



ORIGINAL ARTICLE

Rebirthing-Breathwork, activation of the autonomic nervous system, and psychophysiological defenses

Rebirthing-Breathwork, ativação do sistema nervoso autónomo, e defesas psicofisiológicas

Rebirthing-Breathwork, activación del sistema nervioso autónomo, y defensas psicofisiológicas

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Abstract

Rebirthing-Breathwork can be described as a technique that uses the breathing rhythm to activate a somatic-cognitive cycle. When allowed to unfold, this cycle spontaneously brings unresolved issues to consciousness

and leads to their resolution. This is an analytic and interpretative study with the goal to present a theoretical basis for a processing model that the authors are developing to use Rebirthing-Breathwork in the treatment of traumatic stress-related disorders. In this essay we discuss Rebirthing-Breathwork in the light of a theory and an approach developed by Peter Levine and address the role psychophysiological defenses and the autonomic nervous system play in accessing suppressed and traumatic memories. Based on personal and clinical evidence we describe how Rebirthing-Breathwork activates suppressed and traumatic memories; how these activated memories activate one of two types of psychophysiological defenses; and how these defenses can be negotiated by means of mindfulness, embodiment and empowerment, so that the activated memories can be processed.

Keywords: Rebirthing-Breathwork; Somatic Experiencing; Autonomic nervous system; Psychophysiological defenses; Traumatic memories.

Resumo

Rebirthing-Breathwork pode ser descrito como uma técnica que utiliza o ritmo respiratório para ativar um ciclo cognitivo-somático. Quando permitido o seu desenvolvimento, este ciclo traz questões não resolvidas à consciência, conduzindo-as à sua resolução. Este artigo é um estudo analítico-interpretativo com o objetivo de apresentar a base teórica para um modelo de processamento que está sendo desenvolvido pelos autores para utilização do trabalho respiratório - Rebirthing-Breathwork - no tratamento de transtornos traumáticos relacionados ao estresse. Neste ensaio discutimos o Rebirthing-Breathwork à luz de uma teoria e uma abordagem desenvolvida por Peter Levine e tratamos sobre o papel que as defesas psicofisiológicas e o sistema nervoso autônomo desempenham no acesso a memórias reprimidas e traumáticas. Com base em evidências pessoais e clínicas, descrevemos como o trabalho de Rebirthing-Breathwork ativa memórias reprimidas e traumáticas e como essas memórias ativadas, por sua vez, provocam um dos dois tipos de defesas psicofisiológicas. Descrevemos, ainda, como se pode lidar com essas defesas através de mindfulness, de uma melhor conexão com o corpo e empoderamento, a fim de que essas memórias ativadas possam ser processadas.

Palavras chave: Rebirthing-Breathwork; Experiência Somática; Sistema nervoso autônomo; Defesas psicofisiológicas; Memórias traumáticas.

Resumen

El Rebirthing-Breathwork se puede describir como una técnica que usa el ritmo respiratorio para activar un ciclo cognitivo-somático. Cuando el ciclo se desarrolla, espontáneamente lleva a la consciencia problemas no resueltos y los conduce a su resolución. Este es un estudio analítico-interpretativo con el objetivo de presentar una base teórica para el modelo de procesamiento que los autores están desarrollando, cuya finalidad es la utilización del trabajo respiratorio - Rebirthing Breathwork - en el tratamiento de los trastornos traumáticos relacionados con el estrés. En este ensayo discutimos el Rebirthing Breathwork con base en una teoría y un enfoque desarrollado por Peter Levine, y abordamos el papel que desempeñan las defensas psicofisiológicas

y el sistema nervioso autónomo en el acceso a memorias reprimidas y traumáticas. Con base en evidencias personales y clínicas, describimos cómo el trabajo de Rebirthing-Breathwork activa memorias reprimidas y traumáticas; cómo estos recuerdos activados, a su vez, activan uno de los dos tipos de defensas psicofisiológicas; y cómo podemos tratar esas defensas por medio del mindfulness, de una mejor conexión con el cuerpo y del empoderamiento, con la finalidad de procesar las memorias activadas.

