
Using the Sand Tray in the Context of the Latest Research in Neuroscience to Transform Clients' Defences Le recours au jeu de sable dans le contexte de la plus récente recherche en neuroscience visant à transformer les mécanismes de défense chez les clients

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ABSTRACT

Current research and theories of neuroscience are woven together with Satir psychotherapy and sand tray therapy in this author-developed therapeutic approach called “Neuroscience and Satir in the Sand Tray” (NSST). The theory and the practice of all three parts of NSST are explained and elucidated. This therapeutic approach achieves the transformation of the defences by eliciting the projective identification into figurines and the subsequent enactments(s) that bring about profound “aha” moments of transformation. An example of transformation in the sand tray is presented with photographs. It recounts an NSST training session with a young adult counsellor who created a scene in the sand tray of a highly defended little boy (figurine) and announced that this defensive protection would “never come off.” This article illustrates how such strong, familiar patterns of protection can be transformed within the sand tray before occurring in the body so that the client can experience themselves as being different at a cellular level through epigenetics.

RÉSUMÉ

Dans cette approche thérapeutique élaborée par l’auteure et appelée « Neuroscience and Satir in the Sand Tray (NSST) » (Neuroscience et Satir dans le jeu de sable), la recherche en cours et les récentes théories de la neuroscience sont étroitement imbriquées dans la psychothérapie selon Satir et la thérapie par le jeu de sable. L’article permet d’expliquer et de tirer au clair les aspects théoriques et pratiques des trois parties de la NSST. Il s’agit d’une approche qui vise à transformer les mécanismes de défense en faisant émerger l’identification projective dans les figurines et la mise en scène subséquente qui font ainsi naître de profonds moments révélateurs de la transformation. On présente un exemple de transformation dans le jeu de sable au moyen de photographies. On relate une séance de formation à la NSST avec une jeune conseillère qui créa une scène dans le jeu de sable d’un garçonnet hautement défendu (figurine) et annonça que cette protection défensive ne « tomberait jamais ». Cet article illustre de quelle façon il est possible de transformer de puissants schémas de protection familiers dans le cadre du jeu de sable, avant que ceux-ci ne se

produisent dans le corps, de sorte que le client puisse ressentir en lui la différence au niveau cellulaire par l'épigénétique.

Only recently have neuroscientific findings helped us understand why using the sand tray can create a powerfully transformative experience. This author has developed a way of working in the sand tray that she called “Neuroscience and Satir in the Sand Tray” (NSST; De Little, 2017, 2019a, 2019b). This is a comprehensive way of working with both children and adults using figurines in the sand tray combined with the latest research in neuroscience and an updated application of Virginia Satir’s psychotherapeutic approach.

Two individuals who are associated with the origins of sand tray therapy are Margaret Lowenfeld (1890–1973) and Dora Kalff (1904–1990). The use of the sand tray with figurines in therapy began with Lowenfeld. This form of play with children was without adult intervention and had no theoretical basis. Lowenfeld used a variety of small miniature toys sorted into “different categories—for example, animals, action figures, buildings, vehicles etc.” (Dr Margaret Lowenfeld Trust, n.d.)—that she kept in two trays, one with sand and one with water, in a cabinet. Lowenfeld called her form of therapy “World Technique,” which is currently called “Projective Play Therapy” (Homeyer, 2019).

Dora Kalff (2003) integrated her Jungian approach with adults with Lowenfeld’s (1979, 1935/2008) world technique with children. Kalff named her approach “sandplay” to distinguish it from Lowenfeld’s World Technique (Mitchell & Friedman, 1994).

There are several similarities between Lowenfeld’s (1979, 1935/2008) world technique, Kalff’s (1966/2003) sandplay approach, and NSST (De Little, 2017, 2019a, 2019b). In all three methods, figurines are used within a sand tray. It is commonly agreed among play therapists and sand tray therapists that Kalff (1966/2003) first used the term “free and protected space” (p. 17). In NSST, the sand tray provides such a space. This free and protected space enables clients to connect with their unconscious and to express preverbal experiences and blocked energies (Mitchell & Friedman, 1994). NSST goes further and incorporates the work of Lipton (2015) by suggesting that the release of blocked energy is made available to create new proteins and new neural pathways through epigenetics—that is, by changing the expression of heritable genes.

In addition to providing a free and protected space, another similar element in all three methods involving the sand tray is the use of figurines to express the unconscious. Davis (1992) suggested that Lowenfeld’s concept of

“protosystem” ... corresponds roughly to the Freudian unconscious ... in that the primary processes of displacement, condensation and sensorial or preverbal

representation are inherent in it, as is timelessness. Also it cannot be known directly, but only through dream, play and artistic creation. (p. 11)

Kalff (1966/2003) understood the use of play as a mediator and as a generator of a child's urge to make sense of or to introduce order into their experience (Traill & Hood-Williams, 1973). The NSST approach is founded on the belief that therapy has to allow for the implicit, unconscious expression of the right-brain self-system, and the sand tray facilitates this process through the creation of symbols and pictures of the unconscious, implicit right-brain system (De Little, 2017).

There are some clear differences between the three methods of using the sand tray. Homeyer (2019) described how Lowenfeld adapted Wells's idea with children in a therapeutic setting free of interpretation. In his foreword to Mitchell and Friedman's (1994) *Sand Play: Past, Present and Future*, Fordham (1994), a child psychiatrist and a Jungian analyst, shared how he turned away from using the sand tray completely. As Mitchell and Friedman (1994) noted, Fordham supported Lowenfeld's work but gradually became unable to continue doing so because of her "purposeful attempt to avoid transference by regularly shifting a child from one therapist to another therapist in her clinic" (p. 23). Mitchell and Friedman stated that Kalff's focus was on the positive transference between the client and the therapist, which could be seen in the tray, to "enhance the constellation of the Self" (p. 80).

