

ORIGINAL ARTICLE

An exploration of the processing of suppressed memories during Rebirthing-Breathwork

Uma exploração do processamento de memórias suprimidas durante Rebirthing-Breathwork

Una exploración del procesamiento de memorias suprimidas durante Rebirthing-Breathwork

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Abstract

Rebirthing-Breathwork is a technique that uses the breathing rhythm to activate a somatic-cognitive cycle. When allowed to unfold, this cycle activates suppressed and traumatic memories, brings them to consciousness and leads to their resolution. In this analytic and interpretative study we draw on first-person experiences and clinical observations to describe the phases of a typical Rebirthing Breathwork session. Changes in consciousness and in particular the phases related to the processing of suppressed or traumatic memories during Rebirthing Breathwork are described in detail, with the objective of developing a processing model. The findings are

compared with the Adaptive Information Processing model developed by Shapiro to explain the processing of dysfunctional memories during Eye movement Desensitization and Reprocessing (EMDR). Shapiro's model is based on neurobiological theories and on the hypothesis that during EMDR traumatic memories form new connections and are assimilated in larger neural networks. Our findings suggest a different model, which involves the distillation and re-evaluation of subjective conceptual content. We sketch an alternative processing model – not based on information processing, but on consciousness and cognition – in which the subjective content of the memory is compared to an intuitively perceived higher self-image.

Keywords: Rebirthing-Breathwork; EMDR; Adaptive Information Processing; Traumatic memories.

Resumo

Rebirthing-Breathwork é uma técnica que utiliza o ritmo respiratório para ativar um ciclo cognitivo-somático. Quando permitido que se desenvolva, esse ciclo ativa memórias traumáticas reprimidas, trazendo-as à consciência e conduzindo-as à sua resolução. Neste estudo analítico e interpretativo utilizamos experiências pessoais e observações clínicas para descrever as fases de uma sessão típica de Rebirthing-Breathwork. Descrevemos em detalhes as mudanças de consciência e, particularmente, as fases relacionadas ao processamento de memórias reprimidas ou traumáticas durante a sessão. As evidências são comparadas ao Adaptive Information Processing model (AIP – modelo de processamento de informações adaptativas) desenvolvido por Shapiro para explicar a elaboração de memórias disfuncionais durante a terapia EMDR (Eye Movement Desensitization and Reprocessing, ou Dessensibilização e Reprocessamento por Movimentos Oculares). O modelo de Shapiro é baseado em teorias neurobiológicas e na hipótese de que, durante o EMDR, as memórias traumáticas formam novas conexões e são assimiladas em redes neurais maiores. As nossas observações sugerem um modelo diferente, que envolve a destilação e reavaliação do conteúdo conceitual subjetivo. Esboçamos um modelo alternativo de processamento – não baseado no processamento de informação, mas em consciência e cognição – no qual o conteúdo subjetivo da memória é comparado a uma autoimagem superior que é percebida intuitivamente.

Palavras-chave: Rebirthing-breathwork; EMDR; Adaptive Information Processing; Memórias traumáticas.

Resumen

Rebirthing-Breathwork es una técnica que utiliza el ritmo respiratorio para activar un ciclo cognitivo-somático. Cuando permitido que se desarrolle, este ciclo activa memorias suprimidas y traumáticas, lleva las mismas a la conciencia y conduce hacia su resolución. En este estudio analítico e interpretativo aportamos experiencias personales y observaciones clínicas para describir las fases de una sesión típica de Rebirthing-Breathwork. Cambios en conciencia y en especial las fases relativas al procesamiento de memorias suprimidas y traumáticas durante el Rebirthing-Breathwork son descritos en detalles. Las evidencias son comparadas al Adaptive