Palabras clave: Rebirthing-Breathwork; Experiencia Somática; Sistema nervioso autónomo; Defensas psicofisiológicas; Memoria traumáticas.

1. Introduction

To those who have never experienced it first-hand, *Rebirthing-Breathwork* (RB) must sound deceptively simple: it consists of maintaining a conscious connected breathing rhythm for an hour or longer (usually with eyes closed, while lying on a mat). A conscious connected breathing rhythm signifies consciously breathing without pauses between exhale and inhale. Apart from the breathing being connected, RB involves an active inhale and a relaxed exhale. If conducted by a therapist (a *rebirther*), her or his task is to make sure that the person who is doing the connected breathing (the *rebirthee*) maintains the connected breathing rhythm. There is minimal verbal exchange between rebirther and rebirthee during the session. Those who *have* first-hand experience of RB perceive the process quite differently. First of all, the conscious connected breathing rhythm is remarkably difficult to maintain – most people need ten or more sessions to learn to maintain the connected breathing rhythm without the help of a rebirther. Secondly, the connected breathing rhythm tends to activate unresolved issues and these issues *cannot* be ignored while at the same time maintaining a conscious connected breathing rhythm. The content of the issues activated during early RB sessions consists of unresolved, often suppressed, traumatic experiences that can go back to childhood, infancy or even to the time of birth or gestation. Re-experiencing these experiences is frequently cathartic and can be quite dramatic. More in general, RB can be described as the activation of a *somatic-cognitive cycle* that, when allowed to unfold, spontaneously brings unresolved issues to consciousness and leads to their resolution. Once activated, this cycle lasts from about fifteen minutes to more than two hours – with an average duration of about an hour¹⁻⁴.

RB has several key characteristics in common with two other contemporary therapeutic modalities. These therapeutic modalities are *Eye Movement Desensitization and Reprocessing* (EMDR) and *Somatic Experiencing* (SE). EMDR was discovered by Francine Shapiro⁵⁻⁶; its core procedure is the induction of rapid eye movements (or other forms of bilateral stimulation) in combination with a strict protocol that targets emotionally charged memories. Shapiro proposes that EMDR activates *Adaptive Information Processing* (AIP), which she explains as an associative cognitive process that facilitates the processing and integration of unintegrated memories/experiences^{5,6,10,11}.

SE was developed by Peter Levine and is a predominantly body-focused approach. It draws on clinical observations of traumatized patients, as well as on ethological observations of prey animals that survive

a predator attack. Such animals can be observed going through a stage of intense shaking and trembling before resuming normal behavior. Levine has proposed that this trembling and shaking serves the purpose of completing truncated survival actions and of “resetting” the *autonomic nervous system* (ANS) after it has been engaged in a high-energy survival-cycle⁷⁻⁹. He asserts that in humans this process is often inhibited due to what he calls *fear-potentiated immobility*⁸. SE seeks to gently stimulate and facilitate the completion of truncated survival actions, thereby inducing a discharge of the mobilized survival-energy. Recently Levine introduced an additional concept by proposing that SE facilitates the transmutation of trauma-related *procedural* memories to *episodic* memories⁹.

Clinical observation indicates that RB often spontaneously leads to the somatic processing described by Levine – particularly during early sessions. Analysis of inner experiences reveals that the cognitive processing experienced during RB appears to be very similar to AIP as described by Shapiro and others.

Both EMDR and SE have a relatively high success rate in the treatment of traumatic stress-related disorders and they are both based on a similar hypothesis: that trauma involves the interruption of an innate capacity for self-regulation. The authors of this paper are developing a trauma model that is based on the same premise. Shapiro and Levine have independently proposed that the interventions they developed facilitate resolution of traumatic stress reactions by (re)engaging this natural capacity, and they have developed a processing model that explains how EMDR and SE achieve this. The trauma model we are developing includes a processing model based on behavioral evidence and inner experiences observed during RB. Unlike Shapiro’s and Levine’s model, the processing model we are developing does not reduce the natural capacity for self-regulation to (neuro) physiological processes^{5,10,12}. Our processing model is based on *consciousness* and *cognition* – while we are also investigating the role of the ANS.