In NSST (and in other modes of psychotherapy), there is a significant emphasis placed on the safe, relational attachment between a consistent therapist and a client. Also, in NSST, the transference/countertransference, the projective identification into the figurines, and the subsequent enactments in the metaphor are considered pivotal to transformational change.

Another difference is that Kalff (1966/2003) introduced Jung's concept of archetypes into the sand tray. She believed that the therapist's understanding of the symbolism in the pictures was an essential part of the therapist's role. Lowenfeld (1979, 1935/2008) did not refer to archetypes, nor are they the focus in NSST. The exploration of the figurines in the sand tray in NSST is based on the postmodernist emphasis on the "collaborative relationship [between the therapist and the client], the notion that the client is the expert, and the client-therapist relationship as one of author-editor" (Gallerani & Dybiczyk, 2011, p. 165).

NSST differs from the other two approaches by introducing the term *novel metaphor*. A figurine needs no explanation as a metaphor for part of the client's internal world, but a novel metaphor does require explanation. A novel metaphor is an unconventional, unfamiliar, and unique image and concept outside of conscious awareness. Novel metaphors resonate with stored energy patterns that have no words in the embodied mind. Both Kalff (1966/2003) and Lowenfeld (1979, 1935/2008) were working with symbolic images, which some would argue

is only a difference in name. Kalf's emphasis was to interpret them in the form of archetypes. Lowenfeld believed that play in general "represents to the child the externalised expression of his emotional life, and therefore in this aspect serves for the child the function taken by art in adult life" (Lowenfeld, 1935/2008, p. 232).

Kalf's (1966/2003) notion of sandplay is based on Jungian psychology and uses language such as ego, psyche, repression, archetype, the collective unconscious, shadow, and individuation. NSST uses language primarily of interpersonal neurobiology as well as that of Virginia Satir.

NSST incorporates some elements that were not known or considered by Kalf (1966/2003) or by Lowenfeld (1979, 1935/2008). The following elements of NSST will be addressed in more detail in this article:

- the tracking by the therapist of the relationship between changes in the client's body and the choice and placement of the figurines
- the tracking by the therapist of their own body to ascertain what is happening in the client's body with the goal of the therapist knowing "one's patient inside out" by experiencing "somatic countertransference" (Bromberg, 1991, p. 399)
- the concept of Satir's Iceberg as an assessment tool to ask process questions of the figurines
- the modern neuroscience understanding of the autonomic system of protection called the polyvagal theory (Porges, 2011) and what these different ways of keeping safe look like in the sand tray
- the critical, positively intentional part these defences have played in the development of the individual and how they can be transformed
- the specific "special gifts" that arise from these defences and that can be utilized in the transformative process
- the right brain-to-right brain attachment in the therapeutic relationship
- the understanding of the concept of the embodied mind
- the concept of mutual regression, in which the right brain activity of both client and therapist is open, available, and expressed in "affects, tone, and images," with both members of the dyad sharing a "communication of an implicit creative state" (A. N. Schore, 2019, p. 50)
- what integration of the mind and the body looks like in the sand tray
- the ways that the therapist must be fully present and constantly working toward fostering trust, asking positively directional questions, being curious and playful, and inspiring change both in the play and in the client

As noted below, a central process in NSST is the use of *enactments in the metaphor*. These profound moments in the sand tray bring about a shift in energy and a release of the binding defences that have been keeping the client safe but that have become too large and constraining. These shifts in energy and the release of the defences are reported by the client and observed by the therapist as non-verbal changes in body language, facial expression, and voice tone.

Having compared NSST to the traditional use of the sand tray in therapy, this article will now look at how NSST lies at the conjunction of three elements in psychotherapy:

1. A. N. Schore (2012), Badenoch (2018), Porges (2011), and others have introduced many developments in interpersonal neurobiology. These developments in psychotherapy are hugely influential in all areas of the field. They include right brain-to-right brain body-based attachment (A. N. Schore, 2012), attunement (A. N. Schore, 2012), the polyvagal theory (Porges, 2011), co-regulation (Badenoch, 2018), non-verbal communication (A. N. Schore, 2012), and epigenetics (Lipton, 2015).
2. Satir's Transformation Systemic Therapy (TST) model (Satir et al., 1991) provides a framework for asking positively directional change-focused process questions of the client's internal world. In NSST, these questions are used in the new interventionist model of sand tray work. The therapist asks process questions of the figurines in the sand tray. These questions elicit awareness for the client of the underlying and self-perpetuating elements of *Self* that maintain current unhelpful defences. TST is systems-based and experiential. It stresses the "Use of Self" of the therapist (J. Banmen, personal communication, August 30, 2018).
3. The development of the third element of NSST has been discussed in detail above. It can be summarized here as the use of play, imagination, and creativity using figurines in the sand tray to transform the client's defences. The synergy of three elements has resulted in NSST—an approach to psychotherapy that is quick, profound, long-lasting, and achievable (De Little, 2017).

Theoretical Description of a Typical NSST Session

The goal of NSST and of some other therapies involves an integration process following the release from the binding defences that have kept the client safe but that have become dysfunctional. A. N. Schore (2019) wrote that the patient re-experiences overwhelming feelings that are safely "incrementally titrated" (p. 92) and then internalizes them "so that overwhelming traumatic feelings can be regulated, come into consciousness, and be adaptively integrated into the patient's emotional life" (p. 92). In NSST, this integration process can be seen happening gradually or suddenly in the sand tray, with hitherto disparate figurines coming together and forming a unified picture.

In NSST, the therapist and the client move down into the right brain in mutual regression before any figurines are placed in the sand tray. The client and the therapist attain a tacit agreement that the client is safe enough, that they are in the process together, and that they are going back and down into the unconscious to explore stored, dissociated, impactful, and painful memories that

have no words. Then the figurines are brought into the sand tray by the client. In mutual regression, there is a deep, shared connection between the therapist, the client, and the figurines.

