The Science & Art of Cognitive Interweaves in EMDR

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Cognitive Interweave

- Liverpool Definition:
  - “Cognitive Intertwine – that's were you speak that clever stuff when you get stuck isn’t it?”

Neuroplasticity

- **The strength of synaptic connections is not fixed, but plastic and modifiable.**
- **Changes in synaptic strength can be modified by neural activity.**
- **Learning produces prolonged changes in the strength of synaptic connections by causing a growth of new synaptic processes.**
- **The persistence of these synaptic anatomical changes can serve as the mechanism for memory.**
- **Neurons should be able to modulate their ability to communicate with one another.**
- **The persistence of these alterations in basic synaptic communication, a functional property called synaptic plasticity, can provide the elementary mechanisms for memory storage.**

- **Santiago Ramón y Cajal** (1899) Spanish Histoligist, Physician and Patholgist.

Neuroplasticity

- Two great epochs of Brian Plasticity
  - Infant – ‘critical period’ when the brain sets up basic processing machinery
  - Adult plasticity – when the brain refines its machinery as it masters a wide repertoire of skills and ability

Neuroplasticity & Ci's

- One of the tenets of Neuroplasticity is that in order for the brain to form new connections and change, it must be stimulated through activity
- Both thoughts and imagination physically change the brain, especially through focused attention to positively rewire it.

- Ref: Schwartz, Jeffrey M, Begley, Sharon. The Mind and the Brain: Neuroplasticity and the Power of Mental Force. New York, NY: Harper Perennial, 2003.

Neuroplasticity & Ci's

- Billions of learned associations between the 'self' and its unique experiences underlie its idiosyncratic genesis, form and expression

- Information is always related to other inputs because the brain is constantly constructing representations of things that are correlated in little moments of time

A common theme

- One of the arguments to support why EMDR & TF-CBT are effective is that they both share the same neurobiological objective and that is to down regulate the amygdala so as to allow the hippocampus and medial pre-frontal cortex to come back on line (Bisson, 2008)
- Limbic influenced Cognitions (Emotional Brain)
- Cortex Influence Cognitions (Cognitive Brain)

Development in EMDR

- Move away Small ‘t’
- Distressing Memories
- ‘PTSD is better understood as a memory disorder rather than and anxiety disorder” (Stickgold, 2009)
- Challenges existing conceptual and diagnostic frameworks

MEMORY SYSTEMS

- **PERCEPTUAL REPRESENTATIONAL**
  - Implicit
  - Unconscious
  - Somatosensory
  - Non-verbal
- **EPISODIC**
  - Memory of autobiographical events
- **SEMANTIC**
  - Hyper-associative
  - Meaning

Declarative Memory

Very little of our experience is remembered as episodic memory.

Instead…

The brain extracts and abstracts the meaning of our experiences…

Stickgold, R. 2002. *Journal of Clinical Psychology*, 58 (1): 61-75

At the age of 40

A person has lived through
¼ Million hours of memory

Yet, only app. 1000 hours
of episodic memory
are available

Stickgold, R. 2002. *Journal of Clinical Psychology*, 58 (1): 61-75

BLOCKING

"The clinician should assume that processing has stopped when the information has not reached the appropriate desensitisation level but is unchanged after two consecutive sets" **(Shapiro 2001)**

The Cognitive Interweave in EMDR

- "EMDR clinicians are trained to stay out of the way as much as possible, since the therapist does not know what the best unconscious connections are that need to be made. When change has not occurred after consecutive sets of dual attention stimulation, then the clinician may use Cognitive Interweave and ask a question, or offer a statement for consideration, or suggestion of an action that is geared to elicit the next bit of information needed to continue the learning experience" **(Shapiro, 2007).**

Cognitive Interweave

Cognitive Interweave (Ci's)

Ci's
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Ci's

The Cognitive Interweave in EMDR

- The Cognitive Interweave is a proactive strategy for working with challenging clients
- Clients who often enter into cognitive and emotional loops that are not amenable to the simpler EMDR intervention
- Its purpose is to ‘jump start’ blocked processing by therapist introduction of certain material rather than depending upon the client to provide all of it