To date, empirical research of RB has been extremely limited. The only scientific studies carried out to assess the efficacy of RB involved not only connected breathing, but a program consisting of several techniques, delivered to groups of participants^{13,14}. We are presently conducting a case study and are planning a clinical trial to assess the efficacy of RB in treating PTSD. In preparation for our empirical research, we develop the *theoretical basis* of our processing model in this and a second article. The observations on the basis of which our model was developed are based on the personal and clinical experience of the first and the third author who have been practicing rebirthers since 1985 and 2001 respectively. Due to the necessity of describing the inherent processes in sufficient detail we have divided the original idea for this theoretical paper into two articles. In this first article we will discuss the role *psychophysiological defenses* and the ANS play in the accessing of suppressed (traumatic) memories. We will link these to the insights of Levine. In a second article we will discuss the processing of traumatic memories/experiences itself and provide a first sketch of our processing model.

2. The defense-dissociation sequence

When a conscious organism is faced with an actual or perceived threat, depending on the imminence and severity of the threat and on the capabilities and resources of the organism, specific responses are triggered.

These responses can be seen as stages of a *defense-dissociation sequence*⁴ and are regulated by the ANS. Figure 1 gives a schematic representation of all the potential stages of this sequence in human beings – the sequence has been most comprehensively described by Levine based on ethological and clinical observations. Schauer and Elbert give another account of it, focusing on dissociation and evolution theory – they call it the *defense cascade*.^{4,8,15} The perception of a potential threat immediately triggers the *startle response*, which leads to the *orienting response* and activates the *sympathetic nervous system (SNS)*. The startle response is a reflex which momentarily interrupts all cognitive and physical activity and causes relevant muscle-groups to contract (establishing a protective shield as it were). During the orienting response most of the body is kept immobile, only the head and neck regain mobility to facilitate scanning the environment for threats. Subsequently, when appropriate, the *flight* and/or *fight* responses can be activated. These two responses involve maximum *embodiment*. If the threat cannot be avoided (or fought), the SNS is inhibited and the *parasympathetic nervous system (PSNS)* becomes disinhibited. Activation of the PSNS results in increasing states of *immobility*, *disembodiment* and *dissociation*. The stage of *tonic immobility* involves a transitional stage between SNS- and PSNS activation. During tonic immobility the SNS is still highly activated; relevant muscles are tightly contracted, leading to a loss of physical agency. Tonic immobility is believed to offer a two-fold defense: tightening relevant muscles creates a protective shield, as in the startle response (the startle response can proceed into full tonic immobility without intermediate activation of the flight or fight responses); furthermore immobility may cause certain predators to (temporarily) lose interest in their prey, which provides a potential window for escape. Tonic immobility is involuntary but onset and termination are fast. During tonic immobility consciousness is still very much connected to the body.