There are long moments of silence as the client experiences their perception of past, present, and future in front of them in miniature. The client becomes an observer of themselves. Together, the therapist and the client explore through the metaphor of the figurines how the client's defences have kept them safe. Typically, the therapist asks a Satir process question such as "Did you know that this dragon/this fence/this hidden rabbit has been keeping you safe?"

In addition to this question, NSST goes further by asking about what else the client has gained as well as keeping safe. A question to elicit such a response could be "Can you show me other ways that this dragon/this fence/this hidden rabbit has helped you in addition to keeping you safe?" In my experience, the client is then able to put new figurines into the sand tray and appreciate these special gifts that have arisen from their defences, which have become helpful beyond having kept them safe.

Gradually or suddenly, the client sees how these defences have become too big and no longer helpful. There is an opportunity here to ask another Satir process statement: "I wonder if anything needs to change for the dragon/the fence/the hidden rabbit." There are four ways in which the practical application of neuroscience is central to the process just described: creating an internal sense of safety for the client, the mutual regression into the unconscious of the therapist and the client, the development of a secure attachment of the client through the co-regulation of the therapist, and the tapping into stored unconscious images in the form of figurines.

Through the unconscious projective identification of negative and positive parts of Self into the figurines in the sand tray, the client can enact overwhelming, disorganized, and traumatic experiences safely. The client experiences past ruptures through their connection with the figurines. The therapist assists the client in repairing ruptures as the client adds, moves, and changes the figurines. This repair is the last stage of the enactment in the metaphor. Dissociated pieces of the client's experience begin to become integrated as one final image is created in the sand tray. Finally, the client's appreciation of the role of their defences in keeping them safe and the special gifts that have arisen is achieved because of the playful, imaginative, and creative nature of NSST's use of the sand tray. In NSST, as the client looks at the choice and the placement of the figurines, their perceptions about their sense of Self changes. The figurines come together gradually as one image. This integration of the figurines is a manifestation of the restructuring of the preverbal, dissociated, and dysregulated implicit Self. This article will now explore these theoretical points in more detail.

The Therapeutic Relationship

Creating Safety

Research has shown that the therapeutic relationship is all about creating safety (Porges, 2011). It is commonly accepted that this concept applies now to all psychotherapeutic approaches, recreating the sense of safety that was lost by relational abuse, neglect, or acute traumatic incidents. When the client experiences the “neuroception of safety” (Porges, 2011, p. 17) with the therapist, the ventral vagus nerve (the myelinated branch of the 10th cranial nerve) “inhibits the fight/flight response of the sympathetic nervous system and allows social engagement/secure attachment to unfold” (Badenoch, 2008, p. 60).

As the therapeutic alliance develops, the client’s brain is repaired and new structures are created to reflect the client’s deeper sense of safety and connection so that the client becomes more able to cope with the demands of life (J. R. Schore & A. N. Schore, 2008). This co-regulation within the therapeutic relationship in the context of safety lays the groundwork for the process of neural integration and regulation (De Little, 2019b).

Right Brain-to-Right Brain Attachment

In NSST, as in most psychotherapies, the relationship between therapist and client is everything, as it is “a mammalian biological imperative” (Porges, 2015, p. 2) to be connected to other humans. We shape one another’s brains at every stage of our lives, and we internalize our attachment patterns from our negative or positive relationships with caretakers. The therapist’s work is to provide what the client needed when young (B. Badenoch, personal communication, June 28, 2019). NSST supports A. N. Schore’s (2012) research on right brain-to-right brain connection between the client and the therapist as being essential to attunement and to the subsequent re-attachment to the Self by the client. A. N. Schore (2014) wrote that there is evidence that “this interpersonal neurobiological mechanism allows optimal longer term treatment to potentially transform disorganized–disoriented attachments into ‘earned secure’ attachments” (p. 394). This is because the right brain is responsible mostly for the attachment process through non-verbal implicit communication (A. N. Schore, 2017).

A. N. Schore (2012) proposed that, just as the left brain communicates its states to the left brains of others via conscious linguistic behaviours, the right brain communicates its unconscious states non-verbally to other right brains tuned to receive these communications. He suggested that the implicit system (Self) of the therapist interacts with the implicit system (Self) of the client. A. N. Schore singled out this phenomenon as being “the core of the therapeutic alliance” (p. 85). Thus, for A. N. Schore, “psychotherapy is not the ‘talking cure’ but the affect-communicating and regulation cure” (p. 85). Therapy must include other

practical skills, but ultimately, all these skills must be incorporated into the right brain-to-right brain communication between the therapist and the client.

Attunement Creates Secure Attachment

In NSST and in other psychotherapies, the attunement between the therapist and the client is essential, as is the secure therapeutic attachment between them. This is achieved through deep, non-verbal attunement. From the moment the session begins, the client needs to feel companioned by the therapist so that they have a felt sense of being safe. The therapist co-regulates the client so that the client can integrate their dissociated parts. In NSST, the dysregulated clash occurs between the client and the figurines so that the attunement between the client and the therapist is rarely ruptured and the “earned secure attachment” (Siegel, 2012, p. AI-26) of the relationship remains. The accessing of past experiences in this way provides for controlled and regulated enactments (A. N. Schore, 2012) between the client and the figurines.

The Use of the Therapist’s Body in Affective Communication

Somatic countertransference (Bromberg, 1991) is the ability on the part of the therapist to be attuned to a client’s non-verbal affective state(s). Stevens (2018) spoke of the therapist’s body as being “tuned up” (p. 205) to scan and to receive all forms of communication from the client (such as voice, metaphors, words, body shifts, and behaviours, thus acting as a container to “hold projections,” p. 205) and going with the flow of the moment. Stevens (2018) described how the therapist resonates with the “patient’s internal state of arousal” by being regulated themselves and by putting words to their state (p. 208). Badenoch (2018) described this as the dance of “leading, following, and responding” (p. 221).

