

A New Technique for Attention Management and Somatosensory Processing in Hypnotherapy: Mental Access/Somatosensory Access (MASSA)

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Abstract

The author introduces a new hypnotherapeutic technique termed “Mental Access/Somatosensory Access” (MASSA). MASSA is designed to utilize an external somatosensory stimulus in the context of hypnotherapy, based on a Bottom-Up/Top-Down Paradigm, which complements and mutually reinforces hypnotic inductions by using imbedded suggestions. The intervention’s algorithm includes a combination of real-time stimulation through one of the following somatosensory modalities: sensorimotor activation of the palms, visual, auditory, vibration, thermal, olfaction or oropharyngeal. These modalities are accompanied by guided hypnotic dissociation and suggestions. Somatosensory stimulation amplifies patients’ engagement in the procedure, focusing their attention on a stimulus and on the hypnotic experience during the intervention. A stream of closed questions with imbedded suggestions, presented by the therapist, is designed using suggestive presuppositions, termed by the author “The Create and Verify Principle” (CVP). This principle facilitates effective pacing and helps transform patients’ sensory and mental experiences. Imbedded suggestions followed by real-time stimulation, maintain a focus on the somatosensory content, boost the hypnotic experience, and gradually combine awareness of the somatosensory stimulation experience (Bottom-Up regulation) with memory, imagination, emotions and meanings, for mental access of resources and adaptive coping (Top-Down regulation). In the first part of this article, the author briefly introduces the neurophysiological mechanism behind the suggestive, somatosensory, attention-management intervention and provides an example of a basic algorithm of the MASSA technique. The second part includes clinical samples with scripts of successfully treated patients, who experienced tension headache, psychogenic balance disorder,

tinnitus.

Keywords

Attention, Somatosensory Stimulation, Imbedded Suggestions, Create and Verify Principle, Mental Access/Somatosensory Access (MASSA), Hypnosis

1. Hypnosis, Attention and Connectivity

Hypnosis was the first Western form of psychotherapy. It involves highly focused attention, referred to as absorption [1], coupled with dissociation, the compartmentalization of experience [2], and suggestibility, non-judgmental behavioural responsiveness to instructions from others [3]. Hypnosis is an effective adjunct to the treatment of pain, anxiety, psychosomatic, post-traumatic, and dissociative disorders [4] [5] [6].

Despite the important role attention plays in the hypnotic process, hypnosis practitioners and researchers tend to overlook attentional processes. Theoretical models and clinical techniques of hypnotherapy have traditionally emphasized the importance of attentional control processes in accounting for hypnotic phenomena and susceptibility to hypnosis [7]. As long ago as the work by Braid in 1842, it was understood that focusing attention was a crucial element in inducing and maintaining hypnotic states. Control of attention has also been directly coupled to key aspects of hypnosis such as dissociation [8] [9], absorption [10], and suggestibility [11].

Evidence relating hypnotic phenomena to attentional mechanisms is mounting [12] and there is general agreement that hypnotic phenomena involve attention [13] and relate to self-regulation [14]. Some of the most interesting hypnosis research of recent years has examined the effect of hypnosis and suggestion upon attentional control. Attentional skills are closely related to hypnosis, and a number of models have proposed that differences in executive attentional control account for individual differences in hypnotic susceptibility. For example, [15] neurophysiological model of hypnosis proposes that selective attention must be engaged in order for a subject to focus upon the first stages of a hypnotic induction, and that this selective attention is more effective in high susceptible subjects than in lows. Some traditional views of hypnosis contend that the hypnotic 'state' is characterised by strongly focussed attention [16]. Other models have proposed that high hypnotisables efficiently focus attention while un hypnotized, but that their attentional control is compromised following a hypnotic induction [17]. Consequently, attention management is an important element that is needed to transition into and maintain a hypnotic state "because the shift of attention is constantly sensitive to cues" [18].

Today, attention is best described as the sustained focus of cognitive resources on information while filtering extraneous information. Attention brings an object or event into consciousness, and we become conscious of an object or event

by paying attention (or having attention drawn) to it [19]. The Sholberg and Mateer's Hierarchical Attentional model [20] divides attention into the following categories: 1) Arousal: refers to our level of alertness, whether we are tired or energized, 2) Focalized Attention: refers to our ability to focus attention on a stimulus, 3) Sustained Attention: the ability to attend to a stimulus or activity over a long period, 4) Selective Attention: the ability to attend to a specific stimulus or activity in the presence of other distracting stimuli, 5) Alternating Attention: the ability to shift attention between various stimuli, and 6) Divided Attention: the ability to attend to different stimuli at the same time.

As psychology moved toward the study of cognitive mechanisms, new objective methods allowed for investigation into the processes of selection [21]. The act of selecting a word's meaning appears to suppress the availability of other meanings and competing items.

2. Bottom-Up/Top-Down Paradigm

Attention, therefore, was further operationalized as facilitating memory and even consciousness. Bottom-Up processing begins with the retrieval of sensory information from our external environment to build perceptions based on the current input of sensory information that is a response to exogenous stimuli [22]. This type of processing involves the activation of early sensory areas in the brain, which then transmit this information to higher-order brain regions for further processing and interpretation. Top-down processing is the interpretation of incoming information based on prior knowledge, experiences, cognitive goals, and expectations. It involves the activation of higher-order brain regions, such as the prefrontal cortex, that can influence lower-level processing areas, help to prioritize certain sensory inputs, filter distractions, or make predictions about what sensory information is likely to be encountered. Attention can be thought of as a cognitive mechanism that integrates Bottom-Up and Top-Down processing.

3. Hypnosis, Attention and Neural Networks

As specified by Jiang *et al.* [23], there are three pertinent neural systems responsible for managing key aspects of attention, which are important for understanding changes related to hypnosis. These three systems have been categorised as the Executive Control Network (ECN), the Default Mode Network (DMN) and the Salience Network (SN) [24] [25]. Through the interactions of these three neural networks, as well as brain regions associated with self-concept, self-movement, and perception, hypnotic suggestions can elicit altered perceptual, motor, cognitive and emotional experiences. These three networks interact in complex ways, and their altered activity and connectivity during hypnosis are thought to contribute to the hypnotic state. Specific interactions between the ECN, DMN and SN are critical to achieving and maintaining a hypnotic state. The level of focused attention and absorption reflects a person's ability, readiness, and openness to become hypnotized and have their cognitive processes altered [26]. On a

network level, the insula is the core of the SN, which plays key roles in determining which stimuli are behaviourally relevant and in initiating dynamic switching between the ECN (which drives externally oriented attention), and the DMN (dedicated to internally-oriented cognitive processing). The insula has an essential role in perceiving somatosensory information, helping to integrate this information with other sensory input to form a unified perception of the body's state. It is also involved in processing interoceptive signals (signals related to the internal state of the body, such as hunger, thirst, pain, and temperature). The insula is also involved in processing exteroceptive signals (signals related to the external environment, such as touch, pressure, and temperature). Overall, the insula has a critical role in creating a coherent perception of the body's internal and external states [27].

4. The Principles and an Algorithm of MASSA Technique

Attention management

Attention management refers to models and tools for supporting individuals' management of their own attention, whether in the short-term "here and now" or even over weeks or months, as part of long-term rehabilitation [28] [29]. One of the most challenging tasks of attention management is to help people attain high levels of absorption (meaning unobstructed attention and focus), which is a state of maximum involvement in the "here and now" experience. The ability to control distractions and stay focused is essential to producing high quality results in hypnotherapy. The author's hypothesis is that these goals of attention management can be facilitated by applying external somatosensory stimulation along with a stream of closed, suggestive questions about ongoing cognitive and emotional experiences as they change over time. The MASSA induction includes exogenous and endogenous cues and suggestions that trigger both bottom-up and top-down processes, directly influencing attentional processes; thereby expediting hypnosis. The main goal of this hypnotic induction is to create guided and controlled dissociation [30] [31], while taking advantage of the patient's suggestibility and motivation in the context of the therapeutic situation.

Everyone is susceptible to suggestions to some extent. Although people's degree of suggestibility varies, their state of mind, as well as situational characteristics have a major role in determining their suggestibility at a given moment. For moderate-low hypnotizable persons, even the suggestions of creative and experienced therapists may only result in unstable, short-lived improvement [32]. As noted, suggestibility is fluid and can increase due to situational cues. The literature discusses three situational characteristics that can naturally increase a person's suggestibility. These are: 1) altered states of consciousness; 2) fear, defencelessness, and extensive emotional strain; and 3) when one's usual frame of reference cannot be relied upon, because of a very unfamiliar situation [33]. All of these are related to stress and include some degree of dissociation (disintegration between cognitive control, behaviour, and emotions).

The MASSA technique proposes a fourth way to optimize a person's responsiveness to suggestions in a non-stressful, safe, psychotherapeutic setting. In a MASSA induction, the therapist explains the intervention's rationale and then proposes a somatosensory stimulus which is relevant to the patient's presenting symptom. This stimulus can be a sensation on the palms (achieved using pinecones), light or sound, an aromatic scent, a sip of water, etc. [34]. Somatosensory stimuli allow the patient to be more involved and focused on the procedure. They improve attentional focus on the stimulus and allow a smooth and efficient transition from the induction to the actual hypnotic intervention. A stream of closed, suggestive questions by the therapist, regarding the continuing sensory experience minimizes distractions, maintaining somatosensory focus and gradually combining this focus with imagination, memory, emotion, and meaning to access and mobilize adaptive resources in the service of therapeutic goals [35]. Despite the scientific literature's discussion of the deleterious effects of noxious stimuli, such as somatic symptoms and chronic pain, to our knowledge, no clinical studies have investigated the use of "neutral" external, somatosensory stimuli, in a psychotherapeutic context.

External Stimuli' Modalities as Stimulation' Gates

1) Throughout the stages of the MASSA intervention, the patient is exposed to real external physical stimuli, using one of the sensory modalities [36]. The specific modality is chosen based on the patients' presenting symptoms and the context of the intervention:

- Skin sensations and muscle activity of the palms while holding pinecones, (Palms' Gate).
- A visual experience after stimulation using a medical flashlight (Light Gate). Stimulation of the sense of smell with aromatic oils (Olfactory Gate).
- Processing the beat of a metronome (Sound Gate).
- Mucosal stimulation and motor activity of the mouth and pharyngeal muscles (oropharyngeal sensation), in response to swallowing water (Water Gate).
- Sensation of vibration, in response to attaching a vibration device or tuning fork (Vibration Gate).
- Local thermal stimulation using heat or cold (Thermal Gate).

2) The treatment stages are designed to allow the patient to be in the central, active role throughout the intervention.

3) The availability of the stimulation channels and the simplicity of obtaining the needed experience, facilitate and encourage patients' cooperation in performing self-hypnosis exercises.

Suggestive Communication: Implication and Presupposition

The structure of effective suggestive communication during a MASSA intervention is based on a combination of two "classic" hypnotic values: implication and presupposition [37]. Implication refers to the process of implying something without stating it directly. In other words, it involves using language that hints at a particular idea or concept, without stating it explicitly. Presupposition, on the

other hand, refers to the process of assuming something to be true without actually stating it. It involves using language that assumes a certain fact or condition to be true, regardless of whether it has been confirmed.

The purpose of implication is to suggest an idea or concept indirectly, without making it too obvious or direct. This is often done to make the hypnotic suggestion more subtle or to avoid resistance from the listener. The purpose of presupposition is to increase the power of a suggestion by assuming that something is true, without actually stating it. This is often done to bypass the listener's conscious mind and tap into the subconscious. Implication often involves the use of vague or indirect language, such as metaphors, analogies, or suggestive questions. For example, *“if you choose to continue listening to my voice, you will find yourself more and more relaxed”* implies that the person has felt confident and in control in the past, without directly stating it.

Presupposition often involves the use of certain linguistic structures, such as embedded commands, nominalizations, or presupposition triggers. For example, *“As you start to feel more relaxed, you may begin to notice the tension in your body melting away”* presupposes that the person will feel more relaxed, without directly stating it. Following are two examples of presuppositions under somatosensory external stimulation that can create a change in sensations:

“As you notice the coolness of the breeze on your skin, you may find yourself feeling more energized and invigorated.” or “As you notice a small and gentle area of warmth from the heating pad on your sore muscles, you may feel a sense of relief and relaxation.” Presupposition is an implicit assumption about the world or background belief relating to an utterance whose truth is taken for granted in discourse (“while you’re sitting with your eyes closed and listening to my voice, which hand gets heavier, right or left?”).