Information Processing model (AIP – modelo de procesamiento de informaciones adaptativas) desarrollado por Shapiro para explicación de la elaboración de memorias non-funcionales durante la terapia EMDR (Eye Movement Desensitization and Reprocessing, o Desensibilización y Reprocesamiento por Movimientos Oculares). El modelo de Shapiro es basado en teorías neurobiológicas y en la hipótesis de que, durante el EMDR, las memorias traumáticas forman nuevas conexiones y son asimiladas en redes neurales más grandes. Nuestras observaciones sugieren un modelo distinto, que abarca la destilación y reevaluación del contenido conceptual subjetivo. Esbozamos un modelo alternativo de procesamiento – non basado en el procesamiento de información, pero en conciencia y cognición – en el cual el contenido subjetivo de la memoria es comparado a una autoimagen superior que es percibida intuitivamente.

Palabras clave: Rebirthing-Breathwork; EMDR; Adaptive Information Processing; Memorias traumáticas.

1. Introduction

In a preceding article about *Rebirthing-Breathwork* (RB) we addressed the roles the autonomous nervous system (ANS), consciousness and two types of psychophysiological defenses (urgency and dissociation) play in accessing suppressed or dissociated memories of traumatic events during RB. We announced that we would address the actual processing of such memories during RB in a second article¹. We pointed out that RB shares key features with both *Somatic Experiencing* (SE) and *Eye Movement Desensitization and Reprocessing* (EMDR), two therapeutic modalities with a relatively high success rate in the treatment of traumatic stress reactions²⁻⁷. In contrast to SE and EMDR RB is not a therapist-induced process, it tends to activate unprocessed memories spontaneously, without deliberately directing the client's attention to such memories or to experiences associated with them.

We are in the process of developing a trauma model based on the hypothesis that traumatic stress reactions are part of a spontaneous regulatory process and that this process has become blocked in traumatic stress disorders. Our goal is to create a trauma model that goes beyond present trauma models, all of which ultimately reduce traumatic stress reactions to physiological processes and their dysregulation. The spontaneous, undirected manner in which RB allows traumatic memories to be accessed and processed supports the hypothesis that traumatic stress reactions are part of a natural, spontaneous regulatory process. We believe that the experiences and phenomena associated with the processing of traumatic memories during RB can be better explained by a processing model that does not *reduce* these experiences to (neuro) physiological processes.

We have addressed the key features which RB shares with SE in the preceding article. These are related to the ANS and to how its activation is connected to the *defense-dissociation sequence*. Both RB and SE induce somatic processing that allows completion of uncompleted survival movements and release of mobilized survival energies. RB and SE both rein in the tendency to dissociate by encouraging embodiment and empowerment. In this article we will focus on the key feature RB shares with EMDR: a form of rapid, associative processing

that induces “desensitization, spontaneous insights, cognitive restructuring, and association to positive effects and resources”^{2(p15-16)}. Shapiro calls this processing *Adaptive Information Processing (AIP)*^{2,3,8}.

Our objective in this article is twofold: 1) to explore the processing of past experiences during RB from a first-person perspective; and 2) to propose a processing model based on this exploration.

2. The conscious experience of processing past experiences during Rebirthing-Breathwork

A RB session ‘simply’ consists of an hour or more of conscious connected breathing, generally with eyes closed, while lying on a mat. During RB sessions altered states of consciousness are common. Especially during early sessions experiences can be quite intense, frequently involving the processing of suppressed memories of past events. While undergoing such experiences people are normally also aware of their present situation (i.e. that they are lying on a mat, focusing on their breathing and having these unusual experiences)^{1,7,9,10}.

Most people undergoing their first RB sessions find it difficult to connect their experiences during the sessions with how they normally perceive themselves. The manner in which they have learned to make sense of experiences appears inadequate to make sense of some of the experiences during RB. One only gradually discovers and develops concepts and internal models that help to give these experiences a proper place. This process can take years and may well include developing a new image of the world and of oneself.