The Cognitive Interweave in EMDR & the Client (Explained in Preparation Phase)

- Often all that is needed with the Cognitive Interweave is a tentative, even hesitant agreement or willingness to consider the therapist induced material

- This serves to access the adaptive information stored in the brain in a separate memory network

The Cognitive Interweave in EMDR

- If the information is relevant, it will become assimilated during the next dual attention stimulus (DAS)

- The emphasis is on allowing processing to occur that will generate trait change not simply the elicitation of a temporary state change

The Cognitive Interweave in EMDR

- Specifically clients will need clinician-initiated processing in four situations
  - **Looping** – high levels of disturbance, repetitive negative thoughts, affect & imagery
  - **Insufficient Information** – the client's educational level or life experience have not provided them with appropriate data to progress cognitively or behaviourally

The Cognitive Interweave in EMDR

- Lack of generalisation – the client has achieved a more positive emotional plateau or cognition with respect to one target, but processing does not generalise to ancillary targets

- Time pressures – during the last third of the session the client has an abreaction or fails to process an abreaction sufficiently, or a new target appears that is multifaceted with multiple negative cognitions associations with it.

Where do Good Ci's come from?

- Client History – Case Conceptualisation (Disgruntled client)
- Preparation Phase – Affect resource
- Intuition
- Mindfulness
- Past, Present & Future
- Psycho-education & Knowledge
- Therapeutic Process
- Therapeutic Content
- Therapeutic Relationship

Question to consider

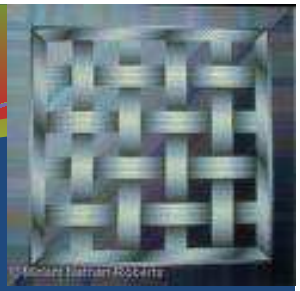
- When is a cognitive interweave not a cognitive interweave?

Adaptive Information Processing Theory (AIP) informs Ci's

- All humans have a physiologically-based information processing system
- Digests or metabolises information so that it can be used in a healthy life-enhancing manner
- Natural tendency to move towards mental health
- Psychological self-healing is similar to other physiological processes

Adaptive Information Processing

- Trauma causes imbalance in the nervous system thus creating block or incomplete information processing
- This dysfunctional information is then stored in its unprocessed state
- Identifying the hotspots of unprocessed events is central to EMDR treatment



Three Types of Interweave

- Interweaves to solve blockages on a process level: Non Specific Interweaves
- Interweaves to solve blockages on a content level: Specific Interweaves
- Interweaves to solve blockages on a relational level: Specific Interweaves

NEGATIVE & POSITIVE COGNITION DOMAINS – Phases 1, 3, 4, 5 & 8

- **RESPONSIBILITY (Past)**
  - **Guilt**
  - **Self-esteem**
- **SAFETY/VULNERABILITY (Present)**
- **CONTROL/CHOICE (Future)**

