therapy "one foot in the past and one foot in the present" is a metaphor used to explain that clients should concentrate on the past situation *and* at the same time be aware of the here and now for the AIP to be efficient. In the terminology of the TSDP, being aware of the here and now while reprocessing (in particular during phase 4) refers to core presentification.

Extended presentification relates to our awareness that our present experience is embedded on the time line of our life, in our past and future. Therefore, extended presentification allows us to link our experiences in a way that makes us feel our personality cohesive (Van der Hart et al., 2006).

Presentification in EMDR

In EMDR therapy, presentification is supported at different stages of the therapy. During phase 3, the protocol carefully differentiates the past and the present tense. For example: "When you think of this experience, what is the worst part of it as you think of it *now*?" (Shapiro & Laliotis, 2017, p. 53). Presentification is also enhanced with supportive interventions during the BLS, such as "You are safe *now*"; "I am here with you *now*"; "This happened *many years ago.*" Such interventions are used to support clients when they are experiencing strong emotions: the aim is to support clients and to help them differentiate the past from the present, binding and differentiating different memory networks and making the AIP more efficient.

EMDR therapy can be considered successful when the client does not feel any more activated by the memory of the past traumatizing event (as measured with the subjective units of disturbance [SUDs] in phase 4, the validity of cognition [VOC] of the positive cognition in phase 5, and a positive body scan in phase 6), that the present life is different from the past (after targeting the present triggers), and that the future can be different than previously expected (after targeting the future scenario). In that sense, successful EMDR therapy (by reprocessing targets on the three-pronged protocol) gives clients the possibility of achieving core and extended presentification.

In our experience in EMDR therapy with less complex cases, interventions supporting presentification should preferably be done after the client has achieved at least some degree of personification, that is, after the client has been in contact with the core pain of the targeted situation. In other words, before being able to realize that the event is over now (presentification), the client needs to realize that the event happened to him or her (personification). In our observation there is a risk that the AIP stays blocked, or that the reprocessing does not go beyond a certain depth, if presentification occurs without a minimum of personification ("It happened in the past but it didn't really happen to

me"). This view should not be seen as an imperative and may be different in the treatment of patients with complex dissociative disorders.

Clinical Vignette

Let us go back to Mrs. C, the client with C-PTSD, repeatedly sexually abused by an older brother over a period of several years. While working on such an event, the AIP blocked on the safety issue, and we proposed several possible cognitive interweaves. In our view, the fourth option seems to be the best choice to achieve personification: support the client to get in touch with a deeper pain, while the theme moved from "feeling unsafe" to "feeling helpless." Here is the excerpt:

> Therapist: How is it to feel unsafe for so long?
> Client: It feels like it will never end! (client cries)
> Therapist: Stay with this. (BLS)
> Client: This hurts so much ! (BLS) (personification)
> Client: This is unbearable. (BLS) (more personification)

At this stage, some therapists might feel an urge to make a supporting intervention such as "This is over now," therefore promoting presentification. In our experience, suggesting presentification too early in the process may prevent optimal personification. Instead, a recommendation is an intervention supporting the client directly on the core theme, which is of being alone and feeling helpless (personification first). Here is the follow-up of the above excerpt:

> Client: This is unbearable. (BLS)
> Therapist (during the BLS): Yes, this is unbearable. Continue. (promoting personification)
> Client: No one saw my pain. (BLS)
> Therapist (during the BLS): No, no one saw your pain *at the time*. Continue. (promoting again personification and first step of presentification)
> Client: Why didn't my mother see anything?!
> Therapist: Stay with this. (BLS)
> Client: I was alone. (crying deeply)
> Therapist (during the BLS): Yes, you were alone and this is very sad. (promoting personification and grief)

The last supportive intervention is meant to support the client during the process of personification ("Yes, you were alone") and to bring some further degree of presentification ("This *is* very sad"). "This *is* very sad" relates to our present consideration of the past event which is why such an intervention softly supports presentification; it also promotes the necessary process of grief. Presentification is fostered also by the compassion shown by the therapist during such an intervention. The therapist's compassion supports presentification also because it is opposite to the client's feeling of loneliness. Hopefully the client will feel the difference between the past (no support from the mother) and the present (compassion from the therapist). Supportive interventions such as "I'm here with you" may also be efficient, but may reorientate the client too soon in the present before sufficient personification has occurred. Again, sufficient personification is needed for optimal final realization.

