

OEI Theory and Case Examples

Although it is grossly oversimplifying the complex phenomena observed clinically during therapy, I believe that the processes underlying OEI involve (a) the multisensory manner in which personally experienced events are stored in our brains, and (b) the neuropsychology behind traumatic memories & recollections.

To illustrate the first of these points, I have had clients in therapy recalling their traumatic experiences during OEI, and re-experiencing every aspect of the original events in my office. One example of tactile recollection is a woman who was choked unconscious by a relative on several occasions as a child. As we focused on the event visually, the marks on her neck evidenced the hand-prints of her abuser. Another case involved visual, olfactory and auditory senses together. My client had been in a high school shooting incident 45 years earlier, similar to the Columbine High School situation. As she vividly recalled the experience visually during OEI, she smelled the gun powder and blood, and “heard” the moans of her wounded and dying friends. In another case, involving a combination of auditory and somatic senses, I was working with a client toward resolution of a negative cognition, or “inner voice” associated with beliefs (and related emotions) that she would “never finish” her academic program, or “never amount to anything”. As we worked with that discouraging inner statement, her shoulder started to twitch. She was initially unable to explain the connection between the statement and her physical reaction, but as we proceeded with OEI she realized that, as a child, her father had jabbed his finger into the region between her chest and shoulder, while saying (with disgust and anger) “You’ll never amount to anything!” As we resolved the issue with OEI, both the intensity of the cognition and the related physical sensation and emotions dissipated.

To bring the explanation more exclusively into the visual domain, there is considerable evidence that we record what we see, into our brains in very precise ways. Gregory (1997) cited a series of studies in which the direction-specific nature of the nerve cells in the occipital cortices were discovered. Individual cells fire in response to eye movements, while tracking objects in particular directions (horizontally left-to-right or right-to-left, vertically up or down, or diagonally). The proprioceptive nerves in our muscles (including the 6 major muscles controlling the movements of each of our eyes) send detailed information regarding the locations and movements of our eyes, and this is naturally intensified during traumatic experiences (when amygdaloid arousal causes adrenalin to rage through the tissues of the body). Examples of how specific these visual recollections can be are included in the following cases. The first is the victim of a bank robbery who had been unable to sleep for several days since the incident. I asked him to hold his head still, and then point to where the gunman was when the gun went off (i.e., moving his eyes to where they were at the time). As I tracked through his visual field for “glitches” in eye movement, I located a major halting point and as I passed his eye over it he experience most of the multisensory intensity he had experienced at the time (extreme fear and panic states, physical shaking, halting of his breath, and an intense startle response. The glitch corresponded precisely to the place his eyes had been earlier when he had indicated where the gunman was standing. A similar example was a client who had received a cel phone call informing him that his best friend had just been killed. Again, the place his eyes were at the time of the call was associated with triggering of the same multisensory intensity. Another case is a demonstration of the same connection but in the reverse direction. This time the client was processing a series of attacks by dogs (which understandably had created an intense phobia of dogs). As I guided her eyes slowly in a

number of directions, I encountered a series of these “glitches”. Each one was associated with a very circumscribed series of movements and facial expressions, identifiably connected with specific moments in the attacks (some on her head, some attacking her legs while she was on a bicycle and others from behind while she was running away). As I “massaged” the glitches (another OEI procedure), these movement sequences resolved (along with the concomitant distressing emotions). In 6 sessions she was cured of her phobia to the point where she was comfortably holding smaller dogs and allowing them to lick and hold her hand in their mouths. The final session was held at the SPCA, walking between cages of large, barking dogs lunging at the sides of their cages. Another example of this glitch in eye movement associated with events is the client from an automobile accident on the OEI training DVD, who reported specific people, events, emotions, thoughts and sensations associated with glitches in specific portions of her eyes.

Neuropsychologically, following the visual pathway forward from the back of the brain, visual patterns associated with specific events are stored in the occipital cortices. Visual nerve impulses are processed through the cortico-collicular fibers into the superior colliculi, and from there through the colliculo-geniculate fibers to the lateral geniculate nuclei of the thalamus. In a temporally contiguous manner (if not concurrently), visual nerve impulses are also proceeding from the occipital cortices, both directly into the thalamus and indirectly through Meyers loop to the thalamus (likely to integrate co-incidental auditory sensory experiences stored in the temporal lobes). From there, the neural impulses are transmitted into the optic tract, and through both the temporal and nasal fibers of the optic nerve to the retinas. Proprioceptive nerve fibers in the muscles around the eyes (lateral rectus, medial rectus, superior rectus, inferior rectus, inferior oblique and superior oblique) are concurrently activated and monitored through a feedback loop between the sensory and motor cortices. During the original events, nerve impulses associated with visual stimuli are relayed from the retinas into the optic nerves, through the optic chiasm, and both directly into the lateral geniculate nuclei of the thalamus and indirectly through the optic tract-collicular fibers into the superior colliculi, and ultimately to the occipital lobes.