Cognitive Domains

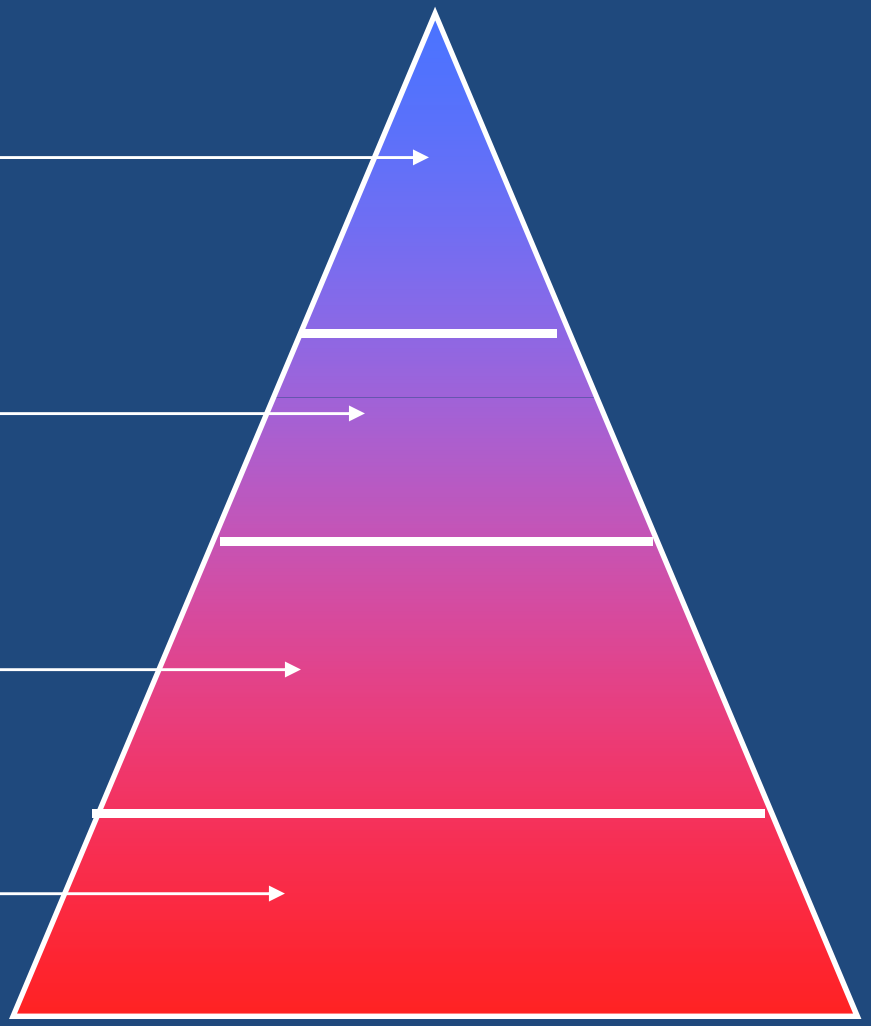
Presentation Alternative Hierarchy with Complex Trauma

CONTROL/CHOICE (Future)

SAFETY/VULNERABILITY (Present)