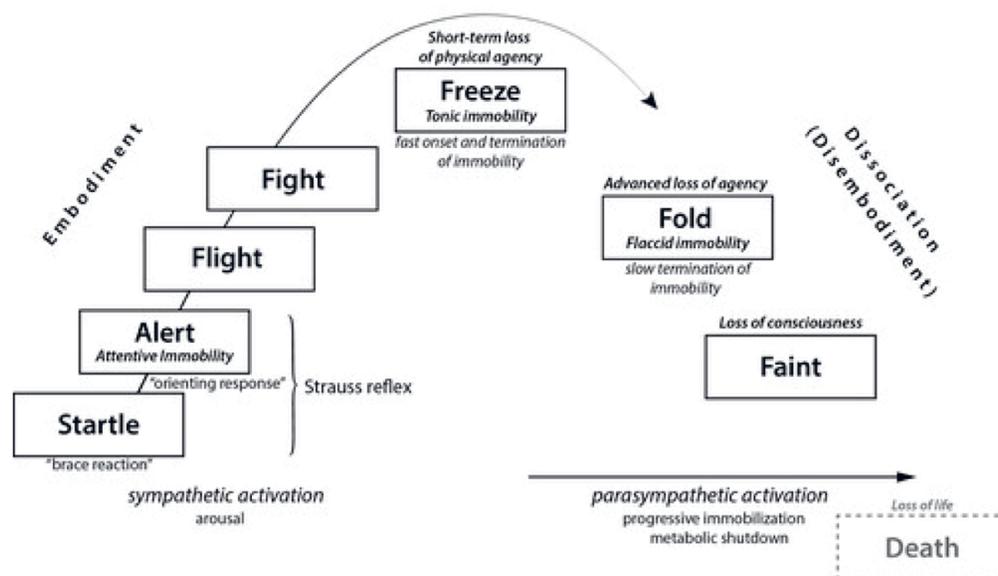


Figure 1. The complete human defense-dissociation sequence. Enhanced from P. de Wit. Learning to breathe from the breath itself: An introduction to Rebirthing-Breathwork and a phenomenological exploration of breathing. Florianópolis: Author; 2016, p.73. With permission.

3. Somatic Experiencing and the processing of trauma-related memories

Levine proposes three somatic causes of traumatization: uncompleted survival actions (flight, fight or protective responses), tonic immobility, and flaccid immobility (see Figure 1)^{7,8}. He hypothesizes that the survival energy that is mobilized during the first two states *remains* mobilized until released and he links unreleased energy with traumatic stress reactions of *hyperarousal*. The third state, flaccid immobility, is a state of *muscle-collapse*, accompanied by numbing and dissociation. Levine associates traumatic stress reactions in which numbing and dissociation dominate with states of *hypo-arousal*. Levine observes that due to the associated mobilized survival energies, traumatic memories related to truncated survival actions and tonic immobility have an *inherent drive for completion*, but that fear-related suppression prevents such completion by perpetuating a subtle, psychophysiological state of immobility (*fear-potentiated immobility*⁸).

The core of the therapeutic approach in SE is to decouple fear and immobility through increased mindfulness of the body and to allow release of the mobilized energy and completion of truncated survival movements, often in the form of *micro-movements*. In the case of more dissociative pathologies, SE encourages re-embodiment and empowerment. The client is led in *reverse order* through the stages of the defense-dissociation sequence^{7-9,12}.

In the descriptions related to RB that follow, the parallels between the insights and approach developed by Levine and the process of RB will become clear. A difference between RB and SE is that in RB the process unfolds spontaneously, without the direction of a therapist.

4. The accessing and processing of suppressed memories during Rebirthing-Breathwork

4.1 The discovery of RB

The report in this paragraph is based on personal conversations of the first and the third author with Leonard D. Orr, who developed RB during the 1960s and '70s. These conversations took place in 2011, while the authors were travelling with Orr through Brazil, the US, and Europe as assistants in Orr's Professional RB trainings⁴. In the early 1960s Orr got into the habit of taking daily baths. One morning in 1962 he found he didn't have the strength to get out of the bath. It took three hours before he regained sufficient strength to leave the water. This experience predated the discovery of RB by more than a decade, but it was a key event in its development. The experience piqued Orr's interest and he started to experiment with staying in the bath for longer periods. He learned that often, while submerged in warm water, he would experience an urge to leave the water. This urge could occur in the form of subtle nudges to go do something, as negative thoughts or emotions, or as an acute sense of urgency. If he didn't give in to the urge but remained submerged in the water, the sense of urgency would peak and he would re-experience an emotionally charged event he had experienced earlier in life. When he allowed such memories to unfold in consciousness they would gradually

lose their emotional charge and eventually leave him with a sense of resolution, often bringing important insights about his present psychological functioning. Such insights often resulted in what Maslow¹⁶ called *peak-experiences*. Physically Orr would feel deeply relaxed after such experiences. Orr calls this phenomenon of a sense of urgency an *urgency barrier*.

