## **MULTICHANNEL EYE MOVEMENT INTEGRATION:**

-08

# A NEW PTSD TREATMENT PARADIGM

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#### FEATURE

...thoughts naturally self-adjust in response to improvements in somatic and sensory reactions following eye movements and sensory pattern interruptions.

"Rebecca" said she spent hours hiding in her bedroom closet, only coming out when her husband arrived home. While isolating in the dark, she would hold her knees to her chest and rock back and forth to avoid thinking about what happened to her (evidence of dissociative behaviors). She refused to discuss the sexual assault she'd experienced five years earlier, she was abusing alcohol and over-the-counter pills, and she'd been diagnosed with PTSD after scoring 79/85 on the PTSD Checklist for DSM-IV (Weathers et al., 1993).

Mike was the fourth in a series of therapists she had seen. She was referred by a counselor familiar with the new eye movement therapy he was developing called *multichannel eye movement integration* (MEMI). This bottom-up, sensory based approach was unlike any before it—faster, safer for clients and supported by an uncomplicated theoretical model distilled from *neuro-linguistic programming* (NLP) principles.

When she took a seat in his office, Rebecca began rocking back and forth while staring at the floor. Attempting to discuss the sexual assault would be counterproductive. Instead, Mike decided to begin at the edges of her reaction repertoire and work toward the center. One of the distinctive features of MEMI is that clients never have to disclose the details of their trauma, let alone repeat them over and over like in conventional exposure therapies. Mike asked if she would be willing to do some eye movements while she thought of a recent time when she was rocking in the closet. He promised to do his best to maintain her safety. She agreed.

First, a sense of security was established for Rebecca by accessing and anchoring an uplifting experience from her past when she felt completely safe. This calming internal state would be reinforced throughout the session to keep her as integrated as possible. She was then asked to project an image of herself rocking in the closet on a wall across the room and used spatial and temporal reframes to emphasize the time and distance between her and the image. Gesturing toward the wall, and projecting his voice in that direction, Mike said, "While we work together today, that experience will be [slowing his speech] way . . . over . . . there in the past. You will remain here with me in the present." Next, they did a pretest of her thoughts (cognitions), feelings (visceral and emotional) and sensory

information (images and sounds) in relation to the experience to determine the structure of that memory. After the first eye movement set, her *subjective units of distress* (SUD) score (Wolpe, 1959) had gone from 100 down to 80. After a second set of eye movements, her SUD score went down to 65 and she looked more relaxed. After a third set, she said, "I'm feeling more positive. It would be nice if I could go for walks like I used to" (a resourceful cognitive shift). Her SUD score had gone down to 50.

At her second appointment, Rebecca told Mike she had stopped hiding in the closet. After praising this accomplishment, he cautioned that they had not yet addressed the "real" problem; they had applied a Band-Aid, but not effected a cure. He asked if she would be willing



to address the real problem, if she didn't have to talk about it. She said yes with some conviction. After a pretest and the first eye movement set, she said her reaction was "less than" before and gave a SUD score of 85. After the second set, the image was "farther away" and her SUD score had gone down to 70. After a third set, Rebecca said the knot in her stomach was not as tight and her legs were no longer trembling (reductions in visceral feelings). "For the first time," she said, "the memory feels like it's in the past" (another cognitive shift). Her SUD score then was less than 50.

What happened next was not unusual in our work with severely traumatized clients: Rebecca spontaneously explained the details of the rape. Mike had not asked her to tell him, and



she was surprised when he pointed out that she had explained everything without tears or the level of anxiety she'd always had.

At their third appointment, Rebecca told him she had been angry with him for a time *because he had spoiled her plan to suicide.* She had abandoned that idea after their second session. She also said that she had poured all the alcohol in the house down the sink, and she had no desire for a drink. One month later, Rebecca scored 24/85 on the PTSD checklist, 55 points lower than her pretest and well below the threshold of 44 for a PTSD diagnosis. A few months after that, her referring therapist emailed Mike: "She seems like a different person now and her husband agrees."

#### **MEMI'S ANCESTRAL ROOTS**

Steve and Connirae Andreas (1993), two master trainers in the neuro-linguistic programming (NLP) movement, created eye movement integration (EMI) in 1989. Although procedurally similar to the first eye movement technique introduced by Shapiro (1989), EMI's theoretical underpinnings were manifestly different. EMI's design was grounded in NLP theory, principles and strategies, whereas Shapiro insisted her procedure was not. Both techniques directed clients to focus on a representation of a distressing memory in front of them while they simultaneously followed the movement of a finger, or an object like a pen, with their eyes. What made the techniques so similar, Mike would discover, was their common ancestry.