“Create and Verify Principle” (CVP)

As I demonstrate below, suggestive communication contains questions with the therapist's imbedded suggestions. In my own adaptation of the MASSA technique, I designed sets of closed, stimuli-related questions with imbedded suggestions, and called this category of presuppositions the “Create and Verify Principle (CVP) [38]”. CVP, the instrument of suggestive communication during somatosensory stimulation processing, consists of a stream of implications and presuppositions, and a long list of options for imbedded suggestions for creating, controlling, and accompanying incoming sensations (in real-time or in the immediate future). This process allows awareness of a sensation of change during the procedure. The therapist can structure suggestions according to the patient's primary imbedded expectations. For example, if the stimulation were a tissue mask placed on the patient's forehead for touch and delicate gentle thermal stimulation, the therapist might suggest: *“Please concentrate on the sensation of the tissue on your forehead and eyes... as well as on your skin's contact with the mask... and the gentle warmth around your eyes... in the next few mo-*

ments, be ready to pay attention to your muscles, especially those around the right eye... notice the gentle sensations becoming more and more readily available... verify which of these gentle sensations helps you to be aware of a feeling of comfort around your eye... please, verify and share any of your findings with me, you can use words to share, your words can come easily, they will find themselves, sounding easy and distinct.”

The CVP helps the patient make choices easily, and facilitates success at every step of guided dissociation during both the hypnotic induction and the subsequent therapeutic tasks.

In the preliminary MASSA clinical interview, during anamnesis and specifically while exploring the patient’s presenting symptoms, special emphasis is given to the analogous characteristics of the symptom (*such as, “what is it, what object does it resemble? The symptom’s size, shape, colour, borders, texture”, etc.*). These characteristics can then be used during the intervention to help the patient connect and focus on various curative suggestions.

In the following step-by-step example of an intervention, hypnotic work with a patient suffering from chronic low back pain will be presented as an illustration of the MASSA technique, using pinecones for palm stimuli. I begin with a brief, clear explanation of the essence of the intervention, which is structured in the form of direct suggestions regarding the desired change and share the steps involved in the work with the patient: *“First you will feel the sensory stimulation. Then, gradually we will progress to careful changes and improvements, with the help of hypnosis. Try to be focused and help the symptoms move, as this is a joint process.” Even at the beginning of the intervention, you will be able to see how easily you manage to concentrate on the palms of your hands, to control the intensity of the pressure and change it... ”*

Focalized Attention Access

The MASSA technique is further designed to activate and utilize prior sensorimotor learning and sensory experiences associated with the hands to access feelings of mastery, creativity, flow, self-efficacy, and other positive emotional experiences in order to create multisystem coherence.

The technique begins with suggesting that the patient hold a pinecone in each hand and squeeze them regularly and equally with both palms, at a strength of 2-3/10 (where 10 is the maximum the patient can bear). The patient is instructed to focus on and feel the sensory stimulation: *“Which of your hands feels the stabbing a little more strongly, your right or your left? Which finger of your right-hand notices that the stabbing is sharper, relative to the other fingers?... In which hand, does the pinecone feel a little bigger, right or left?”*

Practicing Alternating and Divided Attention by Identifying and Controlling the Changes

While voicing a sequence of closed questions (according to the Create and Verify Principle), the therapist can help the patient maintain focus on the stimulation by modifying their suggestions: *“Squeeze the pinecones a little harder,*

4-5/10 or even 6/10... now release back to 2-3/10... you can feel in control of the amount of strength you use. Indicate if and what the differences in feeling are between your right and left hands... ”

With the help of closed suggestive questions, the patient is asked to describe in words the sensations felt in the palms of his/her hands, to find out, choose, verify, and share the characteristics of the changes felt in the hands:

“Squeeze up to 7-8/10, hold for a few seconds without releasing, and be ready to pay attention, so that when the time comes to release the pressure and go back to 2-3/10, or to 1-2/10, you will find that something interesting and new starts to happen in the palms of your hands... hold on for a few more seconds... and release back, to 2-3 or 1-2... nice, concentrate... you have improved your attention, your ability to create and recognize change in the palms of your hands, in the strongest and most skilled place in your entire body... now you can get ready to find out, that in one hand?... or both?... you will soon feel gentle pulses... like a small pulse in the palm of your hand... have you already recognized it? The difference between right and left?... Excellent, keep being aware of these feelings, and keep following...”

After creating an initial focus on the sensory stimulation, we continue with the help of information about the symptom(s) collected previously. The patient is invited to connect with the feelings that arise when the symptom is present and to share what he/she is experiencing in the here and now. Direct CV-type queries, enable the patient to detail the symptoms characteristics, such as: size, area, shape, what the symptom resembles, its depth or direction, colour, texture, temperature, etc.

Alternating and Divided Attention and Suggestions for Changing the Symptom

Regarding lower back-pain, the patient is asked to remain aware and connected both to the lower back, and at the same time to be aware of sensations in their palms. We determine whether, already at this stage, there is any change in the patient’s feeling of their lower back, regarding the discomfort that is felt. The very attempt to examine both sensations at the same time, divides their attention and creates an opportunity to sow suggestions of change, due to the connection that can be suggested between control of the hands and controlling the muscles of the lower back: *“Very soon, in the next few moments, when we move forward, you will be able to detect a change in one of the characteristics of the sensations in the lower back... Any change, however small it may be for now, will work in your favour... It will mark the beginning of relief and a change for the better, which you can improve and strengthen, and take into your hands...”*

Divided Attention Maintaining, Accessing and Consolidating Mental and Emotional Resources

The patient is then invited to concentrate on the sensory stimulation in their palms. With the help of CV, and while being given different options to choose

from, the therapist can suggest that the patient come up with an analogue of the sensations in their hands (*i.e.*, what do the sensations resemble?). The therapist can then use the analogy brought by the patient (for example: “I feel a heartbeat in the skin of my hands... it’s like hot, hot pulses”). For example, the therapist might suggest that the patient build or discover a physical connection, linking the hot beats in the skin of their hands to their lower back pain: *“You shared with me that you feel a sort of track, and inside it lies a tube and inside that tube warm blood flows that connects the pulses in your right hand, through your shoulder and shoulder blades and to the right side of your lower back... concentrate, make sure that the tube goes deep enough into your lower back... feel and understand, what is more essential for your back: to receive oxygen from the tube to let the muscle breathe and relax a little? or to receive heat, experience flexibility and restore its natural and healthy shape? both?”*

At this stage, when a positive operant conditioning effect has been built between the control station (palms) and the presenting symptom, therapists can use the full extent of their hypnotic toolbox: starting from symptom-analogue work (demonstrated above), and moving on from there to conflict resolution or trauma-work, using various strategies and techniques, such as ego strengthening, metacognitive work, etc.

Forming and Practicing Control: Mastering Self-hypnosis to Enhance Neuroplasticity

As the patient continues to practice getting control over the activation and intensity of effort in their palms, they also improve the somatosensory and analogous connections between the locus of control in their palms and the sensations in their lower back (presenting symptom). With the help of suggestive guidance, the patient can discover that creating good control over the intensity of the pressure in their palms as well as the connection between their hands and their lower back, makes it possible to regulate the sensations in their lower back. They can then move on to practicing self-hypnosis to increase the effects of their physical accomplishments.

In addition to the symptomatic work described above, most patients want to do analytic work on the emotional roots of their symptoms, to resolve the underlying source of their problem, mobilize coping strategies, connect to psychological resources, and improve their quality of life and level of functioning. These two therapeutic endeavours—the symptomatic and the analytic—can proceed apace. While this is taking place, the patient may move from their initial physical engagement with the symptom, to focus more on emotional changes. As they do so, they may adopt new psychological coping strategies, in conjunction with the psychotherapeutic process, while at the same time, still using and improving the symptomatic methods of control formulated at the beginning of treatment. In this regard, it is important that the patient be encouraged to continue working consistently with symptomatic self-hypnosis, in order to develop an effective and stable practice, regardless of the analytic progress in understanding the source of

the symptom.

5. MASSA: Palm Somatosensory Stimulation

A sample script: beginning with the pinecone stimulation of the palms

You likely know that if you tense your muscles for a long time, you can expect to feel pain. This happens because the muscle fibres press on the small blood vessels that provide oxygen to the muscle... and the tensed muscles remain without oxygen. At first there are signals of discomfort, and later of distress... There are many areas in your body over which you have full control, to move and to manipulate, to tense and to relax whenever you decide... and there are other areas, quiet and hardly sensed, over which you do not have that control over movement and sensation. For example, there are several areas in your lower back that cause discomfort and tension, sometimes even strong enough to be painful...

1) Right now, I suggest that you concentrate on one part of your body, where you feel in complete control, skilled and strong... Show me your dominant hand... make a fist. Stronger! and release completely... Excellent. You noticed how easy it is for healthy people, to control the hand? That's right, all your life you've developed various abilities, skills, and strengths in your hands.

2) We continue: you are here, to test and experience for yourself, the immediate change that can be found while undergoing this experience... Here, hold a pinecone in each palm, hold them tightly in your fists, begin to concentrate on your hands... I suggest, already at this stage, that you close your eyes... excellent... this way it will be easier for you to direct and focus most of your available attention on your palms. Excellent... hold the pine cones well... no trembling, firm and equal grip with both palms... feel them very well... concentrate on the feeling of the contact between the pine cones and your fingers... on the palms of your hands... and now, we will find out, we will find out together some feelings and thoughts, which will help you focus your attention even more... You can answer in words, without opening your eyes: In which palm is the object a little colder, the right or the left? (After the answer is given). Excellent! In which palm do you feel that the object pokes a little more sharply, in general, right or left? OK! In which palm does it feel a little bigger?... In which finger, relative to the other fingers of your right hand, do you feel a sharp poking a little more... compared to the other fingers? In which finger, relative to the other fingers of your left hand, do you feel a sharp poking a little more... compared to the other fingers? Compare the two fingers you mentioned, which one is being poked a bit more sharply: on the right or on the left? More. Good job paying attention... Keep following, feeling, and observing...

3) And now, begin squeezing with equal strength in both palms a little more... even more... between 0 and 10, contract 6... maybe 7... get to 8... and hold the pressure of 8 for a few seconds... and a few more seconds, while concentrating strongly on what is happening with your hands... Excellent, well done!... (Wait

about 8 - 10 seconds) and now let your hands start to release a little... 7... 6... Release more... more... more... and release all the pressure... Relax until your palms feel a complete release... feel loose, but continue to be aware of the gentle touch on the pinecones... and now be ready to recognize... maybe it is already starting?... Something intriguing: while you listening, pay attention to the feeling of the skin on your palms, on one of the hands, and maybe also in the other?... You will start to recognize subtle pulses... like a heart beating inside your hands... When you feel the sensation, share it with me... Already? Well done... Already? Beautiful! Where is it stronger, on the right or on the left?... Pay attention for a few seconds, maybe it is going to change... You showed excellent concentration, continuous attention, good control.

4) Right now, I suggest that you concentrate on one part of your body, where you feel in complete control, skilled and strong... Show me your dominant hand... make a fist. Stronger! and release completely... Excellent. You noticed how easy it is for healthy people, to control the hand? That's right, all your life you've developed various abilities, skills, and strengths in your hands.

6. The MASSA Method: Palm Somatosensory Stimulation with the Aid of Pinecones

Clinical illustration 1. Chronic tension headache

J. is a 49-year-old man, married with 3 children. He is a very experienced software engineer in a senior position, with a 7-year history of severe daily headaches. He has had about two years of dynamic and CBT psychotherapy, relaxation, and yoga workshops. The daily headaches are debilitating. They hurt in a band-like distribution about his forehead and temples and are often accompanied by moderate-to-severe eye pain. J. sleeps in a bed and has mild hypertension, low glucose tolerance, and is overweight. He is under moderate stress, but states emphatically that stress plays only a minor role in his life. Six months of CBT, combined with relaxation therapy, has been slightly beneficial, J. does not practice it, as he states that he is too busy, and forgets to do it. During the last five months, J. has used multiple OTC preparations, including a combination of two to three ibuprofen, dipyron or acetaminophen pills every day.