During the early 1970s Orr and associates developed this method of persisting through an urgency barrier further and by the mid 1970s it had developed into the connected breathing method that is now known as RB. Since then RB is practiced either submerged in water or dry. Although initial sessions often involve dramatic somatic experiences, RB is predominantly an internal experience¹⁻⁴.

Two phenomena described by Orr can be considered key experiences during RB sessions. The first phenomenon is the urgency barrier experience and the second phenomenon is the *processing* of traumatic experiences or suppressed memories. In this article we will focus on the urgency barrier and related processes and link these to the insights of Peter Levine.

4.2 Two psychophysiological defenses

Detailed study of many experiences during RB suggests that the phenomenon that Orr calls urgency barrier is part of a wider phenomenon: the phenomenon of *psychophysiological defenses*. We posit that there are two broad categories of defenses and that these categories correlate with activation of the SNS and PSNS respectively. We propose that one category, experiences related to urgency, correlates with activation of the SNS, and that the second category, consisting of experiences of *dissociation*, correlates with activation of the PSNS. We will first give a detailed description of each of these categories and then link them to the wider phenomenon.

4.3 The urgency barrier

The experience of urgency during RB has a relatively wide range. On the more subtle side, the experience consists of suddenly occurring thoughts of relatively urgent tasks that need to be accomplished (e.g. "I need to buy bread", "I need to finish writing that article", "I need to talk to my boss", etc.). Such thoughts quickly rise to prominence and interfere with the involvement or willingness to maintain a connected breathing rhythm. The urgency can also manifest when uncomfortable emotions or somatic sensations start to occur. Sometimes it starts as a feeling of embarrassment (e.g. in relation to sudden trembling of parts of the body), but it generally takes the form of a resistance against such feelings or sensations, or of an unwillingness to continue breathing. In its strongest form this resistance can take the form of a powerful urge to stop and leave. It may also be projected onto the therapist as a resistance to following the therapist's instructions, or even as a feeling of outright hostility. Yet another form is doubt, manifesting in the form of thoughts such as: "what am I doing

here?"; "am I breathing in the right way?"; "is this ever going to work?"; "this is ridiculous" etc. Summarizing, these experiences of urgency can take three general forms: an urge to stop and go away; an urge to resist or an attitude of hostility; or a sense of uncertainty or incompetence culminating into an overwhelming sense of giving up.

The recommended strategy to deal with these experiences is increased *mindfulness*. Here mindfulness means that the rebirthee is advised to "simply" witness the physical and inner experiences while maintaining a connected breathing rhythm. Such a state of mindfulness is often a natural effect of consciously maintaining a connected breathing rhythm, but it can also be actively encouraged. In this case it means that the urgency is recognized and acknowledged, but neither resisted nor engaged in; part of the rebirthee's consciousness remains available to *observe* her experiences, including the thoughts and emotions that manifest the urgency. Whether the rebirthee manages to stay *consciously* mindful or not, allowing the experience to unfold while not giving in to what the urge dictates usually leads to a strong, sometimes cathartic experience in which a charged, unresolved event from the past is re-experienced and re-negotiated on a level that is profoundly meaningful to the rebirthee. In case the rebirthee starts to show signs of fear or panic, or of becoming overwhelmed by the experience (which is rare), the therapist interferes by offering reassurance, encouraging a slower, abdominal breathing rhythm, and by actively coaching the rebirthee towards a state of mindfulness.

4.4 Dissociation

Just like experiences of urgency, experiences of dissociation occur along a spectrum. This spectrum ranges from becoming distracted by thoughts, via dreamlike experiences, to the complete loss of waking consciousness. After only a few minutes of conscious connected breathing it can become increasingly difficult for a rebirthee to maintain a conscious connected breathing rhythm. This difficulty arises specifically when the connected breathing rhythm does not activate the SNS but rather induces a state of relaxation. The first stage of dissociation consists of distraction by thoughts. In this case the thoughts don't involve an urge to do something else, they merely distract the rebirthee from maintaining the connected breathing rhythm. They tend to involve items on the (not urgent) mental 'to-do-list', recent conversations, recent actions, relationship issues, plans for the future etc. While these distractions occur, the rebirthee will be reminded to "keep breathing" and will generally resume to do so for a little while and then again become distracted. This *can* go on for a good deal of a session. Sometimes the rebirthee becomes so frustrated by this process that the SNS becomes activated, in which case the experienced state shifts to the one discussed above under the heading "Urgency barrier". A second stage of dissociation occurs when the rebirthee sinks into a profound state of daydreaming. Such dreamlike experiences can be extremely difficult to shake off. At this level of consciousness it becomes impossible to maintain a conscious connected breathing rhythm. The rebirthee may try, but the tendency to drift away into deep mentation is much stronger than the intention to maintain a connected breathing rhythm.