Mike was fascinated the first time he saw Ron Klein demonstrate EMI at a seminar in 2002. He'd never observed a method so simple, yet so fast and effective at relieving posttraumatic stress disorder (PTSD) symptoms. As a survivor of childhood sexual abuse, Mike tends to scrutinize all PTSD methods with a steely, existential eye. Experience has taught him that the most popular therapies are not as effective as they claim (Steenkamp et al., 2015; van der Kolk, 2015). To his surprise, when Mike began using EMI with clients, he was amazed by its ability to quickly and permanently desensitize the sensory and kinesthetic disturbances associated with PTSD. He was equally impressed by how uncomplicated EMI's theory and procedures were when compared to Shapiro's eye movement desensitization and reprocessing (EMDR), a technique he'd experienced as a client in therapy. There were two problems though—EMI had never been developed beyond the modeling stage and it was only taught in one-day seminars.

When Mike began offering EMI seminars to other practitioners in the mid-2000s, he discovered that, without prior NLP training, attendees struggled to understand the technique's theory and guiding principles. And requiring therapists to attend multiple NLP trainings prior to learning EMI would not have been practical. Attendees also expressed a reluctance to use the approach with their clients until its procedures had been fully documented. In 2008, Mike decided to write an EMI practitioner's guide, a task he estimated would take a few months. Unexpectedly, the project mushroomed into a multifaceted research and development effort that culminated 13 years later with the publication of Multichannel Eye Movement Integration: The Brain Science Path to Easy and Effective PTSD Treatment (Deninger, 2021). While researching the history of eye movement therapies for this book, he ascertained that existing accounts had erroneously traced the origins of these approaches to a single story about a walk in a park. But that explanation was notably deficient. The true story is much more convoluted. Rather than just a chance occurrence, the genesis of eye movement therapies actually began two decades before the first technique was conceived.

#### **Split Brain Research**

In experiments conducted in the 1960s, American neuropsychologist Roger Sperry (1968) determined that the separate halves of the brain were able to function independently, albeit differently, and that the content processed by each was quite distinct. Sperry's subjects were epilepsy patients whose brains had been surgically bisected to reduce seizure activity, making the hemispheres independent of each other. Researchers already knew from stroke patient studies that the left-brain controlled mobility and vision on the right side of the body, and the right brain controlled those functions on the left side. From his experiments, Sperry confirmed that the left hemisphere processes verbal information-like speech and language—while the right brain manages spatial, numerical and abstract tasks. Sperry described the brain as exercising two different modes of thinking—one verbal and one nonverbal—represented separately in the left and right hemispheres, respectively. Just a few years after these results were published, the implications of his discovery were being explored in relation to brain hemisphere activations, sensory processing, and most important to this discussion, eye movements.

#### Eye Movements and Brain Hemisphere Lateralization Studies

Given that vision and mobility on either side of the body were controlled by opposite hemispheres of the brain, and given that the left and right sides of the brain processed disparate functional tasks, researchers began to question whether eye movements might also play a role in hemisphere activations. In the early 1970s, a trio of research studies explored whether eye movements to the left or right in right-handed subjects were associated with opposite brain hemisphere activations (Kinsbourne, 1972; Kocel et al., 1972; Galin & Ornstein, 1974). Subjects were asked questions designed to activate the right or left hemispheres (e.g., verbal questions for the left side and spatial or numerical questions for the right) while eye movements were observed.

Each of the studies confirmed that eyes move in the opposite direction of (i.e., contralateral to) the brain hemisphere being activated, but two of the studies also reported unexpected secondary findings. Subjects often moved their eyes to the right when processing verbal problems and to the upper left when processing numerical or spatial problems (Kinsbourne, 1972). In the Galin and Ornstein (1974) study, verbal questions elicited more downward and right-directed movements. These associations between eye movements to specific locations, and the mental processing of images and speech or language, provided the first empirical evidence that eye movements might be associated with neurology. In an NLP study conducted a few years later, the validity of these relationships was tested more methodically.



#### Neuro-Linguistic Programming: The Basis for EMI And MEMI

John Grinder and Richard Bandler developed NLP-a collection of sensory-based counseling approaches and modeling techniques—in the 1970s. NLP's guiding precepts were derived primarily from the therapeutic methods of master therapists Milton Erickson, Fritz Perls, and Virginia Satir (Bandler & Grinder, 1979; Dilts et al., 1980). After analyzing the works of these experts, and after collaborating with Satir and Erickson, Bandler and Grinder identified a number of unifying beliefs about the intersection of language, communication and therapy underlying the successful methods of the three. The pair then reasoned that the beliefs and techniques of these masters could be modeled and taught to others. Of the many books from that period, four stand out as important records of the research, rationale and initial models that constituted NLP: The Structure of Magic (Bandler & Grinder, 1975), The Structure of Magic II (Grinder & Bandler, 1976), Frogs into Princes: Neuro Linguistic Programming<sup>™</sup> (Bandler & Grinder, 1979) and Neuro-Linguistic Programming: Volume I—The Study of the Structure of Subjective Experience (Dilts et al., 1980).