Stanislav Grof developed an elaborate model of the mind meant to explain experiences during sessions with LSD and *Holotropic Breathwork (HB)*¹¹. Although HB differs considerably from RB, both forms of breathwork can lead to comparable inner experiences. Grof’s model of the mind – an expansion of Freud’s model of the unconscious – built on clinical experience with LSD and HB, forms one of the foundations for *transpersonal psychology*(TP)¹¹⁻¹⁴.

Contrary to Grof, we want to stay closer to experienced phenomena and focus on the actual experience of the processing of suppressed memories during RB. In our previous article we focused on the psychophysiological defenses that are encountered when suppressed and traumatic memories become activated and on strategies to deal with these defenses, and associated them with a psychophysiological threshold between conscious experience and subconscious memories: the *liminal zone*(LZ)¹. Here we will focus on what happens when those defenses have been successfully negotiated and the memories are consciously accessed. The following exploration is based on the personal and clinical experience of the first and the second author, which consists of first-person experiences, clinical observations and/or first-hand accounts of 4500-5000 RB sessions over a period of 32 years. We refer to Adams and Weger & Wagemann for arguments and methodological suggestions for the use of first-person inquiry in psychology^{15,16}. The second step of Weger & Wagemann’s methodological extension^{16(p.45)} best describes the methodology on which this article is based.

3. Overview of the different phases of a Rebirthing-Breathwork session

Based on first-person experiences and observed behaviors during RB we have identified nine distinct phases that can occur during RB sessions (see Table 1). These phases do not necessarily all occur during one RB session and at times the order in which they appear differs (or may be remembered differently). Some phases may occur more than once.

Table 1. *The nine phases that can occur during Rebirthing-Breathwork*

Phase	Label	Experience/Symptoms/Behavior
1	introduction	emerging bodily sensations (tingling, trembling, shaking, cramping, pain, cold, warmth, discomfort etc.) and/or emotions (fear, panic, anger, love, sadness, happiness, grief)
2	defense	urgency or dissociation ¹ ; connected breathing exceedingly difficult to maintain
3	immersion	surrender to/immersion in arising sensations/emotions; the breathing rhythm adapts to the experience
4	inversion	inversion of consciousness from central to peripheral (the inversion itself is usually not experienced consciously); short spasm of (usually) the right foot
5	association	succession of associated memories, immersion in some of them; REM
6	insight/epiphany	sudden intuitive clarity about thought/belief embedded in the experience that wasn't fully processed; opening of 'inner space'; exhilaration; surge of energy; deep full breaths
7	transliminal	transpersonal, spiritual experiences ⁷⁻¹³ – often (but not necessarily) in a state of profound relaxation that has the appearance of sleep
8	deep relaxation	profound relaxation; possible short period of sleep; possible breath suspension ⁷ ; slow, relaxed breathing rhythm; REM
9	return	return to the body, starting to move toes, feet, legs, fingers, hands, arms, head; opening of eyes; re-engaging with other(s)

During the first phase, which can commence within minutes after starting a connected breathing rhythm, 'unusual' somatic and/or emotional experiences start to emerge. They can vary in intensity from very subtle to quite dramatic. After a few RB sessions people get used to these experiences and they tend to become less intense. Unless the rebirthee (the person undergoing the session) has suffered more complex trauma, somatic and emotional experiences connected to suppressed memories related to the present biography tend to occur mostly during the first 1-5 sessions. After these initial sessions the experiences become more subtle.

The second phase consists of experiences related to the defenses. We have discussed these extensively in the preceding article.¹ This phase may well be the *first* phase that actually manifests during a session, particularly in the case of *dissociation*. During this phase maintaining a connected breathing rhythm becomes exceedingly difficult. In exceptional cases trying to overcome defenses can last a whole session^{1,7}.