Promoting Presentification in EMDR

Taking into consideration the TSDP for EMDR therapy, specific cognitive interweaves can help support presentification when needed, that is, when the client's attention has been focused on the past suffering without any sufficient awareness that all this is past history. In other words, the memory networks from the present (e.g., "I have emotional support from close friends now") have not been linked to the dysfunctionally stored memory networks of the past events ("My mother didn't protect me"). After gentle presentification has been suggested with supportive interventions as presented above, more direct interventions, like cognitive interweaves, may be needed to help the client bind different memory networks and release the AIP. A recommendation is to first choose cognitive interweaves that describe the past situation with compassion and then propose the present alternative. For example, instead of the interweave "Are you alone now?" the therapist may choose, "Yes, you were alone at the time. What about now?" This last interweave starts with a compassion-based intervention which promotes personification ("Yes, you were alone"), and that also includes some degree of presentification ("at the time"). We believe that this first part of the interweave will make the client more open to the next part of the cognitive interweave, which suggests a bridge to another memory network ("What about now?"). Therapists trained in hypnosis will recognize the concepts of pacing and leading here. In Eriksonian hypnotherapy, a core concept is to be close to the client's experience and feelings (pacing) before suggesting any change (leading; Grinder & Bander, 1976). Clients may be more open for change after they have felt a deep understanding from their therapists. We consider that cognitive interweaves should be adjusted to implement this recommendation, as we did in this example.

Extended presentification can also be developed while working solely on past targets. However, extended presentification will be best achieved after the EMDR therapy eight-phase protocol and three-pronged protocol have been completed: past disturbing situations, present triggers, and future anticipations. In this sense, EMDR therapy enhances presentification without naming it in the same terms as the TSDP. The TSDP and its concept of presentification may help EMDR therapists to better understand where the client stands in this regard and better adjust their interventions with more precision, with either supportive interventions or cognitive interweaves, as we have shown above in the vignette.

Discussion and Conclusion

Integration has been precisely defined and described in the context of the TSDP. It consists of a complex series of mental actions which involve synthesis and realization, the last consisting of personification and presentification. The concepts of synthesis and realization can be useful for EMDR therapists as they allow a deeper understanding of the psychological processes (and the involved mental actions) that take place when the AIP is at work. These concepts also allow better-adjusted interventions during EMDR reprocessing. The AIP model is a hypothesis aiming to explain the nature of maladapted behaviors and psychological difficulties, and the process occurring during EMDR therapy. The concepts of synthesis and realization, as proposed by Van der Hart et al. (2006), can bring a deeper understanding of psychological processes which are or should be activated during the EMDR therapy. These concepts of the TSDP can be extremely useful to understand where clients stand in the course of the EMDR treatment and how to release the AIP when the process is blocked, or to deepen the reprocessing.

EMDR therapists should follow their patients in their own reprocessing, stay "out of the way" as much as possible, but also enhance the missing mental actions when needed, such as during a lack of synthesis, presentification, or personification. In this regard, the choice of supportive interventions and cognitive interweaves during phase 4 can be finely attuned and adjusted, depending on where the client stands in the process of synthesis and realization (with personification and presentification), and also taking into consideration a possible phobia of realization (Van der Hart et al., 2006, 2014). Ideally, clients should achieve core personification of a disturbing event through synthesis. In trauma therapy, personification may lead to strong emotions that not all such clients are able to deal with. EMDR therapists may adjust the treatment according to their clients' abilities in affect regulation. If they assess that their client would not be able to achieve core presentification of a specific disturbing event without being overwhelmed, EMDR therapists could suggest an imaginary reparative scenario through adapted cognitive interweaves. Imaginary reparative scenarios may allow only partial realization but may be a good alternative for many clients. However, for some clients, it is a first step toward a more completed realization (mainly personification at first) that will take time, while for other clients, realization will not go further, at least not without a cognitive interweave which triggers the pain that needs to emerge for full realization to occur. It all depends on the client's stability and goals, on the client's degree of phobia of realization, and on the therapy's setting (time and number of sessions at disposal, etc.). It is important not to push the client in a direction he or she may not be able to cope with. This relies often on a difficult, subjective, and intersubjective assessment.