Siegel (2010) talked about playing on the edges of regulation as the therapist moves to expand the client’s river of integration. Thus, the client can spend more time in their ventral vagal play state (Porges, 2011). Critical to this work is the felt sense of other, through all forms of affective communication, including (with the client’s permission) the gentle touch of a hand on the back and questions such as “Can you feel me with you?” (B. Badenoch, personal communication, June 28, 2019). The client must experience connection and safety to be able to receive what they did not get at the time of the disconnection (B. Badenoch, personal communication, June 28, 2019).

The Use of Tender and Abounding Silence

NSST proposes a new kind of silent witnessing and places that tender and abounding silence between the client and the therapist in juxtaposition to process questions and other verbal interventions. There is much time spent in silence with both members of the dyad being completely present with the images in the sand tray and with each other in mutual regression. Through the figurines, the client

as observer reflects silently and mindfully on and experiences their relationship with themselves, with others, and with the world.

Working in the Sand Tray with Figurines

Transforming the Defences

With this secure attachment in place, the process of finding and transforming the defences in the sand tray can begin. When using the sand tray in NSST, no time is spent describing the story of what happened to the client in the past. The only words used are to describe the metaphors in the sand tray and the client's bodily sensations. In an enactment in the metaphor within the sand tray, unconscious images are produced where there are no words. Although not referring to working in the sand tray, Zanocco et al. (2006) suggested that images arising from the unconscious "do not seem to follow any order and, even less, any system of logic" (p. 145). In NSST, it is the projections into the figurines that resonate with implicit patterns of energy, bringing about a series of enactments. The enactments occur in the metaphor within the therapeutic dyad of the client and the figurines in the sand tray.

The Therapist Is in Charge of the Process; the Client Is Responsible for the Meaning of the Content

In NSST, the therapist asks process questions about the metaphors in the sand tray. "Can you tell me about your picture?" "Can you show me, rather than tell me, what it would look like if you didn't feel this way?" "Can you show me what is getting in the way?" "Can you show me how this figurine feels about this situation?" "Which of these other figurines can help?" Such questions—along with images, bodily sensations, and emotional and kinesthetic experiences—open increasing numbers of doors for the client to access their non-verbal, unconscious, implicit Self (A. N. Schore, 2011). Hayes et al. (2007) described (although not referring to sand tray work specifically) how after defensive patterns are destabilized there can be a reorganization of the system. In the sand tray, as these defences become transformed, the separate parts of the internal world begin to form one complete, integrated picture.

Mutual Regression

A. N. Schore (2019) and Aron and Bushra (1998) wrote about mutual regression in the following way: The right brain activity of both client and therapist is open, available, and expressed in "affects, tone, and images" (A. N. Schore, 2019, p. 50). Both members of the dyad share a "communication of an implicit creative state" (p. 50). In this regressed, subconscious, implicit, openly receptive state, the client and the empathic therapist access their right brain concurrently, achieving wide-ranging "evenly suspended" attention (p. 125). The therapist is

in a ventral vagal state (Porges, 2011) and provides a “disconfirming experience” (B. Badenoch, personal communication, June 28, 2019) for the client as the therapist moves the client to a ventral vagal state. The experience is disconfirming because it is different from what the client has come to expect from others. In NSST, when the therapist and the client experience the images in the sand tray in this disconfirming but positive way, there is a mutual regression as they explore the client’s emerging, new sense of Self.

Accessing Novel Metaphor From the Embodied Mind

NSST embraces the neuroscience concept of the embodied mind. The embodied mind can be seen as the process whereby the mind regulates the flow of energy within the body from the “peripheral and autonomic nervous systems, the endocrine and immune systems, and signals from the physiological processes of the whole body” (Siegel, 2012, p. AI-27). The embodied mind is also a “relational process that *regulates* the flow of energy and information” with others (Siegel, 2012, p. AI-51).

Some affect-regulation therapists talk about the importance of the novel metaphor (A. N. Schore, 2017). Philosophers like Rorty (1991) used the concept of creative or novel metaphors in terms of communication. Rorty said that “a metaphor is, so to speak, a voice from outside logical space . . . It is a call to change one’s *language* and one’s life, rather than a proposal about how to systematize either” (p. 13).

Brain and language researchers such as Faust and Mashal (2007) explored the origins of novel metaphors in the brain through poetry. Others such as Hausman (1989) viewed the novel metaphor through the lens of aesthetic theory and art. NSST defines the term *novel metaphor* as an unconventional, unfamiliar, and unique image and concept outside of conscious awareness, which emerges from stored implicit experiences that have no words in the embodied mind. This novel metaphor is manifest and subsequently witnessed in the choice and the placement of the figurines in the sand tray. There is a resonating energetic match between the figurines and previously unknown, sequestered, implicit, unexpressed internal energy patterns.

Providing a Safe Space to Externalize the Internal Defences From Trauma

Among other phenomena, we are hard-wired for safety and play (Panksepp, 2010). NSST provides a safe, playful space in which the client can explore their internalized world. The sand tray affords a free, protected, and respected space, a sacred place to explore the most vulnerable parts of the client’s soul. The miniatures are a manageable, manoeuvrable way for the client to look at their internal world, to experience it, and to make new decisions about what still fits. When using the NSST approach, the client is invited explicitly to show, through the figurines, how they have kept themselves safe. When the client feels safe because

they are using figurines of novel metaphors, they are more willing to take a risk to move figurines around and to respond to a direct suggestion like “I want you to try something. Try putting the rabbit next to the angel. You can always put it back.”

Externalizing the Internal World: Moving Figurines Around and Integrating Them

Trying something different requires courage—for example, moving figurines around the sand tray in a therapy session and, ultimately, transforming the defences. Siegel (2001) wrote about “autonoesis” (p. 90), which is where previously unknown implicit parts of body memories are given cohesion in time as past, present, and anticipated future events and are recognized and reorganized. The client can observe their internal world in the sand tray and decide what fits now. In NSST, a time machine of an individual’s life can be laid out in the sand tray in the figurines that are chosen and their relationship to one another. This mindful interoceptive (van der Kolk, 2014) attention to the choice and the placement of the figurines within the context of a safe therapeutic relationship is what Siegel (2012) referred to (although not specifically within the context of a sand tray) as the flow of energy and information (p. 1-1). This energy is potentially a source of courage to make new decisions (De Little, 2017). It is also possibly a power source for epigenetic change (Lipton, 2015).