To bridge the divide between theory and practice, Bandler and Grinder codified the beliefs of the masters into a number of predictive statements they called *presuppositions*. Presuppositions are defined as assertions or propositions based on subjective experience that are accepted as true in order to test a theory or pursue a desired outcome, even if scientific evidence has not confirmed a particular proposition. The strength and value of a presupposition is therefore determined by its ability to



consistently predict an outcome. For instance: *Human experience is stored and retrieved using sensory data.* Considered as a whole, the presuppositions laid the foundation upon which NLP products and strategies were developed.

#### **MEMI Presuppositions**

Mike selected five of NLP's key presuppositions to serve as the framework for MEMI, the most recent descendant of EMI:

#### 1) Human experience is organized and systematic.

Humans acquire attitudes, beliefs, values, behaviors and language from our experiences and those around us. These values and beliefs do more than shape our preferences; they determine how we think, feel, act and speak. They are organized and systematic, rather than unstructured or haphazard. Sociocultural norms reinforce the structures and sequences that guide our thoughts and actions. Books always have titles, chapters and numbered pages. Gadgets come with operating manuals. On a personal level, when we take a shower, dress ourselves, or eat a slice of bread, we tend to follow the same routines, unless something disrupts our current system's structure. This principle also applies to our physical, cognitive and sensory systems.

#### 2) Human experience has a structure.

Each of our experiences has a structure comprised of four elements: *context*, *thoughts*, *sensory information* and *feelings*. Context is the who, what, when and where of an experience. Thoughts are the cognitions associated with an experience. Sensory information (from four of the sensory modalities) includes the images, sounds, smells and tastes of an experience. Feelings can be visceral (i.e., physical), emotional or tactile. These four elements provide dimension to all human states of being-whether positive, neutral or negative. It's how we organize our experiences, create order in our lives, and respond to the world around us. Because human experiences have a structure, the elements of past experiences can be recalled and examined in the present. This also enables us to monitor changes in a memory's elements after therapeutic interventions in MEMI. A modified version of NLP's interactive structure of experience theory that provides the framework for MEMI's protocol, procedures and assessment techniques is shown in Figure 1.





Figure 1

Sensory information provides the medium through which memories and ideas are mentally represented when they are stored and later retrieved. When accessing stored sensory data in MEMI-most frequently in the form of visual images—we ask clients to mentally revivify memories with the use of modifiers (called submodalities in NLP). By applying variables such as distance (near or far), movement (movie or still photo) or clarity (clear or unclear), we are able to establish a baseline of characteristics which can be reassessed after eye movement sets. These variables are tested, retested and then recorded on a MEMI worksheet, a portion of which is shown in *Figure 2*.

#### SENSORY INFORMATION

SENSORY INFORMATION	
Visual Pretest: (circle one from each pair, if applicable) Movi@/srill photo Color/Black & white (Near)Far away Fuzzy, Clear) Bright/Dark	High ←> Low I-Score: 4(3)2 1 0
Set 1:	_I-Score: 4 3 2 1 0
Set 2: <u>"Less clear.</u> "	_I-Score: 4 3(2)1 0
Set 3: "Not a movie anymore, farther away."	_I-Score: 4 3 2 (1)0
Set 4:	I-Score: 4 3 2 1 0

#### Figure 2

We also ask clients how intense or threatening the sensory characteristics are with a five-point *intensity scale* (I-Score)—0 represents no intensity at all and 4 the highest possible intensity. In this way, micro assessments of the effects of eye movement interventions are measured pre- and post-treatment. Changes in I-Scores after each set of eye movements are also shown in *Figure 2.* 

## 4) When patterns are interrupted, human experience reorganizes.

Because habitual patterns of behavior are organized and systematic, they also tend to be enduring human attributes. However, if interrupted, habitual patterns (e.g., images of traumatic memories) will reorganize. In his publication Man's Search for Meaning, Frankl (1959) described being so demoralized at a Nazi concentration camp that he decided to change his troubling thoughts. While he was presenting a lecture to his bunkmates about the psychology of prison camps, from the far end of their decrepit barracks, he imagined himself speaking to a professional audience in a posh Vienna lecture hall instead. By visualizing this change in context, he was effectively splitting his awareness between two scenarios: "All that oppressed me at that moment became objective, seen and described from the remote viewpoint of science. By this method, I succeeded somehow in rising above the situation, above all the sufferings of the moment, and I observed them as if they were already of the past" (p. 77).