The rebirthee may enter into a state of semi-consciousness where connected breathing becomes an almost impossible task and the desire to stop breathing consciously becomes extremely difficult to resist. At the final stage the rebirthee falls asleep.

The tendency to dissociate from conscious connected breathing can make RB sessions hard work, both for the rebirthee and for the rebirther. There is a relatively simple remedy against dissociation; it involves breathing in a more active physical position in which it is more difficult to dissociate from the body and the breathing rhythm. Maintaining a connected breathing rhythm while sitting on all fours, standing, or even walking are the best methods to enforce embodiment and to help a rebirthee breathe through strong tendencies to dissociate. (If such states of dissociation occur towards the end of a RB session, *after* a rebirthee has successfully worked through whatever presented itself, they can often be beneficial and help the rebirthee reach deeper, more associative levels of thinking and experiencing. They are only detrimental when they *prevent* the rebirthee from activating the somatic-cognitive cycle that is characteristic for RB). Letting the rebirthee adopt a more active position tends to activate the SNS. Helping a rebirthee to breathe through dissociating tendencies can lead to two sorts of outcome. One of these can again be an experience of catharsis; this time enabling the rebirthee to process memories of past experiences that resulted in dissociation and disembodiment. The general outcome of such processes is a reconnection with the body, a significant increase in energy and an increased willingness to engage with life. The other type of outcome is the strengthening of consciousness itself. This is manifested through an increased ability to maintain both focused and mindful attention.

4.5 Urgency and dissociation as defenses

We conceptualize experiences of urgency and dissociation during RB as psychophysiological defenses. The underlying hypothesis, shared by Levine, as well as by most psychodynamic approaches, is that memories of past events that were experienced as threatening to physical and/or psychological integrity (i.e. traumatic memories) have been split off from consciousness and are prevented from re-entering to prevent re-experiencing the associated feelings/emotions of helplessness, fear, rage and shame⁸.

When the SNS becomes activated during a RB session, a suppressed memory may start to *resonate* with the activation. When outward circumstances are *not* threatening (and they shouldn't be during RB), the activated SNS offers resonating memories a physiological vehicle to manifest themselves – both physically and psychologically. An activated PSNS may likewise encourage suppressed memories to surface: profound physiological relaxation may induce *psychological* relaxation, which may cause the mechanisms involved in suppression to become relaxed and thereby allow suppressed memories to slip past⁸.