The NSST approach affords the client’s fragmented, dissociated, disorganized, disintegrated, and incoherent parts to be laid out literally in front of the client as symbols in the sand tray and moved around more freely. NSST is all play based (non-direct and direct), specifically using a sand tray with a choice of hundreds of figurines to pick from. The client can be curious and playful and can use their imagination and their humour to give them the courage to move beyond the present to a deeper level of Self.

The use of imagination and metaphor awakens the previously unknown, unconscious, unheard, unseen, and unexpected novel metaphors (Faust & Mashal, 2007; Hausman, 1989; A. N. Schore, 2017). When such creativity is employed in the sand tray, the client can see their past, their present, and their future, and they can move the components around and bring them all into the present. They can create images of their defences and what lies behind them. They can then make choices about how they perceive their parts, which ones they wish to keep, and which ones no longer fit. They can integrate their internal world by perceiving all their parts through projective identification into the figurines in the sand tray.

NSST allows for the client to make their meanings of their choices and the placement of their figurines through the process questions asked by the therapist. Experiencing such novel metaphors (Faust & Mashal, 2007; Hausman, 1989; A. N. Schore, 2017) stored in the right hemisphere and experiencing them in the body begins the process of unplugging (A. N. Schore, 2012) the defensive states of dissociation. The client can make new decisions about whether to keep

the defensive, fragmented parts that served to protect and keep the client safe in the past or to use other, healthier parts to allow for “coherent autobiographical narratives” (Siegel, 2001, p. 89).

No Story of What Happened Is Necessary to Do This Work

In NSST, no story is required. The only words used are to describe the metaphorical images and the impact they have on the client’s body. The client and the therapist work together at the level of the novel metaphor (Faust & Mashal, 2007; Hausman, 1989; A. N. Schore, 2017) of the right brain. These novel metaphors arise from untapped energy patterns (Diaz, 2020) of dissociated past traumatic experiences stored in the embodied brain (Badenoch, 2018).

This deep, mutual, regressive space affords safe awakenings of sequestered, defended, insecure disconnections in the past. In this affective psychotherapy, the cognitive left brain of both parties is turned off and the client and the therapist become immersed in intersubjective right-brain mutual regression. This creates space for the therapist to play within the intersubjective space. In NSST, there is not only a right brain–to–right brain connection between therapist and client but also a right brain connection between the client and the images in the sand tray, which the client chooses and moves around. In my experience, when the client moves out of the metaphor and into what happened, when it happened, and how it happened, the power of the emerging unconscious process is lost.

Without any story, the client can see their patterns of protection and attachment in the sand tray and the ways that these protective defences have helped keep them safe and given them special gifts. They begin to see their beliefs about themselves as no longer *fitting*, and then they can change, add, and move around figurines that fit for them now.

The Emergence of the Special Gifts of the Defences

The defences are seen in the sand tray by the client as having been helpful because they have been keeping the client safe. This new awareness is often an “aha” and transformative moment. Also, with the help of the therapist, the defences can be seen by the client as having given them “special gifts” (De Little, 2019a, p. 18). These special gifts allow the client to have a further transformative perspective of their defences. The client can see in the sand tray the way(s) the defences have kept them safe and can appreciate the special gifts that have arisen from those defences. For example, sometimes determination comes from anger; sometimes vigilance and good observation skills come from withdrawal.

The client is now looking at their survival attachment defences head-on and experiencing how important and how life-saving they were. The special gifts typically offer huge surprises for clients as they see their default defensive ways in a new light.

Bodily Sensations and Regulation

Client Becomes Aware of Bodily Sensations

In affective psychotherapy, the body is regarded as both an informant about the world and a facilitator, which allows the client to bring the implicit into conscious awareness, ensuring that the body is not just an object in the world but a means of “communicating with it” (Merleau-Ponty, 1962, p. 106). The body is clearly an instrument of physical processes, an instrument that can hear, see, touch, and smell the world around us. This sensitive instrument can tune in to the psyche: it can listen to its subtle voice, hear its silent music, and search into its darkness for meaning (Mathew, 1998, p. 17).

The NSST approach also involves inviting clients to express how their body is reacting to the placement of the figurines in the sand tray. Often, as the clients see scenarios in the sand tray emerge and transform, the therapist sees a release of traumatic experiences in the client’s crying, howling, shaking, and stamping. Being in touch with and aware of shifts in body state under a variety of situations can provide subjective and objective information that can be acted upon. In NSST, questions are asked of the client, such as “When you see this new picture/change in the sand tray, what is happening in your body? What are your tears saying?” Patterns of negative energy can be released from the client’s body with the help of the therapist in assisting the client to track shifts in their body state as they choose and move figurines in the sand tray.

Shift of Energy Between the Client and the Figurines

In NSST, figurines are added, moved, and taken away by the client as the original ones no longer fit. As the figurines are brought together and form one picture, I propose that a bilateral and vertical hemispherical integration is occurring.

As the client internalizes these new images of their Self within the safety of the right brain-to-right brain attuned therapeutic relationship, there appears a shift in the body. This shift is witnessed not only by the emerging new picture in the sand tray but also by changes in “prosody of voice, facial expressivity, gaze, and auditory hypersensitivities” (Porges, 2011, p. 298). The autonomic system moves from either a stuck shutdown dorsal vagal state (or what Porges, 2011, calls an immobilized state) or from sympathetic arousal (or what Porges, 2011, calls a mobilized state) to a ventral vagal state (which Porges, 2011, refers to as a social engagement or play state). Other taxonomies to describe this shift are insecure attachment (anxious, avoidant, or disorganized attachment) to secure attachment (Badenoch, 2008, p. 60) or “earned secure attachment” (Siegel, 2012, p. AI-26), dysregulated to regulated, depressed to healthy. The resulting shift is experienced somatically and cognitively, and new decisions can be made.