This visual pattern interruption of Frankl's allowed him to observe his plight as an observer, not a participant, blunting the effects of the prison camp to some degree. As will be discussed, the use of embedded hypnotic commands and metaphors are other types of pattern interruptions used in MEMI, in addition to its guided eye movements while thinking about a traumatic experience.

### 5) When experience reorganizes, the results tend to be beneficial.

Six months after a police officer was fired upon late one night while sitting in his patrol car, he was still having flashbacks about the experience. Whenever the memory was triggered, his hands would tremble like they had on the steering wheel and his eyes would dart uncontrollably from point to point. Mike asked him to replay a movie of that night in his mind—but instead of being in the car, he was instructed to watch his younger self going through the experience from twenty feet away. When asked if the memory was the same or different following the exercise, the officer was surprised to find that his hands were no longer shaking. This MEMI presupposition assumes that, when interrupted, the structure of an experience will very often improve. While not guaranteed, that result is predicted. MEMI's use of a variety of sensory and kinesthetic pattern

interruptions is what makes this therapy a multichannel approach.

#### **NLP Eye Movement Model**

Two of NLP's early models were essential to the development of MEMI. One was its eye movement or *eye accessing cue* (EAC) model and the other its *visual kinesthetic dissociation* (V/K/D) procedure. According to Dilts (1983), the EAC model shown in *Figure 3* was based on clinical research done by Bandler and Grinder and a 1977 eye movement study of his own. He was undoubtedly familiar with Sperry's splitbrain research and the three hemisphere lateralization studies mentioned previously.

Although the study Dilts conducted was a logical extension of those earlier investigations, his was broader in scope. In keeping with MEMI's first presupposition—that human experience is organized and systematic—Dilts hypothesized that eye movements are not ran-



dom, but they act as behavioral "cues" providing evidence of a connection between those movements and human neurology. His study tested whether eye movements to particular locations in one's visual field (e.g., lower left or upper right) would correlate with the type of neurosensory information being accessed in the brain. Study participants were asked questions requiring visual, auditory and kinesthetic processing while electrodes tracked their eye movements and EEG activations in both hemispheres (Dilts, 1983).

According to Buckner et al. (1987), the Dilts study produced incomplete results, in part, because the ocular electrodes used to detect eye movements were inadequate. And although subjects' lateral eye movements did not correlate directly with contralateral EEG brain wave patterns as hypothesized, analyses of subjects' sensory-specific cognitive tasks did confirm a strong relationship between eye movements and contralateral brain hemisphere activations. Although the creation of the EAC model is often attributed to Dilts, he credits Bandler and Grinder with the initial coding of its eye accessing positions (Dilts, 2006).



NLP Eye Movement Model

Figure 3

As illustrated in the model, eye movements up to either corner correlate with the processing of images, while eye movements to either side on the horizon are associated with the processing of sounds. Depending on the direction (left or right), the visual and auditory locations can also exhibit a past or future orientation (left indicates encoded sounds or images from the past; right indicates an image or sound never seen or heard before). Although this left (past) and right (future) orientation is depicted in the model, Dilts and DeLozier (2000) later proposed that these directions are sometimes reversed based on right- or left-handed dominance, similar to results reported by Kinsbourne (1972).

Thomason, Arbuckle and Cady (1980) were unable to validate the model's eye positions, but their results did confirm that eye movements are not random. Dilts (1983) recommended that future tests of the model should videotape subjects' responses to more precisely determine the sensory modality activated at the time of each eye movement. In a commentary, Beck and Beck (1984) rejected the findings of Thomason and colleagues, arguing that they misunderstood the model. Beck and Beck also recommended that future studies should use sensory-specific stimulus questions, film the responses, and as Dilts had suggested, ask follow-up questions to determine the sensory modality in use at the time of the eye movements.

In an analysis published online of all peer-reviewed studies of the EAC model from its introduction in 1977 until the time of the review, Diamantopoulos, Woolley and Spann (2009) reported that a clear conclusion as to the validity of the model could not be reached. Four of the ten studies found evidence to support the model, while six others reported a lack of support. However, the reviewers cited serious methodological problems with each of the six nonsupportive studies due to erroneous assumptions that were made about the EAC model. Diamantopoulos and colleagues concluded that there was insufficient research to either prove or disprove the model.