For the first (assessment) session, J. brought a summary from a CBT psychotherapist, an updated neurological consultation (which included normal results of a head MRI) and an update from his family doctor who he has been seeing for over 15 years. J. dressed in a more youthful style than expected for his age and professional status. He was a little embarrassed and had a shy smile. He shared that during psychotherapy, he learned about himself that he tends to avoid conflicts, both at home and at work, sometimes at the cost of damaging his self-esteem. He often cited his dynamic therapist who claimed that J. is having trouble coping with the situation he has been in for the past few years, and repeatedly decides to deal with it by avoiding conflicts and not maximizing his potential. J. does not agree with the conclusions of the psychodynamic treatment

(“Well, I agreed at first, but it didn’t help me: my headaches continued”). He also does not connect the headaches to work stress or family conflicts. J. shared that, surprisingly, he felt great relief, with no bouts of pain during the three-week wait, after receiving a referral and waiting for a head MRI and its interpretation. He explained: “I had hope that they would find an organic cause and that it would be possible to take care of it, once and for all.” The rest of the meeting was devoted to clarifying secondary loss—losses of any kind, which are related to or arise from chronic headaches, and distress J. personally. After repeated clarifications, it was agreed that the main goal of the treatment at this stage is joint work, in order to reduce or stop his distress, which is related to the intensity and frequency of chronic headaches, which have a negative effect on the quality of his life at home and at work. During the first hypnotherapy session, he quickly responded to the induction of hypnotic relaxation, while counting from one to ten, first nodding his head in response to my closed questions, but within three minutes the rapport was severed. J. seemed to fall asleep in the chair, his head dropped. As a result, a full de-hypnotization was performed, to which he also responded quickly, and shared that he experienced “drifting off to nowhere in particular” while resting pleasantly. He lost concentration at the beginning of counting, disconnected, and almost fell asleep. At the second meeting, it was explained to J. about the hypnotic technique that would probably suit him, especially the MASSA method. The method is built on neurophysiological principles of directing attention and maximizing concentration, on J.’s creativity to connect discovering findings in the body’s experiences with their mental insights, and success in maintaining a focus of attention over time. The second session was dedicated to suggestive explanations and experience working with holding pinecones in the palms of the hands, while discovering suggestive somatosensory phenomena, and creating analogies to mental processes and imagination:

“... there it is, the stream of your consciousness, it flows spontaneously, from wherever it begins... to wherever it goes... and in the complex stream, you will be able to recognize the train of thought of ‘here-and-now’... and it is also in motion... word after word, car after car, it is not easy sometimes to intervene and enter one of these train cars in order to understand in depth, to find significant content that continues to move... But in the very next moment, while clenching your fists, you will be able to feel control and connection in your ability to slow, to stop, to connect differently or to disconnect the cars...”

At the end of the session, while the pinecones were in his hands, his eyes were closed and J. was ready to end the session, I made ego-strengthening suggestions, such as:

“... and now, when you feel that you have control in your hands, your physical powers are also much more easily available to you... And you can feel

more in control, stronger, more motivated... there is a real desire to experience change, and soon... maybe already at the next meeting?... and perhaps even a little sooner... ”

Before de-hypnotization, I suggested to J. to gather strength and motivation, and to accept my therapeutic proposal: after today’s session and before the next significant therapeutic session, to completely stop taking painkillers, of any kind, and imagine how he shares his success with me at the beginning of the next session, when he arrives at our next session, scheduled in four days, ready and completely free of painkillers.

In the second session, J. shared that he did not remember much from the previous meeting. I asked him to try to remember what he could, especially from the therapeutic contract we wrote together. J. was able to recall most of the objectives and techniques. He was surprised that he had avoided painkillers all the days between the sessions, but on the way to the treatment, an hour ago, he discovered that the headache was starting to return. After a very brief explanation of the essence of the method, we agreed on expectations and stages of intervention for the next hour: building centres of attention and good control, expanding the centres of control, contraction, and relaxation, to areas of the forehead and temples, and in-depth and creative work that should begin to progress towards stability and long-term amelioration of symptoms. After three minutes of inducing a pleasant experience of general relaxation, with an emphasis on availability and attention, checking and reinforcing a verbal rapport, I continued:

“Here are the pinecones you are familiar with, hold them comfortably, begin to warm them up a little, with a calm and equal grip, in the palm of the right hand and the left hand... You informed me at the beginning of the meeting, you shared that now, the level of discomfort in the palms and forehead is... around 2-3 out of 10?... and it’s still there?... If you feel a change, in any direction, you can update me when you feel it’s important... and now, this is a good opportunity, while your attention is in your hands and your hands are in control and at rest, let your hands remember what they practiced in the previous session: relaxation and contraction... specific sensations and distinctions and differences in the fingers... changes in temperature, in the sharpness of the spines of the pine cones... keep your attention calm in the palms of your hands... and while doing so, at the same time, before you allow yourself to focus on the unpleasant area in your head... first notice the back of your head, the top... areas that are usually quiet and relaxed... allow your attention to observe and experience these areas... to encounter the feeling of health as it should be... remember this, the time will come, and we will return to these healthy areas, expand on them, and utilize them... Nice! And in the meantime, while having excellent control over your palms, in which you feel many pricks but without any discomfort... And at the same time, begin to focus on the area of the head which is now attracting your attention... allow the words to come and help

the feeling, to explain and share... where is it? How big, how deep? or flat? Its borders? Colour, texture? The type of discomfort? The intensity of the discomfort, between 10 and 0?... Is the discomfort stable or changing? Does it react to your breathing? Is there a change, while you observe it? Running away? Follow the direction... Like what is it, what does it resemble, what is it like? Check, do you think that something is happening inside it, in its depth? Pulses?... Fluctuations in sensation? Share with me as you go, if you want... I want to reflect what you just told me: the discomfort in the area above the left eyebrow and left temple, like a 'piece of rubber', shapeless, tense, and warm... shallow, grey, perforated... in the area above the left eyebrow and in the left temple... The discomfort has now increased? up to 4-5/10... already 6 or 7? Just stay there, concentrate on the unpleasant area... and at the same time, while you are present in it and paying attention to the unpleasant area, a piece of grey rubber with holes, shallow, shapeless, hot, tension at 6-7... , we are progressing. Great! Begin to contract your palms, with the pinecones in them... contract gradually, as you are skilled... while continuing to monitor what is happening in your head... squeeze harder... you will easily recognize that you are experiencing pressure in your head and in the palms of your hands at the same time... You have enough attention and control to pay attention to two places at the same time... to join them... to experience a connection between the intensity of the contraction in your hands, and the stretching of a grey and perforated rubber band above your eyebrow and left temple... start synchronizing the strength of the contraction... both in the head and in the hands... when you reach an equal level of the contraction strength in your head and hands, tell me... Well done! Progressing: Continue and clench your fists a little harder... 8... 9... 10/10? As much as you can do it right now... hold the maximum for a few seconds... and while doing so, observe what is happening in your head at the same time... because already in the next moments, maybe already in these moments?... Some of the sensations in your head will begin to change... to rise and become stronger, to follow your hands or together with them?... Follow, observe... Allow yourself to start and relax your hands a little so they don't hurt anymore... that it won't poke... that it won't press... that it won't be stretched anymore... Let your hands choose for themselves the rate of release... a gradual decrease in the strength of the contraction... It's easier to continue and you can monitor the changes in the parallel area in your head: What changes can you already identify at this stage?... You can't measure in numbers the level of discomfort? It's okay, continue to be there... Follow, be present... Is the boundary fading and disappearing? Check well, around, near... check above and below, at the top of your head, at the nape of your neck, inside... in places that have always been transparent and quiet, were and will remain healthy... Do you feel the area as a piece of rubber, as 'transparent'? This is an opportunity to look inside it... After all, it is transparent, maybe you will be able to recognize a thought, can you notice

any underlying thoughts moving behind the sensations can you see any underlying thoughts?... If you feel that you are not yet sure that you want to share with me what you saw, understood, keep it to yourself, take your time... The main thing is that you are starting to connect... You are beginning to learn how to separate...”

At the end of the session, different variations of encouraging suggestions were incorporated to strengthen the ego, value and self-respect, motivation to change and the level of functioning. After the de-hypnotization, J. shared what he experienced in the session: he remembered the intervention and was aware of all the details. He seemed calm and composed, he noted that he did not feel any discomfort in his head, but expressed a fear that the pain might return soon.

In the third session, J. shared that throughout the week he avoided taking analgesics, even though he experienced two episodes of strong (10/10) but short headaches, which occurred during management meetings in which he participated. Episodes of these headaches prevented J. from participating in the meetings and staying until the end. I suggested to J. to continue the work we started in the previous treatment, while continuing to progress in the right direction:

“... now feel the familiar pinecones... feel control and concentration, allow yourself a few moments of deeper awareness, while contracting and releasing... whenever you decide... as strong as you decide... the control is in your hands... Today you are the one who decides, how much to contract and when to release... and while experimenting, allow yourself to perform a parallel scan of your entire body... from your toes to the top of your head... concentrate and you will find the ability to follow and divide your attention: your palms... the body scan... Excellent! Make sure you don't leave any part, scan every corner, reach the farthest corners... Be sure to make sure that even when you contract your hands, your eyebrows, forehead and eyes remain relaxed and calm, loose and transparent... Share your success with me, and we will move forward... and while the pine cones and control are in your hands, allow yourself to recall one of the board meetings... a routine meeting, one of many... and move forward to the last board meeting, from which you left before the end, because you could not stay any longer... See yourself from the outside... and visit yourself at the same time from the inside, so you can visit your thoughts, regulate the level of attention and control, with the help of the palms: increasing the contraction of the pine cones in your hand, will help you to connect inside more easily... inside, it's easier to recognize the thought that flows while, in those moments... you will be able to discover, to identify or experience more confidently, more deeply... you will be able to allow yourself full control of your palms, which will at the same time allow you to have better self-control... So much so that you can feel your self-control, feel the confidence, the courage and the strength, in order to bear the understanding, the thoughts, the experience, and begin to decipher and even understand what your head is trying to tell you in

these moments... and maybe not only for you, J.? Maybe it also has something to say to the people in the meeting? Take your time, control the power in your hands... It is probably time to let go and move forward... ”

In the next few minutes, J. sat tense and quiet, clenching and unclenching his palms, silent and sometimes looking agitated inside... I suggested he consider including himself, and maybe me too, in words. J.:

“... We founded it together; I was sure we were true friends... Stupid! Where was I? When new investors, new partners came in? At first, I was just ashamed, then I was ashamed to appear suspicious, innocent, and not familiar with changes... I was ashamed to be seen as someone who is not counted, as someone who has lost control?! As someone who was never a full partner, who is not counted! Over seven years of silence. They got used to it, were nice to me, like with a sick child who was held back a year in school... but I’m the one who developed the idea in his head, grew it with my own hands... For years I’ve been ashamed to share this with my wife, she did recognize that I’m not really part of the growth around me, at first, I was angry with her, I denied it, I didn’t agree to admit it, I was also ashamed before her... both at home and in society... years!”