The phases we are interested in in this article are phases 3, 5, and 6 – these are the main phases in which

traumatic memories are processed cognitively and they will be described in more detail below. Phase 4 is a shift in consciousness experienced consciously only by few (usually very experienced) rebirthers or meditators. Most people go through this phase without being aware of the actual shift. It is similar to the moment of falling asleep. Consciousness is inverted from *central* (i.e. I experience myself as the subject at the center of consciousness and receive sense-impressions from the environment) to *peripheral* (i.e. a richer, more alive form of consciousness that doesn't have a center but encompasses the whole experience, offering a hyperclear picture). This state of consciousness is often accompanied by a deep sense of peace, and excellent descriptions of the first level of peripheral consciousness can be found in narratives relating the experience of people being involved in life-threatening situations⁵. Figure 1 gives a schematic representation of the levels of consciousness described here and situates them with respect to other systems and phenomena mentioned in this and our previous article. There appear to be at least three levels to peripheral consciousness: level I corresponds to the hyperclear state, level II to the state reached during REM sleep and level III to states normally occurring during deep sleep. During phases 4–8 consciousness repeatedly oscillates through levels I, II and III. It is important to note that although the levels are ordered, the experience during RB doesn't necessarily follow this order. During Phase 4 there may first be a brief drop of consciousness to level III, before it rises to levels I or II. During Phase 5 level II dominates. During Phase 6 level I dominates.

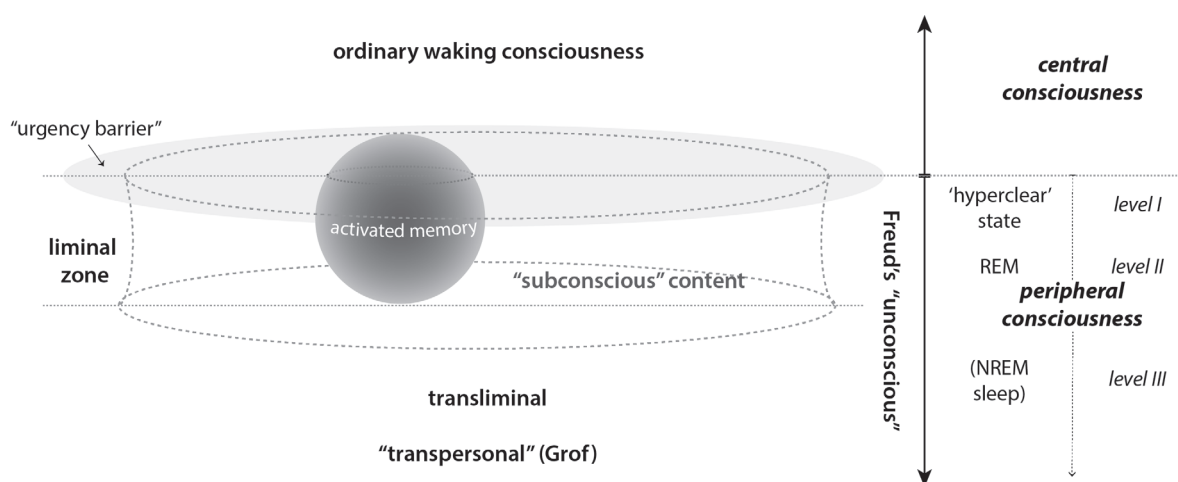


Figure 1. Levels of consciousness and the liminal zone. Copyright P. de Wit.

During phases 7–8 level III is reached more consistently, usually without (complete) loss of consciousness. The inversion of consciousness is not stable and there may be oscillations between central and peripheral consciousness. (Strengthening of consciousness through training¹ produces more stable states). During phases 4–8 what Grof calls the transpersonal may be experienced – in line with our terminology we call this type of experiences transliminal (meaning: beyond the threshold). The ability to experience Phase 7 may depend on constitutional factors and on the ability of the rebirther to remain conscious during deep relaxation (see

Grof for comprehensive descriptions of transpersonal/-liminal experiences¹¹⁻¹⁴). Phase 9 resembles waking up after a healthy sleep.

Advanced RB sessions consist predominantly of phases 2 (subtly), 4, 6, 8 and 9; phases 3 and 5 occur occasionally when deeper subconscious (transliminal) content is accessed.