One methodologically sound study of the model conducted by Buckner et al. (1987) incorporated the recommendations of both Dilts and Beck and Beck in its design. Its most significant finding was that rater observations of eye movements to four of the locations in the model—the past and future visual and auditory accessing positions—were highly correlated (p<.001) with subject observations of the modality actually in use at the same time as the eye movements. Eye movements to the kinesthetic (feelings) location could not be validated and movements to the "self-talk" position were not tested. Although the model was only partially validated, the results confirmed that eyes do move to prespecified locations in tandem with auditory and visual processing.

In spite of its incomplete validation, we believe that the EAC model's significance has been underreported and underappreciated. One could even argue that eye movement therapies might not have been invented without the model's existence. The reasons for this are described in greater detail in the book *Multichannel Eye Movement Integration*. Based on existing studies of the EAC model and extensive clinical experience with MEMI, we conclude that eye movements are indeed organized and systematic, whatever the specific pattern might be for any individual. Furthermore, perhaps because of their unconscious nature, the evidence is also strong that eye movements are active components in a complex neurophysiological system.

Results from the Dilts and Buckner et al. studies introduced a new eye movement and sensory processing paradigm evidencing a neurological connection between eye movements and the activation of sensory modalities. The results also affirmed that eyes do move systematically, not randomly-to at least four of the six accessing positions in the model. Even Thomason and his colleagues, who were detractors of the model, confirmed that eye movements are not random. Because technological advances now allow for more accurate detection and tracking of eye movements (e.g., PCEye eye tracker for accessibility - Tobii Dynavox US), and because brain scanning technologies are much more advanced, we believe this would be a good time to replicate the Buckner study.



Like Dilts, the Andreases (1993) believed that eye movements are not only organized and systematic, but they also correspond to sensory modalities being processed simultaneously in the brain: "They are the means by which these brain functions are activated," they argued (p. 3). And, most relevantly, the following statement establishes why this is critical to understanding the role of eye movements in MEMI: "By deliberately moving the eyes in specific directions, one can alter the way a subject's brain processes a given piece of content" (p.3). Now, almost three decades after the Andreases made this observation, studies and commentaries are beginning to produce evidence that eye movements and neurology are in fact interrelated (Yung and Huberman, 2018; de Voogd et al., 2018; Bone et al., 2019; Mace et al., 2018; Damiano & Walther, 2019; Wynn et al., 2020; Sweeton, 2021; Johansson et al., 2022). Thus, whether a connection between eye movements and neurology exists should no longer be in question.

#### NLP's Visual Kinesthetic Dissociation (V/K/D) Procedure

Another NLP model critical to the development of all eye movement therapies was a visual procedure designed to treat phobias and traumatic memories. Called the *fast phobia cure*—also known as *visual kinesthetic dissociation* (V/K/D)—it was an application of a Milton Erickson hypnotic technique. V/K/D was first described by Bandler and Grinder (1979) and later formalized by Bandler (1985).

In a more recent version of this procedure, sometimes referred to as the *movie metaphor* (Dilts & DeLozier, 2000), clients are instructed to imagine themselves seated near the stage of a movie theater, watching a blank screen. Next, from a location at the back of the theater, they are asked to watch both themselves seated near the stage *and* a movie of the distressing memory playing onscreen. *Figure 4* depicts this scenario. While watching the movie, the client is grounded in a confident or competent psychological state (reciprocal inhibition) using NLP *resource anchoring*. In MEMI, a resource anchor is defined as a positive experience from a client's past, that when reinstilled in them, becomes an uplifting force offsetting the negative reactions to a disturbing memory.

#### V/K/D Procedure



#### Figure 4

Viewing the movie from the back of the theater creates a twofold visual separation between the self and a memory's image, called a *double dissociation* in NLP. By creating this distance and psychological separation, the event can be viewed by an observer-self without experiencing its attendant physiology and emotions similar to what Frankl described in *Man's Search for Meaning*. And because the image is farther away in space and time (spatial and visual reframing), it can be perceived as less threatening.

Klein (2015) popularized a sister technique adapted from V/K/D and used in MEMI, called *therapeutic dissociation.* With resource anchoring, it became another dynamic safety mechanism to assure client security during exposure to disturbing memories. In this procedure, a client is asked to project an image of the distressing event on a wall across the room, while the therapist uses gestures, body language and vocal inflections to emphasize the visual, temof them while eye movements were conducted, but she failed to give attribution to Frankl, Erickson or NLP developers.