After dehypnotization, we continued to discuss what J. experienced during the hypnosis. He looked sad and tired, on his own initiative he returned again and again to the thoughts and the connection between being lied to by his colleagues, embarrassment and shame, because he did not muster courage and preferred to remain silent, and the pressure he felt in his head in recent years. J. reported feeling a moderate headache and weakness. In order to “*continue the correct treatment and make progress in freeing his head from the pressure*” (suggestive language, later in the conversation and without formal hypnosis), I gave J. 2 clean sheets of A4 paper, on which he could write his understandings that have now arisen, and practice self-hypnosis later. As part of the task, J. chose a place where he sat during the day (his “cube” at work) and recreated the core of the understandings. Between sessions, J. committed to practicing self-hypnosis every day: sitting with his eyes closed, holding makeshift pinecones (made from the pages of his full “understanding”) in his hands, which he would crumple and hold in his hands. During the practice, J. should concentrate on a feeling of warmth that will occur in his palms, as a sign of listening to the “thoughts” that are written on the pages he is holding. He must synchronize the experiences in his head that he is feeling at that moment, with the sensation in his palms, make sure there is a clear connection between the tension in the palms and the head, to regulate and moderate the level of discomfort in his head, similar to what he did in our meetings. With each practice, he will be able to improve his ability to concentrate on the task, to progress and succeed, and imagine himself succeeding in leveraging the progress in his daily life, in different situations, at home at work. During the following month, J. had four more therapy sessions, in which

he continued with the MASSA method as a kind of key, with the help of which J. learned to “release stress in a healthy way”, to moderate and even release a symbolic connection between shame and stress, and headaches. During the last sessions, first in a hypnotic state, while holding the pinecones, and after that without any formal hypnosis, J. chose different topics for simulated conversations with his colleagues in the company (the personal conversation with his wife, with his close colleagues, and speaking at the board meeting, in which he demands his rights). Seven weekly meetings after the beginning of the treatment, J. informed me that he was cancelling the next meeting: he was flying overseas, for a series of job interviews for a challenging position (I have to be there in person, to hold it in my hands, I’m not willing to settle for the computer camera.) After two months on the new job, J. updated me about health concerns, and plans for a medical check-up in a different area, which he planned but did not follow through on. Over the next year, there were two follow-up sessions, in which he shared that every few days he continues to practice self-hypnosis with pinecones, he has no headaches, but *“sometimes he fears high blood pressure that he has not yet been able to control, and is still interested in using the treatment again, without waiting another seven years”*.

Clinical illustration 2: A patient with Balance Disorder (Psychogenic Vertigo)

O. is 63 years old, divorced for almost 40 years, mother of two daughters and has 5 grandchildren. She lives near one of her daughters. Most of her professional life was related to secretarial work at a large medical centre, from which she was forced to retire early, a year ago. She takes medication to lower cholesterol and prevent anti-osteoporosis. There is no history of mental disorder or psychological treatment. O. arrived in a wheelchair, accompanied by a close friend, with a referral from a family doctor. She dramatically complained of dizziness, severe difficulty standing and walking, fear of falling and the lack of ability to move without support and accompaniment. Because of these difficulties, O. rarely leaves her home. O. avoids leaving her apartment alone, is afraid to walk in the street, and has stopped driving. Her illness began two months after her retirement, at the height of the first wave of the COVID-19 epidemic, while she was attending the funeral of a very distant family member. During the funeral, out of fear of contracting the virus, she stood alone, far from the rest of the family, her face covered in a medical mask. O. suddenly felt weakness in her legs and intense dizziness accompanied by a fear of dying. She fell to the ground, and no one noticed or approached her for several minutes. In the end, she was taken to the emergency department, where she was evaluated and released to her home for further evaluation. After that, she has suffered from weakness in her legs, instability when standing and walking, dizziness, fears of a stroke, falling and death. After two rounds of consultations with specialists (neurologist, ENT, cardiologist) and repeated ancillary tests, and head CT/MRI, most organic causes were ruled out, including vascular problems (heart rate and blood pressure

monitoring, carotid Doppler). She also had a neurological evaluation, an EMG, drug treatment, physical therapy targeting balance problems, vestibular suppressants, and Recital at a dose of 40 mg.

In an assessment meeting, I had the impression of a woman in distress, seeking advice and who is in constant anxiety related to the threat of losing her independence and becoming disabled and alone with a decreased life span. In addition, she felt guilty and ashamed because she felt that she was burdening family members and friends who come every day to care for her, felt anxious because they have not yet discovered a reason for her distress (*“Soon everyone will think that I’m not normal”*). O. had a reasonable response to hypnosis, easily managed to connect with somatic experiences, describe sensations in rich analogical dimensions. After a slight hypnotic relaxation, she was asked to scan her body and find an area or a place, where she felt normal at this moment, relative to the other places. She reported feeling relatively calm and strong in her right shoulder. After being asked to concentrate and stay inside her right shoulder for a few moments and allow the shoulder to lead the feeling back on a timeline, through times in her life where her shoulder felt strong. O. began to share with me what happened to her: how she raised her little daughters, studied, worked from morning to night, provided for the household. At one point, she burst into bitter tears and shared the crisis period she experienced with her husband: a humiliating betrayal, his sudden disappearance from the life of the young family, uncertainty, embarrassment, and anger that lasted for years. *“I had to be strong, I couldn’t afford to let myself break, I bore everything on my shoulders, I dedicated 40 years of my life to my family, I didn’t ask for help...”* After a few minutes of listening and empathic atonement, when the flood of words subsided, I asked the “right shoulder” to check what kind of help and how much strength O. needs today, in dealing with the health crisis she is facing. *“This time, it’s different... I have finished my path in life, pension, daughters grew up, the grandchildren are moving away... Where did I end up? I’m the one who needs support this time?... I don’t want to burden anyone; they have their own lives...”*

In the second therapy session, after inducing a mild hypnotic state, I asked O. to help me find out what “powerhouses and successes” were on the scope of her life narrative. In age regression aimed at feelings of success, O. shared with me several important episodes in the girls’ lives (certificates of excellence, extra-curricular classes, and performances), progress in her professional life, buying her own apartment and repaying debts. At one point, I asked the right shoulder to try and flow power into the palm of her right hand and to squeeze my hand, while she was remembering and experiencing the successful episodes of her life. At the end of the session, I agreed with O.: her arms, from the shoulder to the palm, the strong parts of her that store the strength and successes of her life, are with her even today, here and now.

In the third meeting, three days later, in a short introductory conversation, we reviewed what we did in the previous meeting (her shoulders, the strength in her

hands). I explained to O. about the role and placement of the palm in her brain-map, as well as about the skills, strengths and precision of her hand across various activities. I demonstrated the pinecones, we performed a “calibration” experiment, concentrating on the experience of holding the pinecones in her hands. I explained that in the next few minutes, we will progress with the hypnosis, to create connections between control in her palms, and a sense of control, security and stability in her body. From here we continued:

“... and while you are sitting in the armchair, hearing my voice, holding the pinecones in your palms... feel a secure, strong grip, while concentrating intensely on your palms... Let the intensity of the pressure in your hands reach 8-9 out of 10, so that you can enjoy the power, to reach the threshold of discomfort and deal with it with dignity for a few moments... and feel that the pricks of ‘the thorns’ change... and have become a kind of light burning, burning in the palms of the hands... Therefore? Excellent! And now, you can let go until 6-7... 6-5... to bring it to the middle, to a balance of experiencing good control, but without the need for excessive effort... In these moments, your head feels comfortable, right? Your head is stable, resting on the back of the armchair. Lift it off the headrest, to make sure it is still stable? less?... I hear, there is a slight dizziness. It is expected at this point, it is fine... and it usually passes, when you open your eyes... nice! Still a little bit? grip it slightly stronger, in order to ‘calibrate’ and balance your head, according to the control and stability of your palms... Excellent job! ... similar to the successful calibration you just performed, gently allow your head to move from side to side... yes, smoothly and slowly... pay attention: when moving in which direction, there is a little less stability in your head? to the left? decide for yourself, out of intuition connect the ‘head-hands’ axis, how to squeeze the pinecones a little more, when your head moves to the left... continue... when you feel that you have succeeded, you will be able to enjoy gentle and slow movements, with better stability and confidence.”

Similar instructions enabled O. to calibrate and balance her head movements in all directions, to raise and lower. During the experience, O. sometimes felt unsteady in her whole body and slightly dizzy. Focusing on the “hands-head” axis and discovering it as a precise pressure of one of the fingers moving in a certain direction, helped O. stabilize the feeling more precisely, until she could move her head without any limitations, and without dizziness. She received homework, to practice and deepen control of the “hands-head” axis at least 5 times a day, and to end each practice only after reaching complete stability, without dizziness when moving her head in all directions. The following therapeutic sessions, Wednesday and Thursday, we practiced in a similar way, gradually controlling sitting on the edge of the armchair, standing close to it, first without, and then while moving her head and upper body. At the end of the sessions, I suggested connecting to the periods of her life in which she functioned

and felt strong, increasing her strength and motivation, security and control within her home. We agreed that she would perform many exercises with standing next to a bed or an armchair, while carefully moving her head and upper body. At the sixth meeting, O. arrived without a wheelchair for the first time, accompanied by her oldest daughter who was holding her by one of her elbows. She entered the room unaccompanied, holding the pinecones in her palms which she holds at chest level. *“I decided I’d surprise you! Smiling. I’ve been walking around the house independently for four days now, I’ve refrained from writing you an email, sometimes I was afraid it wouldn’t last. This morning, I went down to get mail, but I didn’t know how to use the mailbox key, after all, my palms are holding the pinecones. I gathered my courage and opened the drawer with my left hand and discovered that my right hand was strong enough to support me while standing for a few moments. Am I getting better?”*

In the following months, hypnotherapy and use of the MASSA method were gradually reduced, in accordance with the improvements in her stability, walking and balance problems. In a hypnotic state, while holding the pinecones, O. concentrated on imagining different walking routes, social situations, and challenging encounters, while recalling being independent in different areas of her life. The main theme of the hypnotic exercises was dedicated to social rehabilitation (walking and persisting in various groups of her choice, morning lectures, spending time with the grandchildren in the park, trips in Israel and abroad), with an emphasis on *“confidence and stability in walking, in accordance with the life-skills appropriate for the elderly population”*. Towards the end of the treatment, O. resumed driving her car, holding the steering wheel securely. In moments of stress and instability, she learned to regulate balance and stability by squeezing her hands tightly, but without the pinecones.

7. The MASSA Method: Visual Stimulation with Light

An example of flashlight stimulation: Hypnotic Induction

What does this have to do with the giant scientist, who, among other things, is one of the fathers of optics? Isaac Newton studied the structure and complexity of white light, the properties of the eye and of the brain in response to the exposure of his eyes to sunlight. The idea behind the flashlight method was inspired by Newton’s experiments with metamorphosis of the color, after stimulating the optic nerve [39]. The method is suitable, among other things, for patients with a low response to hypnosis, concrete thinkers, lack of imagination, a tendency to mentalize and even skepticism about their personal ability to experience hypnotic phenomenon. Another other indication is for patients interested in spiritual methods where the term “light” has a deep and broad meaning. The method can be used for fast and powerful induction, and as a hypnotic treatment that uses the experience and techniques of physical/mental/analogical/metaphorical work, while creating and working on the chain of phenomena that started from the visual stimulus in the induction. It is important to intrigue the patients be-

fore the induction, with several pre-hypnotic suggestions, designed to raise their expectations and self-esteem. For the induction, a standard medical LED flashlight should be used, to check the reactions of the pupils to the light. The patient is asked to sit comfortably, put his head back and look at the lit flashlight, focused at a right angle, 10 - 15 cm from the patient's eyes. The patient is asked to concentrate on the light that may be a bit blinding, and to help the patient bear the stimulus for the planned time, to count out loud from 10 to 0, at a rate of one digit per second. At the end of the count, the patient is asked to close his eyes. Then, the therapist should immediately continue at a relatively fast pace and in a confident tone:

“... nice!... and now, for one moment open your eyes... take a breath and close them again... excellent... please concentrate on what you see in front of your closed eyes, on the screen of your eyelids... all the people who experience a successful hypnotic trance, see the illuminated dot on the screen... you see a white or yellow circle... what color is the circle for you?... (getting an answer and continuing)... nice... you can too... great... and now, concentrate on the source of the inner light in front of you... see the illuminated circle clearly, imitate it... its strength, its size... and maybe... but this already belongs to people with a more developed imagination, to those with talent in the field of hypnosis... you will be able to identify a colored aura around the illuminated circle... a kind of thin and delicate colored ring... you found it?... well done!... concentrate on it... note the color to yourself, and let me know, without opening your eyes... I will be even happier, when you discover for yourself, how flexible and creative your mind is... how capable it is of creating and changing what you see... take a deep breath, open your eyes... beautiful, look at my palm that is in front of your eyes... and close your eyes again... and now, notice that the colored aura has changed color... right?... share with me the change... wonderful! And this is just the beginning of the changes: take a breath again, open your eyes and look at my hand... and close your eyes again... what color is it now?... continue to follow the aura around the light... it's already different... maybe it's more delicate?... Softer?... Maybe it is starting to be absorbed inward?... Can you still see the circle of light?... If it is less visible, take a breath and open your eyes again and look at my hand... close and relax your eyes... and now it's easier to see, that a circle that was until now white or yellow, has become gray... maybe darker... or very black?... Update me... hey, you've already discovered a black circle... deep... muster your curiosity and observe it... for now, just observe... allow the black spot to remain available... ”