Enactments in the Metaphor

Kalsched (2015), Bromberg (2011), Maroda (1998, 2018), and Mucci (2013) all referred to enactments in therapy. Working in the sand tray appears to remove the powerful clashing of the therapeutic dyadic dissociated defences between the client and the therapist to which these authors refer (De Little, 2019b).

In NSST, an enactment happens in the sand tray between the figurines and the client; it is not predicated on the words of the therapist or even on their gestures. This enactment in the metaphor is a new concept and is central to NSST (De Little, 2019b). It is a way, through projective identification into figurines, for the client to encounter dissociated parts and defences with the corresponding release of the implicit traumatic experiences from the body. The enactments arise when the figurines reveal the depth and the dynamics of these past dysregulating experiences via the client's projections. In NSST, the sacred and safe space of the sand tray and the earned secure attachment of the client with the therapist hold and support these projections energetically and physically.

In NSST, the enactment is in the metaphor. The relational survival mechanisms (i.e., defences) are accessed within the therapeutic dyad of the client and the sand tray. However, the clashing of defensive states that is the basis of an enactment comes between the client and the figurines placed and moved about by the client in the sand tray. The symbolizing of past defensive patterns through accessing novel metaphors in the form of figurines is profoundly impactful. The therapist remains in a state of mutual regression throughout the session and only comes out of this deeply connected state to ask process questions of the sand tray and of the client's body. The process is contained safely in the sand tray through the miniature figurines and the attuned and caring right brain communication of the therapist.

Bromberg (2008) talked about "safe surprises" (p. 329) in therapy. In NSST, the negotiations of the choice of figurines within the arena of the sand tray allow the client to titrate their experiences through safe surprises via the choice and the placement of the figurines. The client can choose by experiencing the figurines and deciding which parts of them are no longer needed. The client can then remove or transform these parts within the miniature world of the sand tray. They can recover and internalize the newly formed modified image of these projections of themselves.

Summary

In NSST, becoming aware of and transforming old defensive patterns—so that dissociated, unconscious, dysregulated patterns can change—is essential for therapeutic growth. The right brain-to-right brain communication between therapist and client is the central platform for this awakening of past implicit experiences.

Then in the sand tray, novel metaphors of early attachment defences arise from within the client. The images that appear, almost like magic, bring together the unconscious and the conscious. Words are used to describe the metaphors. During this process, the therapist regulates the potentially chaotic process for the client by holding the space, having an awareness of the client's breathing, using a gentle touch (with permission), and using words of connection (e.g., "Can you feel me with you?"). This author's doctoral research (De Little, 2017) and anecdotal feedback received from clients and workshop participants shows that quick, profound, long-lasting, and achievable changes occur for clients within a "safe but not *too* safe" (Bromberg, 2008, p. 333) environment as the client accesses the implicit, unconscious memories of past traumatic (and often preverbal) events through novel metaphors and reformulates them in the sand tray.

These previously hidden and disintegrated parts become illuminated and reconnected with the currently accessible parts of Self through the choice and the placement of figurines. New patterns appear gradually and form first in the sand tray and then internally as new neural networks unfurl. This allows for what Siegel (2012) referred to as a flow of energy that "moves across time ... and is created in both the body and in interactions with others and our environment" (p. 1-6).

Case Study

In my doctoral thesis, I researched the impact of NSST therapy on 17 counsellors, some qualified and some graduate students (De Little, 2017). All were participants in three days of learning about NSST using a transformative pedagogy model, during which they received therapy in demonstrations and in triad work. Participants had the opportunity to be both therapist and observer in the training. All but one participant reported quick and profound changes, both personally and professionally. Follow-up questionnaires indicated that these changes were long-lasting. The profound personal "aha" moments made the participants experience themselves and their work differently and allowed them to make new decisions for themselves. Coding like "freedom," "peace," "awe," "celebration," "clarity," "complete," "whole," "delighted," "more fun," and "more positive" all suggested that the participants were changed at a deep level after the workshop (De Little, 2017).

The data about the NSST training were collected from all 17 participants, and while the findings cannot be generalized to a larger population, they are transferable to similar settings. In addition to this research, therapists who are trained in NSST and use it in a therapeutic setting have reported that their clients experience themselves in a different, healthier way after one to six sessions. My experience of using NSST, employed as a therapeutic method either with a *regular* client or with a therapist in training, is that profound transformational change occurs in a short period of time (De Little, 2017, 2019a, 2019b).

When teaching NSST, I conduct demonstrations each day to support participants' learning. The following case study is of a young counsellor from outside Canada who took the NSST training in October 2018. Initially, she was as defensive and frightened as many clients are when they come for NSST therapy, but by the end of the session, she had transformed her old way of keeping safe and had experienced herself differently.

Mary's Session

Starting the Session

Mary (pseudonym), despite being defensive and frightened, was keen to be a client in a demonstration that I did in a recent NSST workshop. I had gained her trust progressively over our first four days together as she watched me work with her peers in several demonstrations and had seen my work on videos with children and adults. I had no idea about her story except that she wanted to deal with some trauma from her past that she had never been able to work through successfully.

To clear any past energies from previous users of the sand tray, I smoothed the sand down, saying this was the only time I would touch the sand. To gain a baseline of her body state, I asked if she was anxious or excited about anything and if she could show me where in her body she was holding such sensations. She noted that her stomach was tight and her breathing was shallow, indicating a level of anxiety. I invited her to show me what she wanted to work on. As she moved around the room and collected her figurines, I stayed close to her to maintain a sense of connection and to communicate that I was there for her. I was tuned in to her non-verbal movements and to the ways she chose or discarded the figurines laid out on several tables.