4. The processing phases

The processing of (partly) unprocessed past experiences during RB consists of three phases. During the first phase (Phase 3) the rebirthee immerses herself* more or less fully in the experience. Conscious awareness of the present isn't completely lost, but as the rebirthee immerses herself deeper in the physical, emotional and other experiences related to the past event, awareness of the present recedes to the background. As the rebirthee allows sensations and experiences related to the past event into consciousness, they become partly embodied and the breathing rhythm adapts to these embodied sensations and emotions. This adaptation is often spontaneous, but may also be encouraged by the therapist. Enactment of past events is generally not recommended (although there can be exceptions to this, particularly when the experience appears to be related to the birth-process and the rebirthee has difficulty accessing it fully). Thus, impulses to act are generally not engaged in and the rebirthee is actively encouraged to keep her muscles as relaxed as possible. Spontaneous muscle contractions (spasms, shaking, trembling etc.) are welcomed as part of the release process¹ and spontaneous expression of emotion (e.g. crying, laughing) are also welcomed. Overindulgence and exaggeration ("drama") are discouraged. Decoupling experiences from the impulse to act allows the rebirthee to fully focus on *experiencing* the sensations, emotions and images that arise. During the immersion phase the intensity and vividness of the experience can reach the level of a flashback, but less intense experiences of (parts of) a past event are more common and the experience may only involve one or more senses (e.g., touch, light, sound)¹. During immersion the rebirthee identifies more with the re-experienced events or sensations than with her present self. Immersion can be brief or more extended, lasting for several minutes or longer. The events, emotions or sensations are experienced at an intensely personal level. The rebirthee surrenders to the experiences.

During the association phase (Phase 5) a rapid succession of memories of other events and experiences, meaningfully associated with the experiences during the immersion phase, starts to fill consciousness. (We write "meaningfully associated", but during the experience the meaning is often not obvious – at least not to ordinary thinking). Experience during this phase may be as intense as during the immersion phase, but it tends to be more dream-like. The rebirthee may immerse herself for some moments in particularly vivid memories (thereby re-entering the immersion phase). In general consciousness tends to become 'looser', and self-consciousness tends to oscillate and may vary from strong to almost absent.

In Phase 6 the rebirthee is suddenly wide awake with a realization connected to the past event(s) she

* As a contribution to the fair use of gender we have chosen to deliberately use the feminine pronoun when referring to "the rebirthee".

just re-experienced. The realization tends to be of the following general nature: she becomes conscious of a *restrictive decision* (or conclusion) she first made during the original event and repeated during the associated events. She understands how this decision has affected her life. Until this moment of realization, the decision/conclusion was subconscious and had taken the form of a fixed *belief* about herself and/or others, or the world; now she realizes that it was *her* decision/conclusion and that she can thus *change* it. This realization is immensely empowering and tends to be accompanied by feelings of euphoria. This phase may not occur consciously during the session, the insight can also become conscious afterwards, while sharing the session, or at a later time. The fixed belief may also loosen its hold gradually *without* a distinct conscious insight into its true nature.