#### From EMI to a Multichannel Approach

EMI is based on NLP theory and presuppositions. Thus, the technique's procedures closely track those used in other NLP models. Because Mike had completed NLP practitioner training prior to learning EMI, he was familiar with several of its change strategies. But because EMI was being faulted for its lack of written procedures, he resolved to fully document the approach. During that process, he decided to insert NLP theory and presuppositions into the new therapy's design. Transforming EMI into what would eventually become MEMI also offered opportunities to improve the method by adding innovations inspired by clinical experience and advances in research.

He began by documenting the procedures he was using and compiling supplementary materials for distribution at seminars. In order to bring the new model to life, he developed a straightforward, 10-step protocol with instructions, procedures, therapist scripts, assessments and a worksheet for recording results following eye movement sets. He endeavored to make every aspect of the therapy straightforward and user-friendly. These enhancements, along with the adoption of a standardized PTSD checklist, made systematic evaluations of MEMI possible. However, the foundations of the therapy—the theory, presuppositions



and beliefs framing its operations—are true to those referenced by the Andreases when they created EMI in 1989.

#### **MEMI Is Not a Cognitive Behavioral Therapy**

Unlike in cognitive behavioral therapies (Ellis, 2008; Sokol & Fox, 2019), MEMI does not ascribe to a belief that irrational thoughts are a cause of PTSD symptoms; that faulty thinking about distressing experiences should be restructured; or that more rational client narratives must be adopted to effect memory desensitization. Cognitive restructuring can be thought of as an active strategy, whereas changing thoughts in MEMI is, in effect, a passive one. Changing irrational thinking in MEMI is not a goal, a strategy or a prerequisite for memory reorganization. Instead, clinical evidence has confirmed that thoughts naturally self-adjust in response to improvements in somatic and sensory reactions following eye movements and sensory pattern interruptions. In other words, cognitions become more rational without redirection after the visual, physical and emotional reactions to a problem state are desensitized. Hence, MEMI is not considered cognitive or behavioral. We prefer to describe the therapy as organic, limbic, neurological, linguistic and systemic.

#### **MEMI's Basic Eye Movements and Sets**

When the Andreases created EMI's eye movements, there was only one specific recommendation: All six accessing positions in the EAC model had to be linked with one another during a session. The therapist's finger, or an



object like a pen, moved from one of the six accessing positions in a client's visual field to another until they all were connected with each other. Except for that instruction, little guidance was offered about which movements to use or when. There was no rationale for how to make those decisions. Neither were suggestions given about which modalities (visual, auditory, visceral, emotional, tactile or internal narratives) should be targeted more frequently or in what order. Instead, therapists were encouraged to experiment with the eye movements and decide which ones worked best for them. Without a standard to follow, procedural uniformity was precluded and evaluations of the method's effectiveness were made difficult.

#### **MEMI's Basic Eye Movements**

Three simple criteria guided the development of MEMI's basic eye movements: 1.) They had to target the three most reactive sensory modalities; 2.) As a whole, the movements had to produce rapid results more efficiently than random eye movements; and 3.) To the extent possible, they had to assure client safety.

Not long after Mike began using EMI with his clients, he realized that the most frequent and intense responses during trauma recall involved the visceral, emotional and visual modalities. Targeting these modalities for desensitization also produced more rapid and durable results, as one might expect. For this reason, these modalities were addressed more prominently in MEMI's design, both with the eye movements selected for use, as well as in testing and retesting these modalities

Unlike in earlier EMI versions, MEMI speci-

fies which eye movements to use and their order of presentation. Through trial and error, Mike discovered that fixed eye movement patterns were more effective than random approaches. After hundreds of experiments, five basic eye movements emerged more or less organically for use in MEMI. The first four movements had existed in some form in EMI, although new features were added to each one. The fifth is unique to MEMI. It's important to note that there was logic behind their selection and the order in which they were presented.

MEMI's basic eye movements featured two common elements in their design—they were repeated a specific number of times and their direction was frequently reversed. This was done for the comfort of clients because uniformity and repetition both sooth the psyche. Just as important, it aided therapists in learning the method. Three of MEMI's five basic eye movements are shown in *Figures 5-7*.

Above the Horizon



Figure 5

#### **Standing Triangle**



Figure 6

Shrinking Circles



Figure 7

The basic eye movements were assigned names to distinguish them from the four more intricate *eye movement sets* used in MEMI's standard protocol. These basic eye movements are also the building blocks for the four more complex sets. Once you master the basic eye movements, the task of learning the sets is much easier. It's like first developing basic vocabulary in a foreign language before attempting to put sentences together. Although describing all four of the eye movement sets is beyond the scope of this article, an example will show how the basic eye movements are combined to make up an eye movement set. We do want to impart one caution about MEMI's eye movements and sets: It would be unwise to think of them as magical or definitive to the extent they could be used in other models. Although tested and carefully considered, they hold value expressly because they are part of an integrated, organized and systematic approach.