One might ask how, or why, individuals would experience traumatic recollections more intensely with their dominant eyes open (i.e., for most people their right eyes), and less shock, fear and anxiety with their dominant eyes covered and non-dominant eyes open. Rauch et al. (1996) demonstrated, using Positron Emission Tomography, that during triggered experiences of traumas the limbic and paralimbic structures in the right hemisphere are more activated (greater amygdaloid arousal). Although both eyes have connections to both hemispheres, it is apparent in clinical work that it is the temporal fibers (rather than the nasal fibers) of the optic nerves that define the nature and intensity of experiences during traumatic recollections.

Another interesting phenomenon that occurs during OEI processing of traumatic memories is visual distortions (in some cases complete occlusion of visual fields for short periods; in others, temporary hemianopsia or quadrantanopsia). These experiences are likely caused by intense overactivation of nerve activity along the visual pathway. The portions of the visual fields that are occluded correspond to locations along the visual pathway that have been identified in medical studies of permanent visual lesions. If the stimuli affect both the nasal and temporal fibers of the optic nerve anterior to the optic chiasm, the visual field in that eye will be totally occluded. In contrast, if the overstimulation or lesion only affects one of the fibers in the optic nerve of one eye, hemianopsia will be experienced. If the blockage or overstimulation occurs in Meyers loop on one side, quadrantanopsia will be experienced.

These visual distortions can be quickly resolved in clinical work by having clients alternately cover and uncover their eyes a number of times. Other side effects such as drowsiness, lightheadedness or loss of balance and pain or pressure in the head can likewise be resolved.

Processing of traumatic memories, internal voices or statements, physical sensations and even distortions or reactions in relationships can also be resolved by “switching”, and when necessary tracking to, and “massaging”, glitches in one or both eyes. During processing of traumas which occurred at very early ages, or those associated with near-death experiences, often non-verbal states are encountered. During OEI processing (switching and massaging glitches) these states can be released. In the Rauch et al. (1996) study it was discovered that regional cerebral blood flow to Broca’s area is reduced during triggering of traumatic memories. It is therefore a reasonable hypothesis that OEI restores that blood flow.

Hemispheric asymmetries in electrical activity on the scalp have also been associated with depression and anxiety states (amplitudes of alpha frequencies higher on the (usually) left hemisphere (see studies conducted by Dr. Richard Davidson and his research group, summarized in the paper titled “Hemispheric Asymmetries” on this site). There was some evidence in the last OEI study that this asymmetry had been corrected, and we are exploring various asymmetries (frontal, parietal and occipital) in the current study as well.

Other PTSD-related neuropsychological findings have included activity in the anterior cingulate cortices (some studies show lower activity in this region with PTSD, some show higher levels of activity). The anterior cingulate gyri (esp. right) are implicated in various psychological conditions involving rumination, worry and unwanted intrusive & disturbing images or thoughts (i.e., symptoms of OCD and PTSD). Since many of these resolve with OEI, it is (not unreasonably) hypothesized that OEI affects activity over the ACC.

The hippocampal-dentate complex has also been reportedly involved in processing traumatic memories. Some studies show reductions in size of the hippocampus in clients who have experienced severe, early-onset child abuse. It is very likely that the functioning of this limbic structure in the brain is not only affected by traumatic experiences (in a negative way) but also by trauma therapies (at least those such as EMDR and OEI, in which representations of traumatic events shift from “intense” to “mild”, and from “present” to “past” in terms of levels of affective and sensory arousal).

Another interesting phenomenon we have observed in OEI therapy is what we have called “transference clearance”. Dr. John Briere has noted, particularly with individuals who have had chronic, severe and early-onset abuse, that they develop “Conditioned Emotional Responses” (CERs). Most people are familiar with conditioning to objects (snakes, spiders, tall buildings, bridges, accident or assault sites, etc.). In contrast, these CERs are internal, affective states (associated with trust, love, anger, shame, or even joy) than become linked with (and therefore become discriminative stimuli for) negative experiences (abuse, abandonment, humiliation, criticism or betrayal). Any facial features or expressions of others, or internal states such as emotional intimacy, can become associated with such negative states. We have discovered that individuals shift in their perceptions of people in close physical proximity as a result of OEI “switching”. Sometimes these differences are in terms of perceived proximity (distance), sometimes in terms of colours, sizes or physical features of the faces they are gazing at, and sometimes in terms of their own emotional experiences

(affection, fear, sadness, shame). Repeated switching will resolve these distortions, and relationships can be greatly improved. We use mirror work (self-perception distortions) in the same way.

Finally, in the course of engaging in very intense trauma therapy with some clients, I have encountered significant somatic reactions (panic attacks, hyperventilation or cessation of breathing, nausea or throat constriction). I have discovered “release points” (associated with movements and visual foci) that release, or dissolve these symptoms, enabling trauma processing to continue. These have been particularly helpful for those who have suffered many years from panic attacks. There seems to be a connection between the optic nerves and the ventral vagal nerve that permits these rapid resolutions of intense physical symptoms. I have described some of these techniques in our clinical training materials.

References

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