From here, one can lead the patient in several directions, depending on the context of the intervention. Gradually ending the experience, while giving suggestions for relaxation, a good general feeling, arousal and energy, curiosity and motivation to continue and to learn the potential for change that can be produced in the continuing treatments, to repeat and encourage changes that the

patient experienced in the last few minutes, with an emphasis on the flexibility of his nervous system, ability to change, talent, and creativity. At the end, full de-hypnotization, and afterward, in a discussion outside the formal trance, in which the patient describes what he experienced, and the therapist repeats the relevant suggestions, and builds a bridge and expectations for continuing the intervention. The continuation of the work is intended to deepen the physical and mental dissociation, while involving the body, the imagination and even a joint hypnoanalytic effort, depending on the therapeutic context. An example of the progress: a patient who suffers from anxiety and lack of sleep, as part of an acute adjustment disorder, following the loss of documents of critical importance to his professional career, continues:

“... look at the black circle... it reminds me of what you described when you first came to me, black in front of your eyes, when you try to remember and recreate the location of your important digital documents... day and night you are busy trying to locate them, and “the black just expands and expands...” this time, when in front of your closed eyes, there is a grey or black circle; relatively small and narrow... it is stable and is coming from a kind of deep trench... a kind of portal or gate that invites the professional part of you, the part of you that is full of uncompromising motivation to succeed, to enter, to progress and discover... without fear, take a step inside... and start searching the depths of your memory... which should advance and lead to the location of the key... that key... which should open and release... when you are ready, approach the entrance into the canal... take a step in and begin... sometimes it is similar to falling in the slide in the water park... with twists and turns that stop your breath... with a desire for it all to be over... surprises along the way... familiar places... new and surprising contacts... allow yourself to move forward... courage and curiosity... inside... further, deeper... the process will take time... it should take all the time it needs... until you feel it in one of the points of your body, in a small point or tangible area of the body, don't miss/lose that feeling, which will symbolize that you found the key in the depths of the memory, and brought it to the top, made it available... any feeling in one of the points in your body, in which you recognize any clear feeling, in the following moments... Share with me with a slight nod of your head... I saw, I'm glad... apparently, the key has already floated to the top, made available for your awareness... you may find yourself connecting to it right now... or will it take you some time, while you gather resources and are ready to upload the memory to your awareness?... In the next few hours? at night or in the morning when you wake up refreshed after a deep sleep?”

Example of session's progression: patient with fibromyalgia

“... and when the black circle becomes available to you, you will be able to continue to progress in a unique and original way, and examine your body,

the ways and pathways through which light is able to flow freely, at the characteristic speed of light... and also to explore and clarify the areas of your body, muscles and tendons, in the directions the light doesn't enter freely or doesn't enter at all... ready? Nice, open your eyes for a moment, look at the light of the flashlight... this time I count only 5... 4... 3... 2... 1... and close your eyes and you will discover how a stream of bright light begins to flow in... accompany it, from the illuminated circle in the retina of the eyes... into the path up to the scalp... the back of your neck... into your right shoulder, towards the elbow... and to the tip of your fingers... to the left shoulder and down... to the shoulder blades... and along the spine... to the waist and pelvic muscles... to the chest muscles... to the abdomen... each leg... ”

After the scan is finished, while the patient's eyes are closed, briefly discuss the places where the flow of light was extremely shallow or not successful at all. At this stage, encourage the patient to create various analogical or metaphorical solutions: for example, to clean the pathway of accumulated sediments (dirt from insults, scraps and debris of conflicts, anxieties and worries), or to better understand and discover alternative ways or changes in the pathways of the body or of life, or a different approach to the old conflicts.

Example of session's progression: patient with psoriasis

“... You shared with me, how much you benefited from phototherapy at the beginning of your illness, many years ago... Since then, over the years, something has changed, and the treatment that was so beneficial stopped helping... The external lighting no longer reaches deep enough inside the lesions... The sores became more resistant, 'locked' against the rays of the sun at the Dead Sea, or the advanced UV devices... and perhaps, something inside you also 'locked' during these years, locked against your faith and hope for healing... but you didn't give up, you came this far, and ready to give yourself an opportunity for change, for a creative and unique way, to reach your skin's distress in a different way... that you have never experienced before, to have your skin meet the light... right from the inside... from the depth of the distress... to permeate the stream of light into the lesion, into the cracked, irritated and injured area... At this moment, scan your skin, choose a place that at this moment attracts the attention of your heart more than the other wounded places... did you find it?... open your eyes for a moment, look at the light of the flashlight. Here, begin to absorb and internalize the light! I count 5... 4... 3... 2... 1... close your eyes and allow a stream of bright light to build the shortest and most comfortable path, from the illuminated circle in the retina... to that place that is calling for your help... feel the light that flows... accompany it, be creative and accompany and help the light through its course... to that place... from the inside... the light will spill into the small capillaries, reach the depths of your face... it is absorbed into the tissue... it begins to illuminate it... the whole area begins

to be illuminated... concentrate on the feeling... begin to recognize the change... any change... any experience, any feeling that is a little different... share with me when you are ready... any change is for your benefit... the process has begun...”

8. MASSA Method: Auditory Stimuli. The Beats of a Metronome

Clinical illustration 3: A patient with Tinnitus

Presented here is an example of authors’ hypnotic induction employing metronome sounds, to induce the phenomenon of *sound-word synaesthesia* (Audio-Semantic Connectivity), producing a point of continuous focus and directing auditory stimulation, creating a change in the experience of the stream of time (Time Distortion), while incorporating changes in the rhythm of the metronome. The purpose of this intervention is to create a positive classical-conditioning effect between the rhythmic sounds, words, and associations, accompanied by suggestions to discover new relevant findings in body sensations and emotions, and suggestions aimed at calming and relaxing, to enable him to get a good night’s sleep and to deal the symptoms of tinnitus in a healthier way [28].

N., 66 years old, married with five children, took early retirement, lives with his wife in a house in a rural area. He worked for 30 years as an advisor to the Ministry of Defence (Veteran’s Administration). Earlier in life, as a young soldier performing mandatory military service in the Israeli army, N. was injured during a wartime campaign, lost vision in one eye and sustained burns of varying degrees. He recovered, studied and over the years worked mostly in the field of electrical engineering. A year ago, his youngest child left the house. N’s older children and grandchildren visit every few weeks, despite some living quite far away. Over the last decade, N. developed moderate hearing loss, without the need for a hearing aid. He had no history of mental disorders, psychological treatment, or combat-related PTSD symptoms. He is athletic, in good general health, and despite receiving a prescription for medication to lower blood lipids, he does not take any. In the past year, there have been repeated visits to his family doctor and an ENT specialist, with complaints of tinnitus, which worsens in the evening, interferes with falling asleep, makes N. nervous and angry, and interferes in his relationship with his wife. Tinnitus Retraining Therapy did not significantly ease his distress and a trial with Clomipramine caused daytime drowsiness, without alleviating the tinnitus. While attempting to self-treat using the Tinnitus Binaural Beats Music method, N. was flooded with memories of the battle in which he was wounded, and it took him several days to recover. That iatrogenic experience made him suspicious of modern treatment methods and wary of using other “technological gadgets” or psychological treatments that might awaken old traumatic memories of the war. When arriving for hypnotherapy, N. expressed doubt that he could be hypnotized, saying: “I don’t sleep well at night, I have been very tired and nervous in the last few months.”

After a comprehensive psychiatric evaluation, checking N.'s responsiveness to hypnosis and calibrating expectations from his first hypnotic experience, it was explained to N that our goal was to check whether he would be able to understand the content and follow hypnotic instructions, while making sure to stay alert and not disconnecting or falling asleep. The request was that he would remain aware enough to maintain control of his experience of the flow of *time, the situation and the noise accompanying him during the experience.*

“N., I remember you saying that it is not suitable for you to be exposed to electronic devices, that you are not interested in discussing the details of your combat or recalling the events, not interested in starting a long psychological treatment, and not really sure whether you can be hypnotized. You probably meant that you are not ready to give up control... I respect everything you said... and more than that, I believe that it would not be appropriate for you to lose control or to lose attention and connection with what we will try to do together in this meeting... You, as an electrical engineer, know very well that there are heavy and complex electronic schemes, that begin to wear out over time... one or several semi-conductors wear out or burn out... the solder loosens or falls apart over the years... all of these inevitable processes can be slowed down but cannot be stopped... Please confirm that you are listening to me, focused and are not really in a deep trance, okay? Nice, let's continue—Look, here is the metronome, a device that is not electronic, and does not know how to fake it, its function is to play a simple, precise, stable rhythm, to be heard clearly for a long time... it is easy to control, start and stop... we will turn it on at a frequency 'one beat per second', in the professional language you understand much more than I do - one Hertz... Let's turn on the metronome:... note: at a rate of one beat per second... a reliable, constant frequency... you can trust it... while the metronome continues to tick the time, at the natural rhythm of time, one beat per second... you will be able to concentrate on the sound and give it a place in your focus... and discover that each full beat is made up of two sub-beats, according to the movement of its pendulum from side to side: 'Back... and forth... back... and forth'... I suggest you sit more comfortably, and close your eyes, so that you can concentrate better on the sounds of the metronome... tick-tock... tick... tock... and if you keep concentrating, you will easily find that the sound of 'tick' is a little higher than 'tock'... 'tick' high... 'tock' a little lower... high... low... I will reveal to you a secret that you may have known even before I did: the human ear knows how to reverse the sound of the beats of the metronome, and identify in the sound any word we want, any word that can be divided into two rhythmic parts... listen to the rhythm of 'tick' and 'tock', and you will discover that with each full beat, you can hear any simple word, for example: 'Qui-et'... 'Qui-et'... are you succeeding?... and now, replace the sound you hear with the word 'de-ep'... de-ep... de-ep “... it's easy, to be focused on the word that utters it-

self, to hear ‘de-ep’ with every next beat... to hear it in your heart... and check if you can also recognize and experience a little, the depth, while the time between the beats it gets wider (here, I stop the pendulum for a moment and slow down the metronome a bit)... ‘de-ep... .. de-ep’... time becomes a little more spacious, a little more available... even more... the spaces between the beats become longer, and during them you will be able to improve your focus on the sound a little... True, it’s not easy at this stage, when the heart keeps repeating ‘de-ep’, but part of your body, it’s not clear yet which part, is more, the head or the limbs?... Prefer to be heavier... looser... calmer... check, and when you find out, give me a sign: if the head is a little heavier, limp and sleepy, nod your head... and if it’s the limbs—let your hand or foot inform me with a slight movement... Thank you, I saw: the head... and now, you and I together, while you hear my voice very well... Your head continues to rest a little deeper... the metronome continues to synchronize its sound with the ‘de-ep’ in your heart... allow your heart itself, the chest where the heart is, your shoulders, to listen and feel the sound... beat-beat, ‘De...-ep... De...-ep’ in the shoulders... in the chest... inhale and exhale... deeper... more relaxed... when you can feel a slight looseness in the chest, give yourself permission to continue to the stomach, to the whole belly... the stomach also breathes... together with the chest... ‘De... ep’... sound—movement... sound—breath... deeper, more pleasant, more relaxed... the metronome knows how to disappear for long moments, but still to continue and to deepen the rest... and again the sound of the metronome can appear in your focus... and again disappear into the background... until your waist and legs also allow themselves to feel fatigue... a pleasant heaviness... rest... ‘De... ep, de... ep’... simple sounds... simple words... who needs gadgets, when there are real relaxing sounds... simple relaxing words... ”

N. continued to stay in this position for about ten minutes. I asked him occasionally to give me a sign to make sure he is hearing me and continuing the process. After he was dehypnotized, we discussed the types of experiences he felt, I praised him for being able to focus. The patient believed that the experience was very long, in his experience he stayed in the room for more than two hours, and was concerned about the patient who was supposed to come after him in the queue, and if so, was it planned in advance or did the patient cancel it? At the end of the conversation, we coordinated the experiences of time, the duration of treatment and N.’s ability to concentrate and invest in restoring his lost rest. In the second session, we practiced hypnosis under the “metronome hypnosis” (that’s how N. called the practice), in the context of a night’s rest, starting the evening after the treatment. During the session, I suggested the patient flow with his smart and intuitive unconscious and adopt words that are more suitable for a healthy and satisfying night’s rest, from the choice of his ears and the choice of his body. When N. reached the stage of matching the authentic word, he did not

respond to my offer to indicate to me whether the word had been selected successfully. When I asked if he could still hear me during the sounds of the metronome, he responded in the affirmative. And when asked if the replacement word was already beating in his heart, closed his eyes and uttered “To... forget, to... forget...” At the end of the session, after giving post-hypnotic ego-strengthening suggestions and suggestions for successfully having a good night’s rest, and complete de-hypnotization, N. shared that he did not remember the word he chose “with the help of his unconscious”, but he feels that it is the most correct word, and he is ready to carry out self-hypnosis practices at home, every night.