#### **MEMI Eye Movement Sets**

As discussed, MEMI's eye movement *sets* are made up of combinations of the basic eye movements. The four *sets* are designed to increase in complexity, not only to accustom clients to the rhythm and flow of the eye movements, but to gradually increase the frequency and complexity of pattern interruptions designed to stimulate beneficial neurological shifts. *Figure* 8 shows how Set #2 is performed.

#### Eye Movement Set #2





The set begins with 10 to 20 back and forth Above the Horizon eye movements before smoothly transitioning into 9 repetitions of the Standing Triangle. The Standing Triangle is bidirectional and reverses direction after every 3 rotations. Reversing direction is a potent metaphor for changing or undoing the sensory reactions to a trauma. This possibility can be suggested with a comment such as, "And reversing it. Reversing everything . . . now" while the movement is reversed. After completing 9 Standing Triangle rotations, the movement transitions back to several Above the Horizon sweeps to prepare for an embedded command to be spoken as the therapist's finger moves down and up over the SELF-TALK position, as shown in Figure 8.

#### **MEMI Innovations**

MEMI's protocol and procedures are strengthened by several innovations involving strategic comments spoken by therapists during the eye movements. Although the use of purposeful verbal comments is not ubiquitous in eye movement therapies, MEMI uses spoken metaphors, direct commands, embedded commands and visual, spatial and temporal reframing statements to stimulate the desensitization of trauma reactions.

When Mike began using EMI, he noticed how frequently, due to his silence, a client's thoughts would wander to topics other than the aspect of the trauma being addressed. And there was no way for him to know how their internal attention was focused unless they self-reported that information. He found himself frequently reminding clients of the two tasks at hand with statements like, "You're still thinking about that experience as you watch my finger move." After discovering how helpful comments like this were in maintaining a client's focus, he began experimenting with other direct and subliminal verbal suggestions meant to appeal to a client's deeper thought structures and desire for change. This made sense on many levels. Visual, emotional or visceral reactions to memories could receive special focus; cognitive shifts could be proposed; metaphors prompting change could be inserted; and assurances could be given that a client's well-being would be safeguarded. These interventions have three intended outcomes:

- to verbally reinforce the resource anchor during exposure to the trauma and the eye movements
- to remind clients to maintain their focus on the finger or pen moving in the foreground while they think about the image across the room; and
- to help transition a client's thoughts, feelings and sensory reactions from a problem state to a problem-free state.

#### **Metaphors**

A metaphor is a technique used in MEMI that blends symbols (e.g., geometric shapes) with actions (e.g., circumscribing a circle) in a way that subconsciously links them to the sensory reactions to a trauma. For example, if Joachim is conducting the basic eye movement Shrinking Circles (shown in *Figure* 7) with a client, he might draw the first and largest circle with his finger while saying, "And now a circle, right here in the center, encompassing <u>every</u>thing." When spoken with greater emphasis, the word <u>everything</u> hints that he's referring to the visual, emotional and physical reactions to the distressing event. The phrase "encompassing everything" also infers that those aspects of the experience are contained within the circle and might therefore be acted upon. Then, as he shrinks the size of the circles with his finger, he says, "And it's getting smaller . . . and smaller . . . and smaller, shrinking it down until it's almost invisible."

Given the metaphor, the possibility that the distressing reactions might also shrink along with the circles is a provocative, subliminal suggestion. Thus, an appeal is made to the client's unconscious mind via language ("encompassing everything" and "shrinking it down"), symbols (the circles) and actions (shrinking of the circles) that are blended together in a cohesive fashion. And remember, the primary pattern interruption is the eyes being guided to move in non-habitual directions.

#### **Embedded Commands**

An embedded command is an intoned directive nested within a larger question or statement spoken by the therapist. The command part of the statement is pronounced with more emphasis than the rest of the sentence, drawing attention to the comment's imperative nature—not too forcefully, but the difference should be noticeable. A possible command one could use with Set #2 is, "Still thinking about that experience, but you may find that <u>your</u> thoughts about this will change." The first part of the statement (not underlined) is spoken in a normal, conversational tone during the Above the Horizon movements. However, the underlined command is spoken with a deeper, more resonant tone while the finger or pen sweeps down and up 2 times over the Self-Talk location.