4.1 A classic example

We provide the following composite example (based on many actual cases), to illustrate the unfolding of Phases 3–6 during RB. 10-20 minutes into her session a rebirthee starts experiencing strong feelings of inability and helplessness, while also increasingly feeling unable to move physically. Gradually her knees bend and her chin moves to the chest while the muscles in her shoulders, thorax and abdomen tighten (if encouraged to enact what the body ‘wants’ to do, the rebirthee will curl into a tight fetal ball, the head may gradually bent backwards, and she may feel inclined to press her feet into the mat). The rebirthee breathes through these experiences and the feeling of disempowerment turns into a deep sense of hopelessness; “I can’t do it” she realizes desperately. (She may even speak those words out loud). Now the experience changes and moments in her life when she felt the same hopeless desperation and had related thoughts start to flash through her mind. Occasionally she is carried away by an arising memory. Between memories she returns to the connected breathing rhythm. It feels as if these experiences last for a long time, but her experience of time is altered, as during dreaming. Her body gradually relaxes, but she is hardly aware of it. Suddenly she is wide awake, it feels as if she has moved ‘through’ the *experience* of the belief “I can’t do it” – her experience of it has turned inside-out as it were, and she now perceives it from the outside; she ‘looks’ at it as a thought instead of *experiencing* it. She realizes that the belief “I can’t do it” has played a central part in her life and that it has restricted her severely. It has been one of the foundations of who she was for as long as she can remember. She realizes that *she* is responsible for holding on to the thought, that it is a decision *she* keeps making in situations in which she feels trapped. She is struck by the realization that *this insight* – that the belief is a thought, a *decision*, not a *truth* – means that she can now change this – *she* is in charge now, not the thought, nor the situation. This realization, here spelled out in several sentences, hits her in one instant and fills her with exuberant energy.

(We call this a classic example, because the experience of immobility and the accompanying sense of desperation described here occur frequently during (early) RB sessions. Based on detailed reports, rebirthers associate such experiences with the prenatal stage of being stuck in the womb, shortly before birth, when the cervix has not yet dilated sufficiently to let the infant through – see also Grof¹²⁻¹⁴; also see our previous article for a discussion of immobility¹).

5. (Re)processing during EMDR

Reports about the processing phases of EMDR sessions describe experiences very similar to the ones described above (except the associations with birth). When reporting personal experiences and clinical observations, EMDR therapists particularly mention experiences reminiscent of those during Phases 1, 3 and 5 in RB.^{2,8,17,18} Some descriptions extend to Phase 6 (although this phase would be described differently if only the descriptions of EMDR therapist were available; it would probably be described as putting past (e.g. childhood) events into a present (adult) perspective)^{17,18}. Despite the use of a relatively strict treatment protocol during EMDR sessions, van der Kolk emphasizes that the processing during EMDR is predominantly an inner experience which doesn't require verbal exchanges. Some of his descriptions are reminiscent of Phase 7, particularly when he reports about a client's intuition concerning the deeper significance of a relationship and about how she perceives that healing extends to ancestors¹⁸.

We believe that EMDR and RB allow clients to access the same form of processing. But based on case reports we conclude that the therapist-directed protocol of EMDR doesn't allow the processing to manifest as freely as during RB. In RB the therapist doesn't interfere in the processing; it is allowed to unfold spontaneously. Moreover, the rhythmic stimulation and the reminder to "notice that"^{2,17,18} are not externalized and initiated by the therapist as in EMDR, they are effectuated by the rebirthee herself (in the form of a conscious connected breathing rhythm and the resultant state of mindfulness).

5.1 The Adaptive Information Processing model

The AIP model proposed by Shapiro posits that: 1. memories are stored in the brain; 2. memories form associations, they are linked together in neural networks; 3. current experiences are accommodated and assimilated into existing networks, which are thereby constantly updated – this, the updating and expansion of neural networks through the processing of new experiences, constitutes learning; 4. traumatic experiences cause a neurophysiological imbalance that prevents the assimilation of these experiences in existing networks; as a result they are stored in "state-specific form"^{19(p316)} (they maintain the form of the original experience), in their own, isolated neural network; 5. these isolated networks may form links with survival mechanisms and form the basis for maladaptive behavior when triggered by current (not survival-related) experiences that share qualities with the dysfunctionally stored memory; 6. EMDR triggers a physiological state that encourages the re-processing of dysfunctionally stored memories (suggested mechanism: relaxation response, activation and strengthening of weak associations, mindfulness, orienting response^{2(p31),20}); 7. during EMDR isolated neural networks are assimilated in larger networks^{2,3,8,19,20}.