During the second therapeutic session, I recorded the hypnotic part of the treatment for the patient, the metronome activity, connecting to the word of choice, investing in deliberately and orderly transferring the experience of rest to all parts of his body, and to sleep through the night until morning. It was agreed that he would perform an orderly dehypnotization after waking up in the morning, while counting in his head from 10 to 0, and saying to himself “I’m out!” At a follow-up visit 4 weeks later, N. shared that he is not as preoccupied with the problem of tinnitus as before, is less nervous, and feels more alert. N. shared that at our first meeting, he probably did not tell me that a year ago he was convinced to try and sign up for talks with the psychologist of the Rehabilitation Division, who previously treated one of his friends who was injured in the same battle. “It’s a good thing I didn’t go to her. After all, the persistent tinnitus didn’t leave me much choice, the noise in my ears drove me from doctor to doctor, I didn’t go to the meetings, and maybe it’s a good thing.” At the last follow-up meeting, one year after the hypnotic intervention I described, N. reported on his general health, on the well-being of his children and grandchildren, on the fact that he sometimes continues to “maintain” the achievements of the self-hypnosis. I asked how he feels on the days he decides it’s time to go back to the tape and practice hypnosis, N. answered “What, doctor, didn’t you guess on your own? When the sounds of the word ‘I forgot’ stop beating in my heart.”

9. MASSA Method: Oro-Pharyngeal Stimulation. Working with Water

Clinical illustration 4: A patient with Crohn’s ileo-colitis

Patient L., 42 years old, married with one child, a religious Jewish woman, with her hair covered (modern orthodox), a lawyer by training, does not work in the profession, is helped by a disability allowance, has not worked in recent years. About a decade ago, she was diagnosed with progressive Crohn’s disease and underwent a bowel resection (complications of inflammation and strictures in the terminal ileum), is being monitored and receives intensive professional treatments. In the last year, her disease has been under control, without serious episodes of inflammation flare-ups, without bleeding, and is maintaining a reasonable weight. For over five years, she has been receiving biological treatment

(Adalimumab), Escitalopram 20 mg, uses Loperamide to stop diarrhoea, when she feels bowel activity is too active. In the past year, N has started experimenting with mindfulness, but finds it difficult to concentrate and practice outside of the group. She was referred by a gastroenterologist who noted that L. is in extended remission, most of her symptoms are abdominal pain and feelings after eating or drinking, which are atypical of her illness. Laboratory tests are normal. L. describes anxiety about her health, related to the future of the disease. She feels unable to prevent episodes of flare-ups, which she claimed came every few weeks. She is unable to let go and live a fuller life, to return to her profession, is not convinced and cannot really relax for more than a few hours, even when the experts in the field convince her that her illness is in remission. Most of the time L. is afraid of getting sicker, sometimes she is very stressed by the feelings in her stomach, she is stressed and has diarrhoea. She is afraid that she will accidentally misinterpret what she feels, and report symptoms that are not related to her illness, and this will convince her gastroenterologist to change or increase the dosage of the drugs, give up, and in the end recommend another bowel resection. In the first assessment, the patient shared her expectations from the treatment: *“I want to try hypnosis, alone I can’t concentrate on meditation more than a few minutes. Maybe hypnosis will help me achieve longer concentration and attention, maybe I will be able to understand what is happening in my intestines, without panicking and without making a mess of my stomach”*. L., who has a mature personality and developed emotional intelligence, has been aware since childhood that she has difficulties with attention and concentration. She has a well-developed visual and somatic imagination, high therapeutic motivation, good response to initial hypnotic experience, and achieved the maximum score on the Somatoform Intention Test [40]. In the intake interview, she reports worsening symptoms in the days of waiting for the first session: abdominal pain, mucous diarrhoea returned the night before the session, anxiety, and waves of abdominal pain. She shares in tears that she is desperate and very scared of what has been happening to her in the last few months. *“... I have had almost no remissions; I’ve already had a bowel resection... What will happen? I’ll be left without a bowel?! With a feeding tube in my vein?! With a colostomy? How can I take care of my young child?”* I responded with empathy, using only positive language:

“I hear you: you are very worried that the remission will not last long, that it will not be easy to continue eating as usual, as you have been eating all your life, and continue to eat even today... the integrity of your body, the integrity of the stomach, control and strength to raise your daughter are very important to you, to function... you’re not ready to give up!”

After a few minutes of conversation about the chances of an optimistic prognosis, we proceeded to discuss the role of hypnosis in the management and regulation of anxiety and stress, the role of sympathetic and parasympathetic network of nerves and their complex meeting in the stomach and intestines, the

possibility of learning the language of the stomach, learning to separate the desire from the real need of the body, stomach, and intestines:

“... you know yourself well, it is not easy for you to listen and concentrate for a long time on something specific, the thought flees from you... This is perfectly normal, but sometimes it prevents us from maintaining the connection for the appropriate amount of time, so that we can move forward and benefit from the connection. You told me that you had diarrhoea this evening... We both think that your stomach will be happy to give the intestines a few sips of cold water, is that so?... Nice. Here is a paper cup, with water. I got it ready in advance. Hold it with both hands together... Yes, wrap your fingers around the cup... nice. Feel yourself holding a cup of cold water from the cooler, place your hands with the cup on the pillow that is on your lap, sit more comfortably, because you need concentration and attention, right? Your treatment, which we already started in the previous meeting, is continuing now... In the next few minutes, it will be interesting, you will be filled with tasks, tasks that are clear and easy to implement, tasks that will encourage gut feelings, thoughts, and experiences... As one of the tasks, I will suggest you drink a few sips from the glass without opening your eyes, and after that we can continue with interesting and fruitful hypnotic work, to move in the desired direction... L., you shared with me what bothers you, what scares and discourages you in the years of the disease... you shared with me the worsening you faced this evening as well... sensations, waves, noises in your stomach, the evening is difficult... diarrhoea... Like the crying of the intestines... just as the eyes know how to tear when we are overwhelmed by experiences, maybe the intestines also learned to cry, out of threat or frustration, out of stress, out of despair in the face of uncertainty... out of some conflict with someone important?... or out of the unexpected and threatening encounter with the immune system?... And sometimes, there are several reasons together, and they cause the stomach to react, exert itself, get tired and even cry... The stomach, the intestines themselves, sometimes understand much better than ourselves, the sources of stress, the causes and the roots of distress... the intestines may understand, but find it difficult to express in words, but only in symptoms, time after time, symptoms you know well, for years, one by one... you know well, everything that does not suit your stomach, there is no need to remind you, the tension is still here, in the stomach, under the pillow that is warming your stomach, here and now... N., you’ve been ready for a change for a long time, doing a lot to get the relief, to enjoy it... and enjoy it... you know well, what doesn’t suit you, what bothers you and what disturbs you, what hurts and what scares you... It’s time to make it clear to yourself—what is suitable, what is desirable to feel in your stomach, what is allowed to be felt, how you want to spend the day, while your stomach is calm and quiet, transparent and light... Now in these moments, it’s time to formulate and define:

how do you want to feel and experience your stomach, your bowel activities, a healthy appetite, daytime, and night-time rest?... Start formulating and defining, one by one, your simple requests, what do you want to sense and to feel, what are your positive expectations from the intestines, from the immune system?... You are a religious woman, all your life you say a blessing on the water, before you drink it... the multicultural customs, over thousands of years, among many peoples... even nowadays, some curious researchers, discover amazing properties in the water, among other things—changes in the structure of the water—the unique liquid crystal in the universe—in response to exposing the water to different musical harmonies, to the presence of the person with positive intentions who utters a prayer or positive intentions... When you formulate the requests, the main ones, the most important and the most obvious, you will enjoy yourself easily, and we will continue... I saw, excellent! And now, while you're sitting in front of me, your eyes are closed, you're holding the cup of water in your hands... your fingers feel the coolness of the water in the cup... I believe you're trying to concentrate and do your best... continue to experience the cold water through the side of the cup... and the heat inside you, the heat of your fingers, warming the glass, passing into the water inside it... and during the next few minutes, you will be able to recognize that the water inside the glass is a little less cold, warming up, internalizing the energy in your body, feeding on your heat... Try not to move your hands, keep the water in the glass quiet and calm, very calm... to transfer maximum warmth to it... the complex and unique liquid crystal that is called 'water', which relaxes and warms inside the glass, changes and adapts itself to your body... give the water time, a few more moments... And in the meantime, while the water in the glass warms up and listens to our conversation, they have no choice: the vibrations of the words that change the molecular order of the water, and who knows? Maybe recording across billions of small dipoles of the water, your requests for change, the therapeutic message you formulated, is ready to start moving into the water, right now... start talking in your heart, in your inner speech, the words of the requests for change, clearly and slowly... sure and clear... conveying positive requests for change, restoration and healing, feel how it flows through your shoulders—into your arms... into your hands... into your fingers—inside, into the water... the right rhythm, to flow with a request for change... in your words... from your heart—into the water... In simple and clear words, as only you know... and as soon as you requested it, the change starts flowing, feel how the water changes... becomes a little warmer... small and humble requests that flow through the water... keep moving, and you will discover, that you also hear the words I utter very clearly... a quiet and rested stomach... the intestinal lining is calm and intact... the lining is intact and well protected throughout the entire intestine, every step, every part... calm and quiet digestion... the

relaxation of the stomach... good absorption... quiet, complete and healthy digestion... the friendly bacteria are happy with the way you take care of yourself... the E. coli bacteria population reaches relaxation and quiet and efficient functioning... a calm morning... a full night of deep sleep... day after day, week after week, month after month... relief... true remission, over decades... When you feel that the water has received your request, has warmed up enough, internalize your requests regarding the nature of the change, you will be able to allow your hands to begin to rise towards your face, to the direction of your lips... yes, at a careful pace... start drinking the water... , and internalize the contents of the cup, sip sip... inside! Excellent (let your hands go back down and continue to hold the empty cup)... after swallowing, immediately concentrate on what is happening in your throat... feel the water flow down the oesophagus... the water seeping inward... breathing relaxes... allow yourself to accompany the flow of water all along the way, all the way in oesophagus... the water continues, follow the small sensations, follow them with the little video camera of your imagination, follow the flow in... deep down, water is already entering your stomach... inside... breath after breath, the water continues and seeps into your intestines... it is already in the small intestine, flowing and beginning to be absorbed... and the stomach can allow itself to start to be a little more hypnotized, more relaxed and calmer... water flows and continues, it is a process that takes time, It has its own rhythm... It turns out that it is very simple to concentrate, to follow and experience the progress and the absorption, while imagining and feeling how your breathing relaxes the chest: inhale—a slight rise of the chest... exhale—a slight fall... rise and fall... inhale and exhale... like a lullaby... it is simple and makes you happy to discover that the stomach is also connected to the easy movements of the breath: up... and down... inhale-up... exhale-down... the stomach also gets to be part of the pleasant hypnotic feeling... to be relaxed and calm... to be ready to listen to me... to be hypnotized... to remain to be hypnotized... You are sitting in an armchair, listening to my voice, rested and relaxed... your thoughts continue to flow... your breaths continue to raise and lower your shoulders... the stomach goes along with the breaths, rising and falling... somewhat reminiscent of small waves on the surface of the water that flows in the river of life... This is the moment to imagine yourself sitting in a comfortable, safe boat, designed for you... the boat has a strong sail and rudder, the boat is easy to steer, and it will respond to your every thought or command, move forward, turn, and if you decide to get off, the boat will approach the river bank... in the last few minutes, you were focused and goal-oriented: to create a clear connection and relationship with the intestines, to formulate messages and requests for relief, change, rehabilitation and healing, and transfer them inside... in a tangible and perceptible way, to make sure that it is delivered inside, to feel and understand that it is already a part of you...