She returned to the sand tray, laden with figurines, and I followed. As she found positions and places for her figurines, I watched her facial gestures and her choice and placement of figurines in the sand tray. The picture she created was dominated by two plastic containers that she had placed on top of a tiny figurine (see Figure 1).

Mutual Regression

Mary stood over the image in the sand tray, shook her head, and, referring to the two plastic containers, said, "You will never get that off." To which I replied with a smile, "Well, let's see." Immediately, there was a sense that we were doing this together and that, with my smile and my words, I was conveying hope. I was companionship her. The message was that she was no longer alone, as likely she would have felt during the traumatic event(s) of her past. There was stillness between us as we looked in silence at her metaphors of protection. I was there with her in mutual regression. It was as if there was no one else in the world except the two of us.

Figure 1
The Cage Has Kept Her Safe



I was also fleetingly in and out of my left brain as I conceptualized her process. The audience had seemed to disappear as Mary and I experienced in the sand tray her oppressive, default way of keeping safe from impactful trauma. Because of this powerful, intimate right brain-to-right brain attunement, my body was resonating with Mary's internal state, reflecting in me what was happening in her. The sensations resonating in me as we shared this moment of meeting felt oppressive in my stomach. I modelled deep breathing, her mirror neurons picked it up, and she began to breathe in and out from a deeper place in her body. After a long minute, I spoke these words from my left brain: "I will tell you what I see." I described objectively what I saw in her picture. "I see a transparent container on top of another container, and I think that there is a little human underneath these containers." I invited her to describe to me the containers and what was underneath.

A Silent Hypothesis

She told me that the two cages (plastic containers) were so big and heavy that the little boy underneath could never come out. As I listened to the descriptions of her novel metaphors while watching her non-verbal communication of despair, I began to form a silent, left-brain hypothesis of what Mary's implicit memory

was showing us. My working hypothesis was that the containers on top of the figurine were Mary's way of protecting/defending her vulnerable part. My theory included the possibility that this was her way of sequestering away some form of trauma in the implicit memory. My silent hypothesis was that this dissociation of the past was necessary for her to continue to cope.

I hypothesized to myself that these plastic containers were metaphors for her immobilized state, under the control of the dorsal vagal nervous system. This way of keeping safe had been helpful to Mary, if not life preserving. However, as symbolized by the double layer of protection in the form of plastic containers, this way of keeping safe had become excessive and potentially unhealthy for her. I understood that the goal of this session would be to help Mary appreciate how she had to stay safe and to find the special gifts that she had gained from being in that state for so long.

I then asked, "Did you know that this protection has been keeping you safe from something that happened to you when you were younger?" She cried as she came to see the positive intention of the protection. To elicit the special gifts of such default defences, I continued. "It has been keeping you safe. Can you show me how else it has helped?" She brought together several figurines very quickly. She placed a unicorn, a Wonder Woman, a lion, and jewels for her "special gifts." She described only the unicorn and Wonder Woman. She said that the unicorn was her inner beauty and that Wonder Woman was her intuition. She then placed the ladder on a three-dimensional triangle, which served as a fulcrum so that the ladder potentially could lift off the cage. Here was the beginning of possible incremental transformational change, as described earlier in Figure 1. As she experienced her special gifts internally, she experienced the potential for change.

Shifting Toward a Ventral Vagal State

As hope began to move closer to realizing new possibilities, her autonomic system was responding to a greater sense of safety, and her body and her facial gestures suggested that she was moving toward a ventral vagal state. I was experiencing this shift in her state as my body was feeling a sense of optimism as she was moving the figurines and her subsequent body state so fast. As she became increasingly activated, she added to the sand tray an angel holding on to a gurney as well as a Gumby figurine (I assumed they were special gifts since she had no words to describe them). Then she placed an eagle on top of the containers using words to describe the bird as her "wisdom part." I noticed and commented on how the unicorn had joined in the effort to lift off the container by lying down with its nose under the container's edge (see Figure 2).

Then she picked up the Incredible Hulk and placed him by the ladder—presumably, I thought, so that he could add his weight to lifting the defence off. I commented that the Incredible Hulk, Gumby, and the unicorn were all helping to lift the container/barrier off slowly (see Figure 3). This was her way of titrating

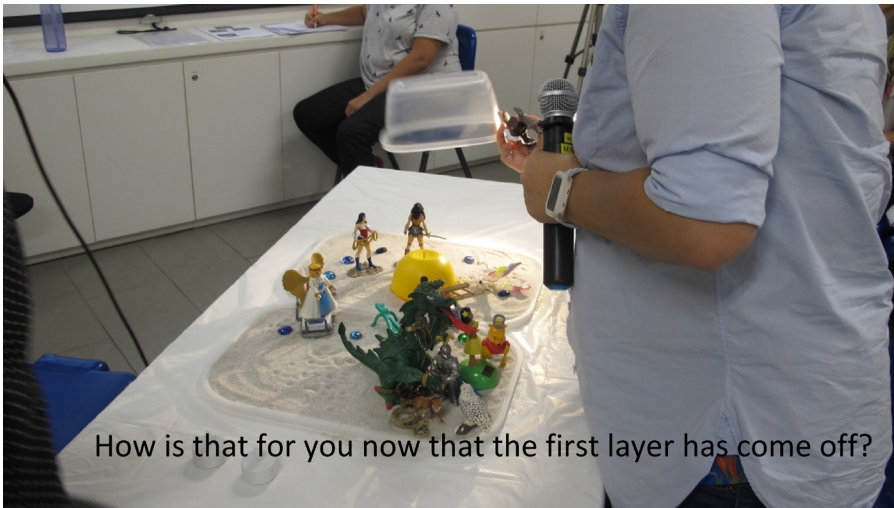
Figure 2
The Unicorn Helps to Lift Off the Container



Figure 3
Others Help Lift Off the Container



Figure 4
Questions for the Client's Body



the transformation of her critically important protective part, a part of her that perhaps was unwelcome and yet comforting in its familiarity. This push-and-pull of letting go of the old ways of coping by using other parts of her to support and supplement her was at a delicate stage.