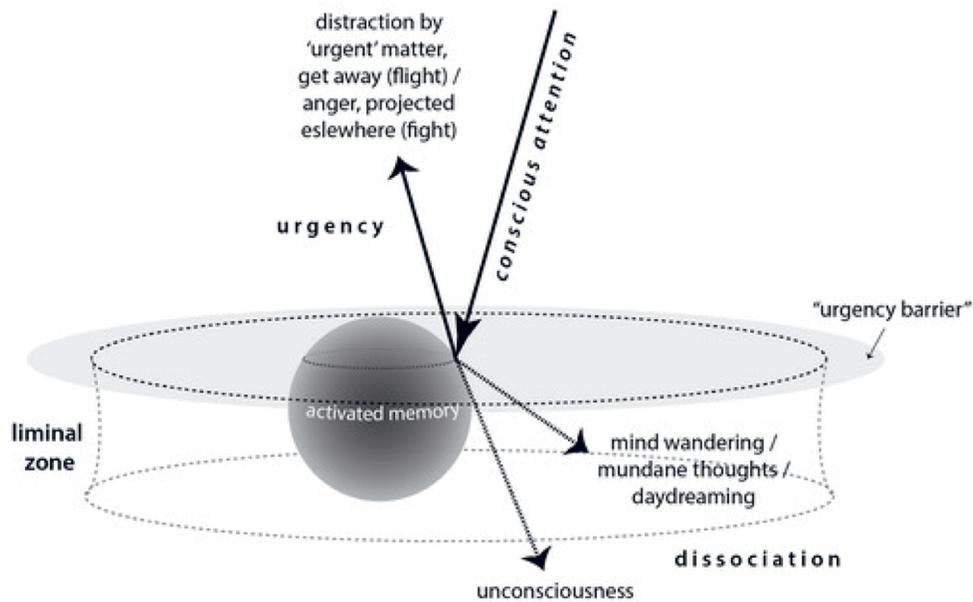


Figure 2. Urgency and dissociation as defenses that deflect conscious attention away from an activated traumatic memory. Copyright with authors.

In either case, the suppressed memory has found a way past suppression and its imminence gives rise to one of two *final* defenses: *urgency* (in an attempt to terminate the circumstances that allowed the memory to emerge) or *dissociation* (as a response to scatter, dim or switch off consciousness and not experience the memory consciously: sometimes people start falling asleep within minutes after commencing a connected breathing rhythm, even when they are fully rested). Figure 2 summarizes the two defenses in an image.

We suggest that during RB sessions (particularly during early sessions) the *type* of defense that presents itself correlates with the branch of the ANS activated during the session (SNS or PSNS). Moreover, activation of SNS or PSNS depends on the specific defense that was active during the *original* experience.

To encourage *conscious* access to the traumatic/suppressed memory during RB and to facilitate its proper processing, encouraging the **opposite tendency** from the one activated proves the most useful strategy. Thus, when an emerging memory triggers a reaction of urgency, SNS-activation is likely and the best approach is one of “*dissociating*” part of the rebirthee’s consciousness from immediate engagement with the memory through *mindfulness*. Although physiologically the rebirthee remains in a state of activated SNS, she *mentally* relaxes. Often, under stressful circumstances the tendency is to try and relax the *body*, here the activated state of the body is merely acknowledged, without trying to change it, only the *mind* is relaxed. (In extreme cases, the PSNS can be deliberately activated by encouraging lower, abdominal breathing in order to avoid retraumatization). Likewise, when the PSNS is activated and leads to dissociation, the best approach to prevent complete dissociation is one that encourages *embodiment*; in this case adopting a physically demanding position facilitates

embodiment, will eventually activate the SNS (inhibiting the PSNS), and prevents complete dissociation. Once urgency or dissociation are successfully dealt with and the suppressed memory is consciously accessed it can be processed (see Figure 3). Since the urgency barrier and dissociation can both be seen as *thresholds* that prevent access to a suppressed/traumatic memory, we propose calling the overall phenomenon the *liminal zone* (from the Latin word for threshold: “limen”).



Figure 3. The liminal zone and activation and processing of suppressed memories in RB. Copyright with authors.

5. Breathing regulates, and is regulated by the autonomic nervous system

Breathing has several dimensions; the two most important dimensions during RB are the *frequency of the breathing rhythm* and the *depth of the inhale*. When someone is breathing in a connected breathing rhythm, breathing varies spontaneously. Yet, there are two general tendencies: breathing either *becomes faster*, or it *becomes slower* and relaxes. The overall intensity of breathing is related to both its velocity and its depth, and during the major part of a RB session the rebirthee is coached to maintain a slightly *intensified* level of breathing. Thus, breathing can be fast and deep, rapid and more shallow, or relaxed but deep. A relaxed shallow breathing is not recommended, because its intensity is generally not sufficient to activate the somatic-cognitive cycle mentioned earlier (but there are exceptions). The two tendencies – a faster or slower breathing rhythm – normally alternate during a session, although one of them may dominate. The tendencies to breathe faster or slower arise spontaneously, and the rebirthee is encouraged to follow these spontaneous variations (as long as the connected rhythm is maintained and the overall intensity is *at least* slightly above the normal intensity)⁴.