Billions of water molecules, seeping through the water, delivering your wishes to your immune system, carrying the requests for change to the lining of the small intestine, continuing farther, deeper, where there are no words or where the camera will never reach... But the water, your messengers, will reach every corner, in body and emotion... even without you having to be aware of their dedicated work, even without keeping you busy with updates of processes that begin to improve and relax in real time... so that you can rest and stay away from following your bowels, rest your stomach and restore its autonomy, return one of the basic features of a healthy stomach: to be clear, quiet and easy, to calibrate and regulate itself, manage itself, digest, absorb, release and get rid of what does not suit it... so you can make time for yourself to live, you can regain the right to live your life as you always wanted to... have experiences, feel and participate, be angry and happy, start and finish, set limits, to invest in and get bored of something you have chosen, to enjoy every day, the people you love, the meaningful actions that make you feel good... to live, while the stomach feels liberated, mature and independent enough, in order to preserve your health, to protect itself from excessive worries and pressures, in the face of unnecessary worries and anxieties, and all this—so that you can continue to live... ”

At the end of the meeting, it was agreed that N. would perform a daily practice of self-hypnosis with drinking water, similar to what she did in this meeting. A week after the session, she reported that she was surprised that she was able to hypnotize herself, using water and that clear tasks helped her to complete the practice. In the second and third therapeutic sessions, we concentrated on strengthening motivation, clarifying the conflicts, and aligning her expectations regarding her medical condition with the plans for rehabilitation, whether she felt a significant improvement, stability, and confidence that her illness was indeed under control for a long period, and was letting her make plans for the future. In the fourth session, the hypnotic intervention was recorded, with a recommendation to combine hypnotic practice with water, and to listen to the therapeutic recording every few days. After producing a hypnotic trance with drinking water, which took 5 minutes and did not include a smooth warm-up and transferring requests into the water, I continued:

“... feel yourself in the boat we built, sitting-lying, like in your hypnotic seat here and now, inside a safe boat sailing across the river... the river is familiar and unfamiliar... light waves, in the rhythm of your breathing, rising and falling... Pleasant air, a blue sky, a friendly sun, the current is calm and peaceful... your boat is sailing, you are in it... a clear day, you can see far, the banks of the river on the right and left... you can identify the vegetation on the sides of the river... to sail in the wide and deep sections of the river... or narrow and shallow... the vegetation around the river changes, the boat moves at the rate of your breath, the water flows around the boat... you take

your hands out of the boat, touch the water with your fingers and remember: these waters have a memory, there is a mission... everything you asked for, everything you passed on to them, all the energies of desire and motivation that you passed into them, flows and accompanies the boat, breath by breath... you know and feel in these moments part of the solution, you are a complete partner with the water in the healing mission: you will be able to identify narrow sections of the river that are full of dry vegetation or debris, places that need your attention! All you have to do is think of a change—and it happens immediately!... Here, other places you will recognize and feel their distress, that ask for assistance: opening or closing, expanding, any help you can give... you have everything you need to make the change: and if the fantasy isn't fast enough, you can reach into the water and pour water on the places that need repair... the boat is listening to you, don't rush... invest in the riverbanks that collapsed... in places of distress... let the water flow, let it water the vegetation well, so that it will strengthen the bank, straighten, widen, straighten, allow the water to flow more freely... all along the river, in every corner or turn of the river... in front of every view that appears around you, you will be able to control the flow the water, you will be able to slow down and help, irrigate and assist... to block or break through, to clean or strengthen, to calm and to repair... the restored places breathe a sigh of relief... the water inside them is clear and clean... the river is restored... Breathe by breathe... second by second... minute after minute, day after day, week after week... the restoring current does not stop... it is healthy and stronger than any blockage, than any swamp... than any wild vegetation that broke in... the river flows, at a healthy rate, restores and strengthens... the stomach and intestines allow themselves to remain in hypnosis as long as necessary... the unconscious current continues to flow and restore... the stomach reveals sedation and relaxation... longer, more completely... Recovers and preserves the banks of the river... month after month, good and healthy absorption, healthy digestion... healthy and strong mucosa... resilient and calm... scars fade and allow a healthy and appropriate flow... ”

After general dehypnotization, while maintaining the continuation of the therapeutic work that was applied during the trance, the patient returned to a state of full alertness, reported that she felt the abdominal area as clear and light, floating and cool. She received instructions to continue practicing self-hypnosis at home, while drinking water and working with the recording that would be integrated into the self-hypnosis practices she had done so far. L.'s hypnotherapy continued for three months, with work on interpersonal conflicts, concerns about the worsening of the disease, various health concerns, including concerns about diseases not related to the Crohn's disease. Hypnotic intervention focused on ego-strengthening, improving general functioning, making the future more fruitful, and improving quality of life. L. was highly motivated to practice self-hypnosis.

In a clinical follow-up, L. reported a significant improvement in her condition: diarrhoea and pain had decreased in intensity and frequency, treatment with the specialist ended. A year later her gastroenterologist informed me that after L. returned to part-time work as a legal consultant, she experienced a brief stormy period of worsening, during which she returned to steroid treatment, but she insisted on stopping the medicine sooner than planned, continued to work, and even increased her work hours. My proactive follow-up after a year: L. feels reasonable, over a year without Escitalopram, a few months ago initiated divorce proceedings, functions well, but still worried about oversensitivity in the stomach, dealing with days of stress. Returned to a meditation group, considering studying the field in depth and maybe becoming a guide. Continuing to practice meditation (in her version, “diving into water hypnosis”), she feels that she has enough concentration and attention, personal experience, and talent to engage in the field.

10. MASSA: The Foundations of the Attention-Connectivity Hypothesis behind the Method

A new hypnotherapeutic technique termed “Mental Access/Somatosensory Access” (MASSA) is designed to utilize an external somatosensory stimulus in the context of hypnotherapy, based on a Bottom-Up/Top-Down Paradigm, that complements and mutually reinforces hypnotic inductions by using imbedded suggestions. The intervention’s algorithm includes a combination of real-time stimulation through one of the following somatosensory modalities: sensorimotor activation of the palms, visual, auditory, vibration, thermal, olfaction or oropharyngeal. These modalities are accompanied by guided hypnotic dissociation and suggestions.

- The MASSA technique is aimed to enable the creation and maintenance of focused, sustained and divided attention during hypnotherapy.
- Controlling the intensity of the stimulus and the duration of the exposure, while creating alternating mental tasks that encourage immediate feedback and cooperation, guarantee optimal sustained and alternating attention between sensory and mental tasks, over time. The MASSA technique for controlling attention helps patients with attention deficit and low hypnotizability boost their sense of agency and helps facilitate the hypnotic experience for them.
- The therapist then provides the patient with specific tasks and questions in response to the somatosensory stimulus. These questions can vary along a few axes. They can lean more towards concrete descriptions, perceptions of how sensations change over time, or invitations to formulate cognitive, emotional or metaphorical descriptions of either the stimulus or the presenting symptoms.
- Strengthening patients’ divided attention, engendering a controlled dissociative state and using suggestions focused on change-talk, help to create a

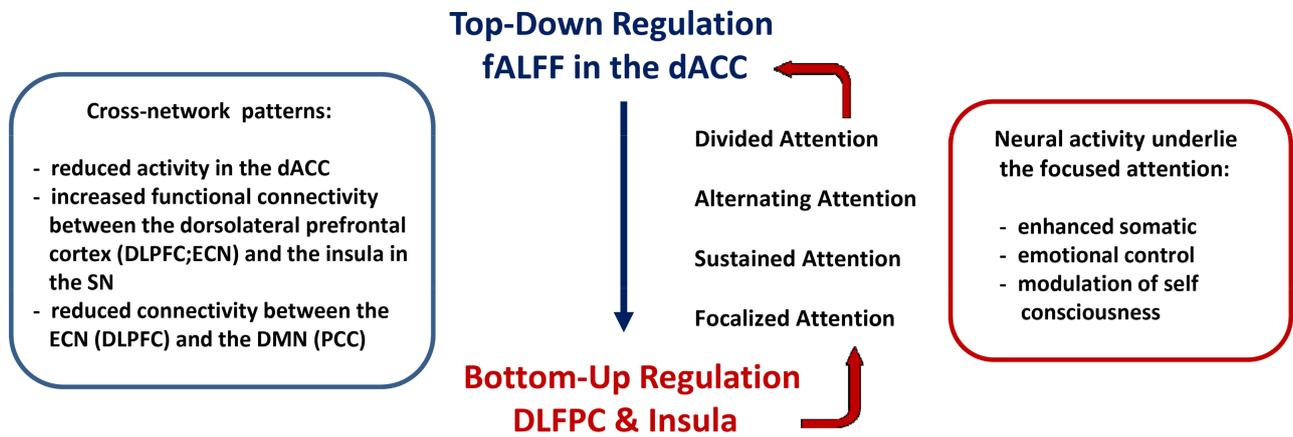


Figure 1. Modulation by MASSA intervention: possible cross-network patterns.

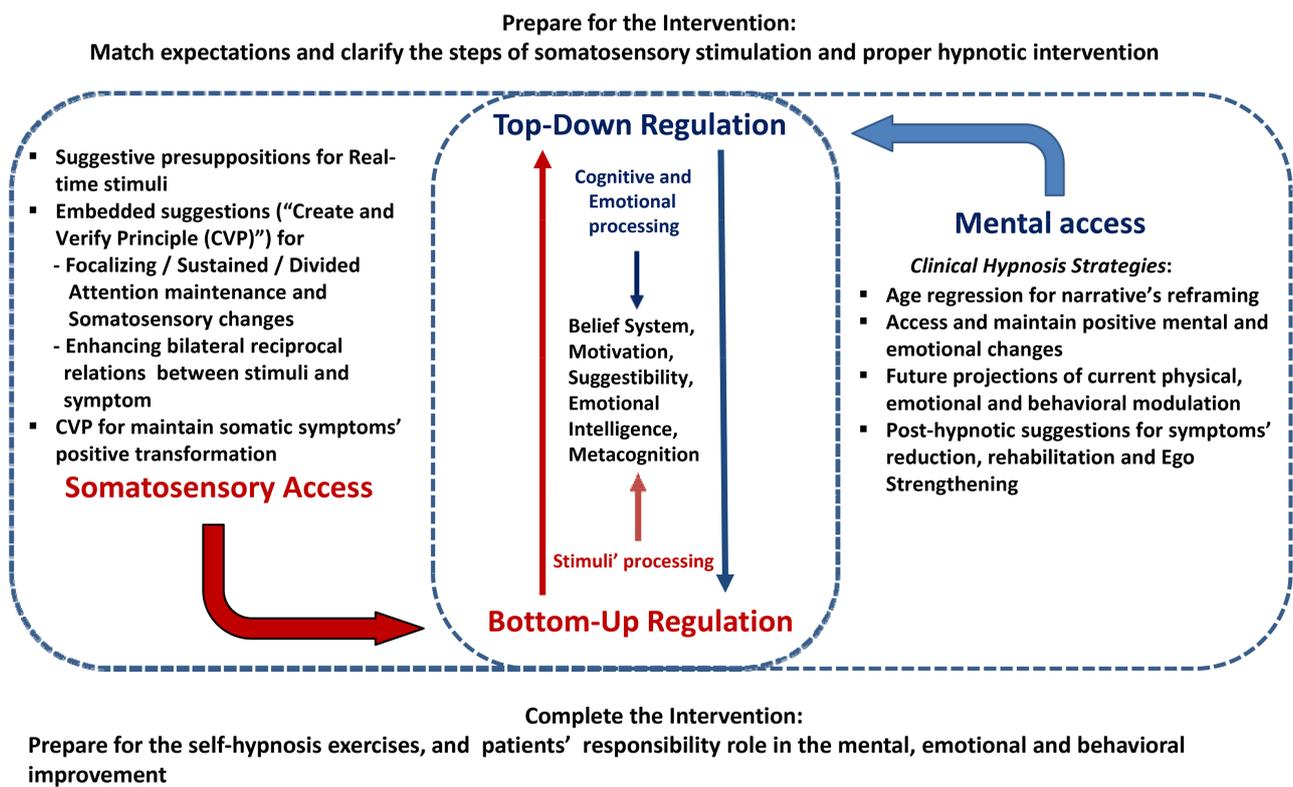


Figure 2. MASSA (Mental Access/Somatosensory Access) intervention model.

transition from the patients' unconscious relationship with their emotional distress to a more conscious, semantic processing of that distress. This encourages metacognitive awareness of the roots of the conflict or deficiency underlying the patients' symptom.