The decision to be made between these two types of interventions will depend on the following factors:

- Is the client ready at this particular moment of the therapy to realize elements of the trauma that were not conscious until now? For example, the feeling of danger *over a long period of time*, which leads to a feeling of *enduring helplessness*, as in the case of Mrs. C.
- Is the timing good in the session and in the therapy to trigger intense emotions?
- Is the client able to regulate the intense emotions that may come up if the therapist facilitates the emergence of a deeper emotion? Or will the client go out of the window of tolerance (Ogden & Minton, 2000)?
- Is the clinician ready to go through these intense emotions with the client?

Synthesis and realization with personification and presentification are intertwined. They occur in a combined process. Separating these four concepts may feel artificial but is necessary for the purpose of this article. Nevertheless, it is useful to define each of these concepts precisely and to explain how they may combine or not during treatment. Clinicians may therefore focus on the missing elements. We have shown how interventions can be adjusted, depending on what has not been developed enough: synthesis, personification, and presentification. Overall, in our view, synthesis—as a lower-order mental action—should be

fostered first, which should lead to the higher-order mental action of realization, with personification and then presentification. These overall intertwined processes lead to the integration of traumatic memories in the client's autobiography (in the meaning of the TSDP) and the subsequent simultaneous fusion of the ANP and the EP(s). In the neurophysiological words of the AIP model, these overall intertwined processes are involved in the transformation of dysfunctionally stored memories into adaptive memory networks. We have emphasized that presentification should be supported by adjusted interventions only when at least some personification has occurred. This is of course no dogma, and further thorough observation is needed in this clinical field.

Because all cases are unique, we should keep in mind that there is not only one way to do EMDR therapy. The clinician's difficult task is to choose the best solution at a particular moment in a specific session, in the process of that particular treatment with a unique client. With the knowledge of the concept of integration as defined by Van der Hart et al. (2006), we believe that EMDR therapists can better adjust and attune their interventions to their specific clients. In many cases—not only in cases considered as complex—the benefit of EMDR therapy could increase when taking into consideration these concepts of synthesis and realization. We should not view the psychological concept of integration according to the TSDP as conflicting with the neurophysiological concept of information processing according to the AIP model. As Van der Hart et al. (2010, p. 90) state, "they rather involve different levels of description of the same phenomena." We believe that these different levels of description complement one another. A challenge for research would be to consider the concept of integration of the TSDP in neurophysiological studies. Aside from the ever-growing interest in the neurophysiological processes involved in EMDR therapy, this article hopes to bring a focus on the psychological processes and the mental actions involved in EMDR psychotherapy based on the AIP model.

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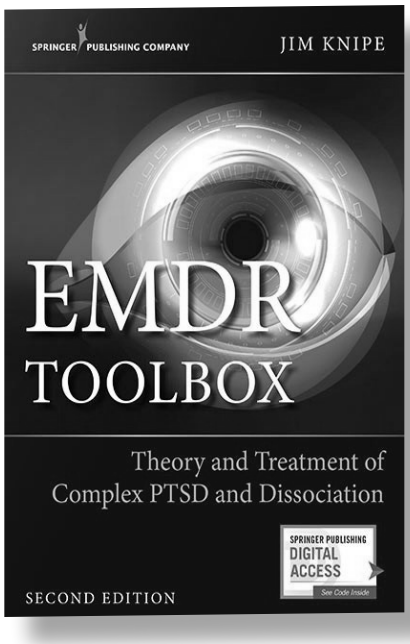