We believe that activation of the somatic-cognitive cycle is closely linked to activation of the ANS. The frequency of the breathing rhythm is related to activation of the ANS as follows: faster breathing is activated by *and* activates the SNS; slower breathing is activated by *and* activates the PSNS. Thus there is a double connection between the frequency of the breathing rhythm and the activation of the ANS. On the one hand activation of

SNS or PSNS regulates the frequency, on the other hand regulation of the frequency stimulates SNS activation or PSNS activation. These connections *can* be used deliberately, but experience from RB indicates that *proper* regulation results from *allowing* SNS or PSNS activation rather than from trying to *control* it.

6. The forms in which memories can resurface

In the preceding descriptions we have kept the forms in which traumatic memories can resurface vague and have spoken alternately about memories and experiences. Ordinarily we associate personal (episodic) memories with internal (mental) recollections of past events. During RB (and indeed during flashbacks and other intrusive experiences associated with traumatic disorders as well as during some other therapeutic processes) surfacing memories are much more alive, they are not so much recollections as *re-experiences* of aspects of the original event. Such resurfacing memories *take hold* of salient parts of the body and the psyche of the one who “re-members”. They can be experienced as purely somatic symptoms (pain, muscle contractions, vibrations), as isolated sense-perceptions (light, sound, taste, smell, touch), as emotions, as images, as thoughts, or as any combination of those, including partial or full flashbacks. Sometimes it is clear to the rebirthee that the experience is a memory of a past event, on other occasions the rebirthee believes that the experience really occurs during the session (this applies particularly to certain perceptions of sounds, light and the experience of being touched). Thus, the clear distinction between memories and (present) experience that we perceive during ordinary life disappears to some extent during RB sessions.

7. The strengthening of consciousness

Unprocessed experiences related to past events connected to SNS activation tend to resurface in this form mainly during early RB sessions (the first 1-5 sessions). RB is very efficient in bringing such memories to consciousness and in processing them. After the initial sessions the experiences during RB become more subtle. Strong dissociative tendencies, particularly those of a more pathological nature, may take more time to access and process. In the preceding sections we have limited our discussion mostly to one manner of dealing with dissociative tendencies: encouraging embodiment. RB also offers another, more advanced way of dealing with dissociation, which results in the strengthening of consciousness itself. This method requires considerable persistence and is most effective when RB is practiced individually (without therapist) on a regular (daily) basis. It consists of a persistent effort to remain conscious when dissociation of consciousness starts to occur, for example when sleep threatens to overcome consciousness. This ability *can* be mastered, but it takes time and considerable effort. As a result shifts to different states of consciousness are increasingly experienced *consciously*. We propose that this practice *strengthens* consciousness and enables it to enter *subliminal* levels of experience. In this case one could say that subconscious memories are not brought to ordinary consciousness, but that consciousness is expanded to previously subconscious levels.

8. Conclusion

To date, scientific research of RB and its efficacy has been extremely sparse. Its popularity and clinical evidence of its effectiveness warrant further research. In this article we have considered psychophysiological aspects of RB in the light of Levine's trauma-related theories in preparation for an empirical study of RB. Traumatic memories related to uncompleted survival actions and to tonic immobility (both associated with SNS activation) have an inherent drive for completion but may be suppressed. Such memories are relatively easy to access and process through RB, but attempts to access them may trigger a psychophysiological defense mechanism: the urgency barrier. Memories associated with flaccid immobility and PSNS activation tend to induce dissociation. Based on clinical experience we conclude that the best approach to access and process SNS-related memories during RB is to encourage the rebirthee to *allow them* to become activated, while fostering a state of mindfulness. Furthermore we conclude that the best approach to access and process memories that induce dissociation is by means of embodiment and empowerment via SNS-activation.

In a follow-up article we will address the actual processing of traumatic memories during RB. We will compare it to AIP and propose an alternative processing model.

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