6. An alternative processing model

The evidence from EMDR shows that when the client is remembering a memory and experiences a succession of associations, the traumatic memory gradually loses its charge and eventually is no longer experienced as traumatic. The conclusion that the memory must therefore have been assimilated seems warranted. No one really understands how memories can be stored in physical neurons, or how memories can be assimilated in neural networks, nevertheless the model which associates memories with neural networks is widely accepted and the conclusion that during EMDR the traumatic memory must have been assimilated in a larger network is understandable and admittedly quite elegant.

In the AIP model what we have called Phase 5 in this paper – the association phase – is interpreted as a phase in which isolated memory-systems start to make *new* connections. The model is built on the hypothesis that the eye movements (or other forms of bilateral stimulation) induce a state that enables the establishment of so-called *weak* associations. (During ordinary waking states such weak associations are not formed, the only other state in which this is thought to happen is during REM sleep¹⁸). Based on this hypothesis the mental associations the EMDR client experiences during the association phase are considered *new* and EMDR theorists interpret this as evidence of neural *re-processing*, or adaptive learning^{2,8,20}. We posit that the evidence suggests a different process. Perhaps during the phases of a RB session the evidence is more obvious, but EMDR case reports show glimpses of it too. The associations experienced during the association phase are not new, they are significant reiterations of a subjective aspect of the traumatic memory. We think that the association phase is part of a process of *re-evaluation* which encompasses the three phases described earlier (Phases 3, 5 & 6).

Let us reiterate these three stages of processing. During the first stage the rebirthee allows the traumatic memory to become conscious and immerses herself in it. This is an intense, subjective, very personal experience. Identification with the arising sensations, emotions, images and feelings is maximal. The essence of this stage is *immersion* and *identification*.

The second stage is the association phase. During this phase self-consciousness and identification fluctuate. During hyperassociative sequences self-consciousness is almost lost, as it is in dreams, but when specific memories are encountered self-consciousness reawakens and brief phases of immersion occur. This process unfolds spontaneously, but sometimes a deeper purpose behind the associations can be sensed and a wisdom that goes beyond the perceived self. We propose that the essence of this stage is one of *searching*, *extracting* and *weighing*.

By really *experiencing* the sensations and emotions of the traumatic memory, the rebirthee has opened herself to *re-cognize* what she believed these experiences were telling her when they originally occurred. In the subsequent associations this recognition is deepened as the consolidation of this “message” is tracked through life. In the third stage she finds herself consciously looking at the meaning she gave to these experiences and realizes she no longer believes in it.

Therefore, the core processes during the reprocessing of a traumatic memory are not accommodation and assimilation but *extraction/distillation* and (re)*evaluation*. What is distilled and evaluated is the *meaning* the traumatic experiences were given. This meaning doesn't measure up against an image, a 'blueprint' the rebirthee now senses within herself. This image, this 'blueprint' is in essence a *higher* image of herself.

But where does this image come from? The rebirthee doesn't merely *invent* this image. As Van der Kolk writes when reporting about the dramatic changes taking place in one of his EMDR clients: "it was as if her life force emerged to create new possibilities for her future."^{18(p259)} We want to present a hypothesis about the source of this higher image. Our hypothesis is not based on neurobiological processes, but on consciousness. To explain our hypothesis we follow the phases during RB as a guideline. To aid conceptualization we have represented the *movement* of consciousness through the phases of RB in an image (Figure 2). The arrows in this image represent the movement of consciousness as it travels from ordinary waking consciousness through the phases of RB. The numbered zones between the concentric circles correspond to the phases listed in Table 1. The liminal zone forms the threshold between what we are aware of during ordinary waking consciousness and what we can become aware of in other states of consciousness. In psychoanalytic terminology what lies underneath the LZ constitutes the *unconscious*; in TP it constitutes the *transpersonal*; we call it the *transliminal* (Fig. 1).