- The therapist's first "technical" task is to focus the patients' attention, helping them to stay in an attentional zone of "stimulus—experience—awareness", while at the same time maintaining awareness of the intervention's larger context, to progress and achieve clinical relief. This gradual transition to a metacognitive discussion of distressing symptoms expands the patients' use

of emotion and imagination, enabling them to find creative solutions to their own problems. It is presumed that at this stage, a change occurs in the neuro-connectivity between the ECN and the DMN.

- After the first few therapeutic sessions, patients are encouraged to continue self-hypnosis. With a focus on practicing the therapeutic goals achieved thus far in therapy, patients are instructed to use the same controlled stimulus that they became familiar with during therapy (pinecones, sipping water, smelling a scent, listening to a metronome, etc.). Each of these somatosensory stimuli provide an effective and practical “anchor”, enabling successful practice, while repeating and strengthening the therapeutic achievements. As the treatment progresses, these new resource networks become more easily accessible to the patient, and with practice over time, in accordance with the principles of neuroplasticity, they are integrated into the DN (see **Figure 1** and **Figure 2**).

Consent

Informed written consent for the publication’s clinical examples was obtained from the patients.

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Conflicts of Interest

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References

- [1] Tellegen, A. and Atkinson, G. (1974) Openness to Absorbing and Self-Altering Experiences (“Absorption”), a Trait Related to Hypnotic Susceptibility. *Journal of Abnormal Psychology*, **83**, 268-277. <https://doi.org/10.1037/h0036681>
- [2] Elkins, G.R., Barabasz, A.F., Council, J.R. and Spiegel, D. (2015) Advancing Research and Practice: The Revised APA Division 30 Definition of Hypnosis. *International Journal of Clinical and Experimental Hypnosis*, **63**, 1-9. <https://doi.org/10.1080/00207144.2014.961870>
- [3] Spiegel, H. and Spiegel, D. (2004) *Trance and Treatment: Clinical Uses of Hypnosis*. American Psychiatric Publishing, Washington DC.
- [4] Spiegel, D. (2013) *Tranceformations: Hypnosis in Brain and Body*. *Depression and*

- Anxiety*, **30**, 342-352. <https://doi.org/10.1002/da.22046>
- [5] Adachi, T., Fujino, H., Nakae, A., Mashimo, T. and Sasaki, J. (2014) A Meta-Analysis of Hypnosis for Chronic Pain Problems: A Comparison between Hypnosis, Standard Care, and Other Psychological Interventions. *International Journal of Clinical and Experimental Hypnosis*, **62**, 1-28. <https://doi.org/10.1080/00207144.2013.841471>
- [6] Schaefer, R., Klose, P., Moser, G. and Hauser, W. (2015) Efficacy, Tolerability, and Safety of Hypnosis in Adult Irritable Bowel Syndrome: Systematic Review and Meta-Analysis. *Psychosomatic Medicine*, **76**, 389-398. <https://doi.org/10.1097/PSY.0000000000000039>
- [7] Hoefl, F., Gabrieli, J.D., Whitfield-Gabrieli, S., Haas, B.W., Bammer, R., Menon, V. and Spiegel, D. (2012) Functional Brain Basis of Hypnotizability. *Archives of General Psychiatry*, **69**, 1064-1072. <https://doi.org/10.1001/archgenpsychiatry.2011.2190>
- [8] Bell, V., Oakley, D.A., Halligan, P.W. and Deeley, Q. (2011) Dissociation in Hysteria and Hypnosis: Evidence from Cognitive Neuroscience. *Journal of Neurology, Neurosurgery and Psychiatry*, **82**, 332-339. <https://doi.org/10.1136/jnnp.2009.199158>
- [9] Elkins, G.R., Barabasz, A.F., Council, J.R. and Spiegel, D. (2015) Advancing Research and Practice: The Revised APA Division 30 Definition of Hypnosis. *American Journal of Clinical Hypnosis*, **57**, 378-385. <https://doi.org/10.1080/00029157.2015.1011465>
- [10] Deeley, Q., Oakley, D.A., Toone, B., Giampietro, V., Brammer, M.J., Williams, S.C. and Halligan, P.W. (2012) Modulating the Default Mode Network Using Hypnosis. *International Journal of Clinical and Experimental Hypnosis*, **60**, 206-228. <https://doi.org/10.1080/00207144.2012.648070>
- [11] Terhune, D.B., Cardena, E. and Lindgren, M. (2011) Dissociative Tendencies and Individual Differences in High Hypnotic Suggestibility. *Cognitive Neuropsychology*, **16**, 113-135. <https://doi.org/10.1080/13546805.2010.503048>
- [12] Raz, A., Shapiro, T., Fan, J. and Posner, M.I. (2002) Hypnotic Suggestion and the Modulation of Stroop Interference. *Archives of General Psychiatry*, **59**, 1155-1161.
- [13] Karlin, R.A. (1979) Hypnotizability and Attention. *Journal of Abnormal Psychology*, **88**, 92-95. <https://doi.org/10.1037/0021-843X.88.1.92>
- [14] Posner, M.I. and Rothbart, M.K. (1998) Attention, Self-Regulation and Consciousness. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **353**, 1915-1927. <https://doi.org/10.1098/rstb.1998.0344>
- [15] Gruzeler, J.H. (1998) A Working Model of the Neurophysiology of Hypnosis: A Review of Evidence. *Contemporary Hypnosis*, **15**, 3-21. <https://doi.org/10.1002/ch.112>
- [16] Kallio, S., Revonsuo, A., Hamalainen, H., Markela, J. and Gruzelier, J.H. (2001) Anterior Brain Functions and Hypnosis: A Test of the Frontal Hypothesis. *International Journal of Clinical and Experimental Hypnosis*, **49**, 95-108. <https://doi.org/10.1080/00207140108410061>
- [17] Spiegel, H. (2010) An Eye-Roll Test for Hypnotizability. *American Journal of Clinical Hypnosis*, **53**, 15-18. <https://doi.org/10.1080/00029157.2010.10401743>
- [18] Terhune, D.B., Cardena, E. and Lindgren, M. (2011) Dissociated Control as a Signature of Typological Variability in High Hypnotic Suggestibility. *Consciousness and Cognition*, **20**, 727-736. <https://doi.org/10.1016/j.concog.2010.11.005>
- [19] Pitts, M.A., Lutsyshyna, L.A. and Hillyard, S.A. (2018) The Relationship between Attention and Consciousness: An Expanded Taxonomy and Implications for “No-Report” Paradigms. *Philosophical Transactions of the Royal Society B: Biologi-*

- cal Sciences*, **373**, Article ID: 20170348. <https://doi.org/10.1098/rstb.2017.0348>
- [20] Sohlberg, M.M. and Mateer, C.A. (1987) Effectiveness of an Attention Training Program. *Journal of Clinical and Experimental Neuropsychology*, **19**, 117-130. <https://doi.org/10.1080/01688638708405352>
- [21] Rolfs, M. and Szinte, M. (2016) Remapping Attention Pointers: Linking Physiology and Behaviour. *Trends in Cognitive Sciences*, **20**, 399-401. <https://doi.org/10.1016/j.tics.2016.04.003>
- [22] Rusanen, A. and Lappi, O. (2007) The Limits of Mechanistic Explanation in Neurocognitive Sciences. Lawrence Erlbaum Associates (LEA), Mahwah, 284-289.
- [23] Jiang, H., White, M.P., Greicius, M.D., Waelde, L.C. and Spiegel, D. (2016) Brain Activity and Functional Connectivity Associated with Hypnosis. *Cerebral Cortex*, **27**, 4083-4093. <https://doi.org/10.1093/cercor/bhw220>
- [24] Jiang, H., White, M.P., Greicius, M.D., Waelde, L.C. and Spiegel, D. (2017) Brain Activity and Functional Connectivity Associated with Hypnosis. *Cerebral Cortex*, **27**, 4083-4093. <https://doi.org/10.1093/cercor/bhw220>
- [25] Seeley, W.W., Menon, V., Schatzberg, A.F., Keller, J., Glover, G.H., Kenna, H., Reiss, A.L. and Greicius, M.D. (2007) Dissociable Intrinsic Connectivity Networks for Salience Processing and Executive Control. *Journal of Neuroscience*, **27**, 2349-2356. <https://doi.org/10.1523/JNEUROSCI.5587-06.2007>
- [26] Roche, S. and McConkey, K.M. (1990) Absorption: Nature, Assessment, and Correlates. *Journal of Personality and Social Psychology*, **59**, 91-101. <https://doi.org/10.1037/0022-3514.59.1.91>
- [27] Gogolla, N. (2017) The Insular Cortex. *Current Biology*, **27**, 580-586. <https://doi.org/10.1016/j.cub.2017.05.010>
- [28] Thomas, M. (2015) Time Management Training Doesn't Work. *Harvard Business Review*.
- [29] Rosenberg, M.D., Scheinost, D., Greene, A.S. and Chun, M. (2020) Functional Connectivity Predicts Changes in Attention Observed across Minutes, Days, and Months. *PNAS*, **117**, 3797-3807.
- [30] Abramowitz, E.G. (2009) Annual Meeting Workshop "Hypnosis as Guided and Controlled Dissociation". Israeli Society of Hypnosis, Akron.
- [31] Abramowitz, E.G. (2023) Hypno-Somatica: Toward a Practice of Neuroplasticity: An Original Methods of Hypnotherapy in Somatic Medicine. (In Press)
- [32] Lee, J. and Pyun, Y. (2012) Use of Hypnosis in the Treatment of Pain. *The Korean Journal of Pain*, **25**, 75-80. <https://doi.org/10.3344/kjp.2012.25.2.75>
- [33] Kekecs, Z. and Varga, K. (2013) Positive Suggestion Techniques in Somatic Medicine: A Review of the Empirical Studies. *Interventional Medicine and Applied Science*, **5**, 101-111. <https://doi.org/10.1556/imas.5.2013.3.2>
- [34] Abramowitz, E.G. (2007) Technique of Mental Access/Somatosensory Access: Clinical Applications in Hypnotherapy. *Israel Association of Hypnosis*, Akron, 18 May 2007, Workshop.
- [35] Abramowitz, E.G. (2018) Technique of Mental Access/Somatosensory Access: Clinical Applications in Medical Psychology. *8th Singapore International Parkinson Disease and Movement Disorders Symposium*, Singapore, 28-30 June 2018. <https://www.nni.com.sg/education/events/pages/SIPDMDS.aspx>
- [36] Abramowitz, E.G. (2010) Gates of Stimulation: Clinical Applications of Hypno-Olfaction Conditioning (HOC). *Israel Association of Hypnosis*, Akron, 14 May 2010, Workshop.

- [37] Stalmaszczyk, P. (2021) *The Cambridge Handbook of the Philosophy of Language*. Oxford Press, Oxford. <https://doi.org/10.1017/9781108698283>
- [38] Abramowitz, E.G. (2014) Mental Access/Somatosensory Access (MASSA): “Create and Verify Principle (CVP)”. *Israel Association of Hypnosis*, Akron, 15 May 2014, Workshop.
- [39] Rowlands, P. (2017) *Newton and Modern Physics*. World Scientific, Singapore. <https://doi.org/10.1142/q0095>
- [40] Abramowitz, E.G. (2012) Somatoform Intention Test (SIT): Rapid Assessment of the Feasibility of Hypnotherapy for Inpatients. *Hadassah Medical Center*, Jerusalem, 26 December 2012.