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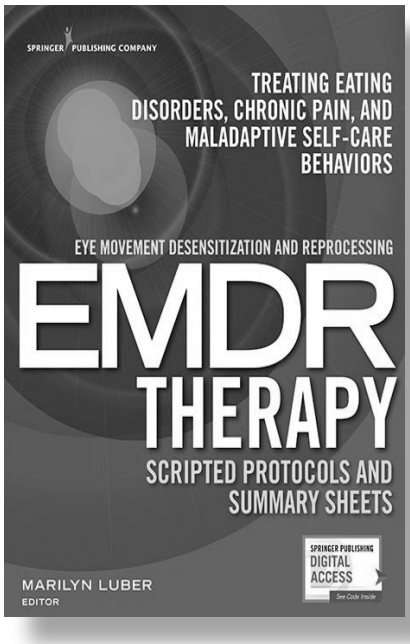

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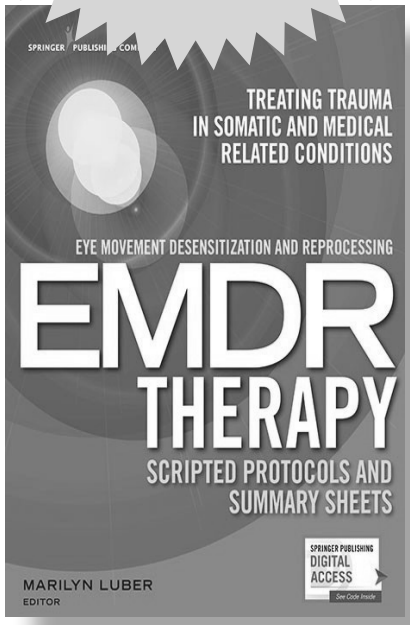

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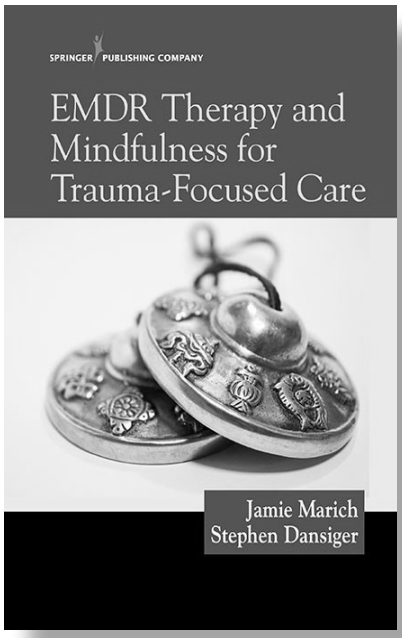

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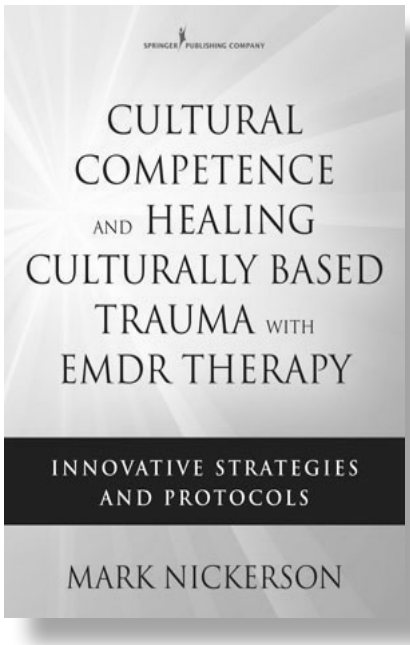

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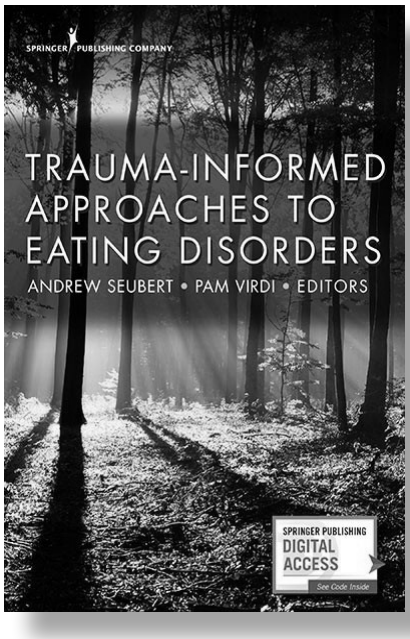

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