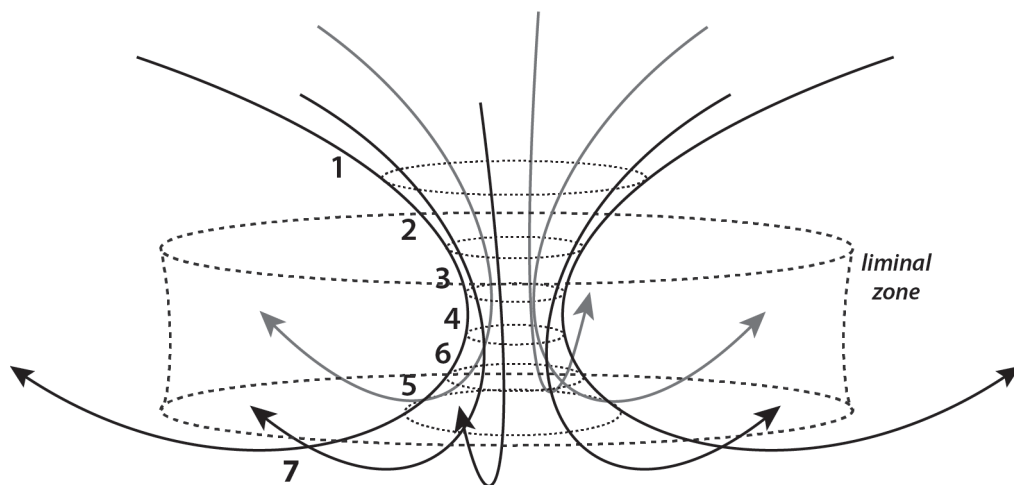


Figure 2. The 'movement' of consciousness through the phases of RB (the numbered zones delimited by concentric circles correspond to phases 1-7 listed in Table 1; Phases 8 and 9 are not represented, but Phase 8 reverses through phases 7-4 and Phase 9 emerges from the top of the liminal zone; Phases 3-7 are not as clearly delimited as pictured here, they partly overlap). Copyright P. de Wit.

We *enter* the LZ whenever we daydream or lose ourselves in fantasies. We *cross* the LZ every time we fall asleep (and when we wake up we cross it in the opposite direction) – but normally we don't cross it

consciously. Normally consciousness is not strong enough to uphold itself during crossing of the LZ (but see our previous article for a brief discussion of how consciousness can be strengthened¹). As stated earlier, while it crosses through the LZ, consciousness undergoes a radical change and is 'inverted' from central to peripheral.

Our working hypothesis (based on Steiner²¹) is that while consciousness moves through the LZ it is gradually liberated from its connection with physiological processes and becomes more independent. During the sleep state associated with REM, consciousness is crossing the LZ; during deep sleep (NREM) it has crossed into the transliminal. The transliminal is not an unknown, dark void, it is the source of higher inspiration and creativity, and indeed of the higher image – the 'blueprint' –against which the rebirthee measures the meaning she distilled from the traumatic experiences.

When consciousness moves down the LZ it extracts the meanings it has given recent experiences and these meanings are weighed against the 'higher image' in the transliminal. When consciousness *returns* from the transliminal it brings with it the results of this evaluation, and during the crossing of the LZ and the re-association with physiological processes these evaluations are 'translated' in a form in which waking consciousness can make sense of them. These insights manifest in waking consciousness as higher thoughts, as inspirations, insights, creativity^{22,23} etc. This process, we assert, constitutes true learning and true adaptive self-regulation.

7. Conclusion

Experiences during RB are difficult to conceptualize. Analysis of the experiences related to the processing of traumatic memories during RB suggests a process that goes beyond contemporary conceptualizations based on information processing and neurobiology. In this article we have suggested a cognition- and consciousness-based, adaptive model that involves the *distillation* of deeply subjective conceptual content and the *re-evaluation* of this content on the basis of an intuitive perception of what we have loosely described as a *higher self-image*.

In a preceding article we described the process of *accessing* suppressed traumatic memories, and in a further article we intend to compare the two theoretical aspects proposed in these two articles to the measures taken and observations made during a case study of the treatment of a firefighter suffering from PTSD with RB.

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