In brief, the rationale for this embedded command is that the self-talk location in the EAC model may have merit, even though it has not been deemed reliable in empirical studies. Regardless of whether an individual accesses internal self-talk via this location or not, changes in one's cognition might be triggered by the eye movements alone, the statement's linguistic content, or the hypnotic mediation of the embedded command. The more "pattern interruptions" the better is a theme in this multisensory approach, supporting a firm belief that multichannel input is more effective



than single channel stimulation.

The example from Joachim that follows demonstrates the efficiency of MEMI's multifaceted approach in treating the most severe trauma cases. "Angela" was referred to Joachim, MEMI's licensed trainer in Singapore, for treatment a month after her infant child was murdered by a caregiver. Angela's presenting symptoms included acute stress, dissociations, suicidal ideation and depression. Her pretest score on the PTSD Checklist for DSM-5 was 72/80 (U.S. Department of Veterans Affairs, 2020). Considering a score of 31-33/80 or higher warrants a provisional PTSD diagnosis, her score was extremely high. Angela rated the associated visual imagery, physical sensations and emotional reactions to her traumatic memory all at a 4, the highest intensity I-Score. To counterbalance Angela's severe physiological distress-evidence of limbic dysregulation-Joachim modeled self-regulation and anchored her in safety before beginning the first eye movement set.

After the first set, Angela said her SUD score had gone down to 85. What had been a movie changed to a still photo, and the image moved farther away (almost always an improvement). She reported being less affected by the memory and feeling "a little lighter." Her I–Scores all decreased from 4 to 2, moderate intensity. After a second eye movement set, her SUD score dropped to 70.

Although Angela was feeling less intense and breathing better, she reported that new visual images had emerged during the second eye movement set. She saw the hospital scene when doctors were attempting to revive her brain-dead child. After a third eye movement set focusing on the distressing hospital image, Angela appeared stunned but somehow relieved: All three of her I-Scores dropped to 0—no intensity at all—and her SUD score fell to 25. She smiled for the first time. Angela's PCL-5 posttest score of 10 was a 62-point reduction from the pretest, representing clinically significant change.

MEMI was only used during Angela's first appointment. Three subsequent talk therapy sessions focused on grieving strategies and how to heal herself and her family. Months after her four sessions with Joachim, this is what Angela wrote: "Now, eight months on, I am fully recovered. My little boy will forever live in my heart, but thanks to Joachim, my heart has healed. I am able to focus on my children and I have a life that is filled with joy, in spite of what we went through as a family."

#### SUMMARY

This article has introduced Multichannel Eye Movement Integration (MEMI), a new sensory-based (bottom-up) eye movement therapy for trauma, which addresses PTSD symptoms at their source—in the limbic system. MEMI's uncomplicated theory, rationale and simple procedures represent a distinct paradigm shift when compared to other eye movement approaches. In addition, recent brain research and clinical results suggest this treatment offers a more direct and effective path to PTSD symptom resolution than cognitive behavioral methods. MEMI's theory and presuppositions assume that the human neurological system will achieve desensitization naturally through the use of strategic eye movements and purposeful pattern interruptions in the form of sensory reframes, metaphors and embedded commands.

The book Multichannel Eye Movement Integration: The Brain Science Path to Easy and Effective PTSD Treatment was designed as a comprehensive guide to the use of this therapy. It includes an unvarnished history of eye movement therapies, a discussion of current PTSD research and treatment trends, case studies, multiple client vignettes and suggestions for treating common mental health disorders with MEMI. The therapy's five basic eye movements are discussed in detail and the four eye movement sets are accompanied by directions, scripts, and tips for therapists and assessments. In short, the book contains everything a mental health practitioner needs to know to conduct sessions and evaluate the results.

#### Bio:

**Mike Deninger** is an accomplished educator, mental health therapist, author, trainer, and public speaker who is a leading proponent of the use of eye movement integration therapies for PTSD and other mental health disorders. His extensive experience in the treatment of trauma has culminated in the 2021 publication of *Multichannel Eye Movement Integration: The Brain Science Path to Easy and Effective PTSD Treatment.* 

**Joachim Lee** PBM is a psychotherapist, counsellor, a certified counselling supervisor, neurofeedback therapist and a Board Certified hypnotherapist. He is an International Trainer and Speaker, Founding Member of ISPA (the International Strategic Psychotherapy Association) and was appointed by the Board of ISPA in December 2021 as Chair for the Singapore ISPA Chapter.

For live trainings or for more information, contact Mike Deninger at drmikelpc@comcast.net or Joachim Lee at jlchsingapore@gmail.com. Online MEMI certification trainings are also available through Arizona Trauma Institute via the following link: https://aztrauma.teachable.com/p/multichannel-eye-movement-integration-memi-a-new-model-for-treating-trauma.

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