Can We Do This Together?

It was at this point that she said she could go no further. In response, staying within the metaphor and referring to the Incredible Hulk figurine, I said, “That’s as far as he can go? So that’s it for today?” It was at this point that she cried harder, saying, “No—I want to, but I can’t.”

I waited another long minute and watched as her breathing became deeper, her tears slowed down, and her shoulders relaxed. She appeared to be in a conflicted, scared state. I spoke to her in a genuine, caring, loving tone of voice, with my right brain/body deeply attuned to hers and with full compassion in my heart, saying, “Let’s do this together.” After another long moment of silence, she nodded her head in agreement. I softly invited her to find any other parts of her that could help with the next step. I didn’t use the word resources, but this is what I call them. They are different from special gifts. I see them arising not specifically from the defences but as personal attributes. I stood with her as she sorted through the hundreds of figurines on the other tables. She introduced a dragon into the tray, saying he had courage and determination. At this point, she stood, lifted off the first container slowly, and held it in her hand (see Figure 4).

Figure 5
Gradually, the Boy's Legs Appear



Figure 6
The Angel Brings the Gurney Closer



The dragon part of her had been externalized and had given her the energy to do something profoundly difficult. She could not have done this if her special gifts and the dragon had not been externalized and experienced by her. I was taken aback by the speed of this transformation, and I was waiting to see if she would put the container back. But she didn't. I asked about how it was for her now that she could see that the first layer had come off. She replied that it was not as scary as she had thought it would be. I asked her what bodily sensations she was experiencing. She said that she felt lighter in her chest and that her stomach was not so tight. This shift in her body was an indication that she was moving out of the dorsal vagal state toward the ventral vagal/social engagement system/play state. She proceeded to lean Wonder Woman against the second container. It had a hole in the bottom, and my perception was that Wonder Woman was looking inside. Again, I used the metaphor of this image by asking, "What does Wonder Woman see inside?" Mary replied, "A little boy." She placed the Incredible Hulk astride the ladder (see Figure 5) as if to put all his weight on the ladder to lever off the container that was, in effect, suffocating the little boy figurine. As the Incredible Hulk continued to use his might, the legs of the little boy gradually began to appear. As this was occurring, I was likening it to the "jaws of life" whereby paramedics rescue people from a tangled wreck of cars. The Incredible Hulk part of her was rescuing another part of her.

As Mary lifted off the second container, the angel brought the gurney closer (see Figure 6). Gumby then greeted the little boy with open arms and Mary placed the little boy in Gumby's lap (see Figure 7). Mary was allowing Gumby to give what the little boy needed: to be free and to be connected, to be accepted, and to be held in the arms of another. The little boy figurine was no longer alone. Mary was no longer alone. She was connected to all her parts. She would now be able to experience the integration of her sequestered, dissociated parts.

Mary reported that after this sand tray work, she felt freer, she could breathe more easily, and her stomach did not hurt anymore. She said that she felt happier, more connected to others, and with a sense of peace inside.

Conclusion

Mary connected all her special gifts, her resources, and her vulnerable parts to work together to bring about a transformation of her defences. The transformation was that the constricting defences were no longer required. She was able to appreciate how important they had been in keeping her safe and to appreciate the gifts that these defences had given her. Now, these special gifts of wisdom, inner beauty, courage, and intuition would help to keep her safe, and the oppressive defences were no longer necessary. My understanding of the neuroscience behind this change is that her experience in using the sand tray brought about a change at a genetic level.

Figure 7
The Boy Is Greeted by Gumby



Through projective identification between herself and the figurines, Mary began to encounter the dissociated parts of herself. She came to appreciate how her default way of keeping herself safe had been vital to her life and had given her a plethora of special gifts that she could use now to assist her instead of the old ways of staying safe. She felt positive sensations in her body as she experienced how the protection of her defences (the two plastic containers) had been essential to her survival. She began to experience a sense of hope and potential for change because the special gifts could be used as an alternative way of keeping safe. She was able to see how the resources she was aware of already could work with her newly found special gifts to help her keep safe and move forward.

In this process, the sand tray provided a contained sacred space in which to work. My relationship with her gave her enough of a developing earned secure attachment to take risks and to move the figurines around. In the session, I was present energetically and physically to hold and to support the projective identification she was experiencing with the figurines. In the enactment, in the metaphor, the figurines mirrored back her past experiences and her inner world.

For a moment she was frozen, unable to go back or to move forward. Then we looked at all her parts as they worked together in the sand tray to bring back to life a part of her that had metaphorically got left behind. As Mary projected her unconscious experiences into the figurines, she was able to externalize them. She was able to see the depth and the dynamics of her parts from the past. She was able to separate the parts of her that had become helpful from other parts

that had become too big and restrictive. She was able to integrate the past and the present in the metaphor to create a new way of being, not just feeling better but being different at a genetic, cellular level (Jiménez et al., 2018).

Two years later, during an international zoom webinar, I presented this example of NSST as a way to transform the defences. Mary was present and I asked her to speak about this experience. Here is her response:

Session was liberating. When I started the process in the class, it was in relation to my work and how I had felt stuck. However, upon working through the session with Madeleine, I realized that it was more than just about work as it was linked to a very young part of my life. I had not realized that I had been feeling so trapped for the longest time. The frozen state was something that permeated into other parts of my life, making it difficult for me to make changes even though the automatic responses were outdated and no longer relevant right now in my life. So being able to have that resolved actually started the ball rolling on changing the other parts of my life. I have since been able to make better decisions about how to achieve my yearnings, making me more congruent in my life. It has also increased my ability to be reflective in my work, which then helped me become more effective with my clients.

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