RESPONSIBILITY (Past)
- **Guilt**
- **Self-esteem**

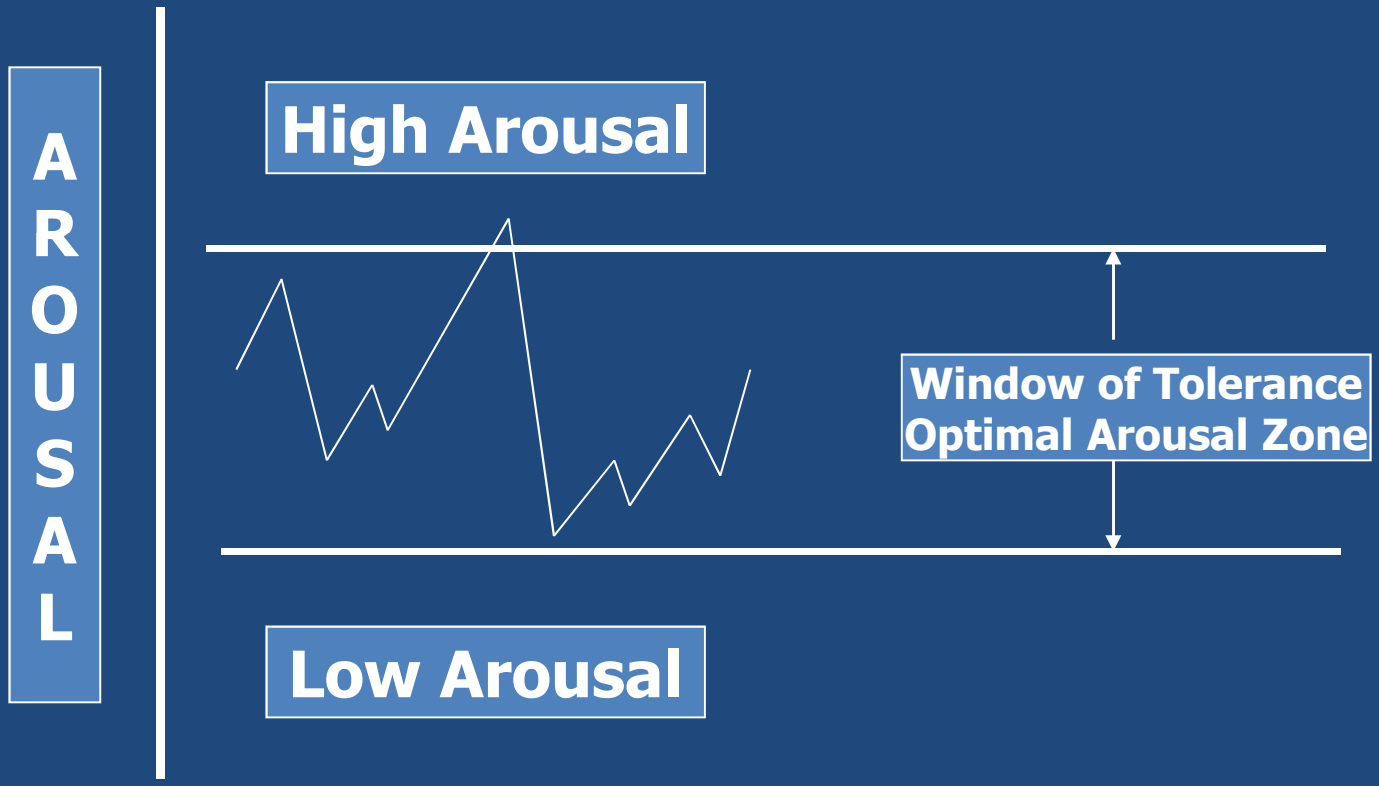
SURVIVAL



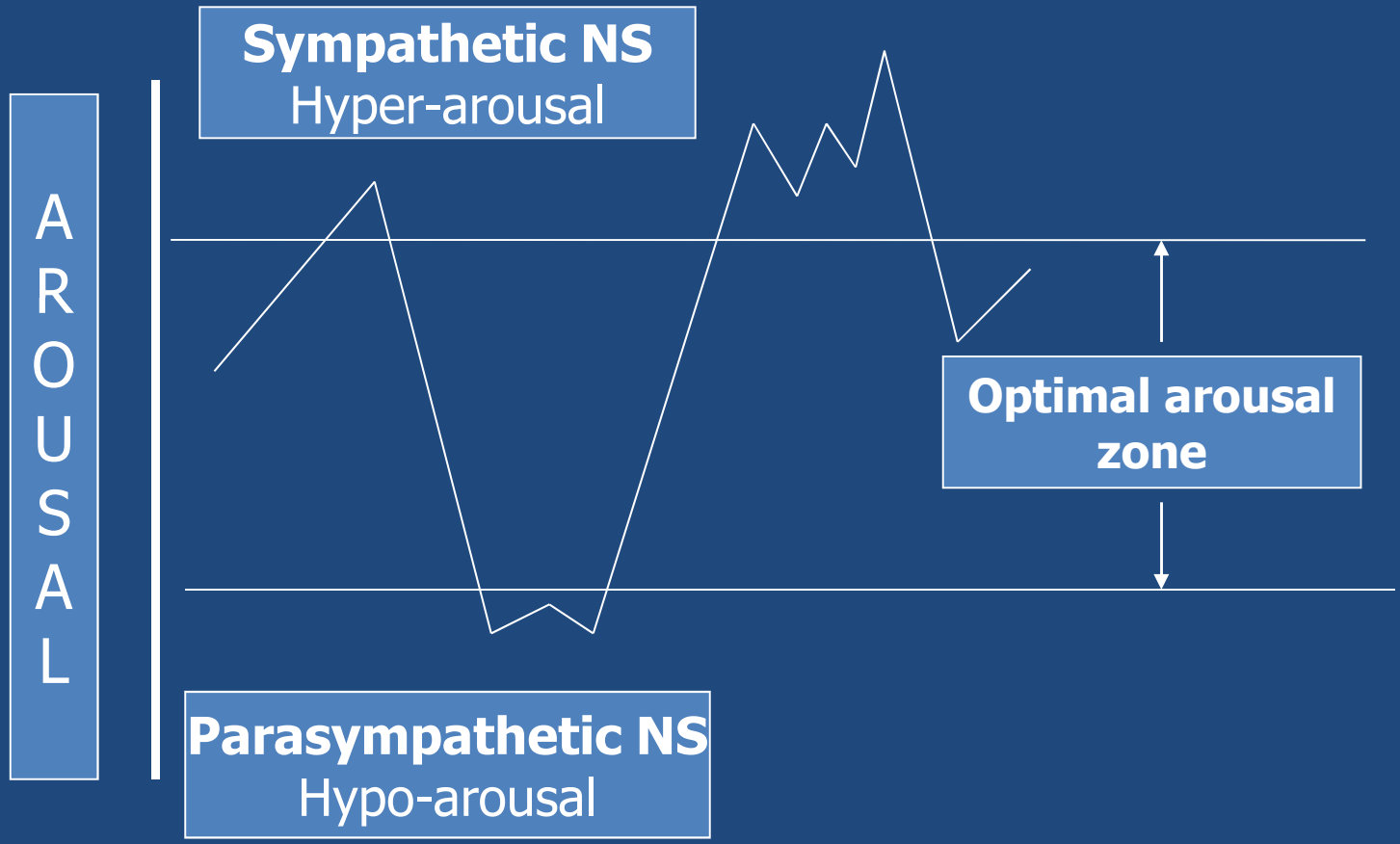
Process Interweaves

- As Spierings (2008) stipulates process-interweaves are used to keep the client within his or her window of tolerance, to strengthen the contact with the safe here-and-now and to strengthen the contact the client has with the EMDR therapist.
- Two files must be opened and active at the same time: the safe here-and-now and the traumatic there-and-then

AFFECT MODULATION



AFFECT MODULATION: DYSREGULATED AROUSAL



Process Interweaves: When?

- When the client is very near the top of their window of Tolerance
- When the client is loosing contact with the safe here-and –now
- When the client is loosing contact with the therapist

Deadlock: What to do?

- **AS YOU WOULD WITH YOUR COMPUTER: reset, restart.**
- **TECHNICAL VARIATION: Change the type of bilateral stimulation, Concentrate on the body sensation. *(The body keeps the score)***
- **THE UNSPOKEN WORDS: To say now what you wanted to say then.**
- **THE FROZEN IMPULSE: Which inclination do you feel in your body?, What would your hands, legs, etc. want to do?**
- **STUCK IN THE WORST MOMENT: What happened next?**

Above the Window of Tolerance?

- BRING DOWN AROUSAL !!!!
- Anything that brings the arousal down is useful
  - Slow down bilateral stimulation
  - Explanation/psycho-education
  - Reassurance/warmth
  - Humour ("your making me anxious")
  - Activate other parts of the brain

Process Interweaves: what?

- Encouragement
  - You are doing well
  - It's working
  - You are brave
- Connectedness and extra safety
  - I am with you, you're not alone
- Temporary manipulation of the material
  - Put the image at a distance, (around the block)
  - Black and white, not full techno colour
  - Put up a glass wall between you and the image
- NB *many complex clients are often incapable of this sort of control*

Process Interweaves

- Have a tape running
  - You have already survived
  - It's already done
  - It's over
- Bring and Hold resource object
  - Symbolic object
  - Talisman
  - Photograph
  - Trusted person

Problems with Process Ci's

- When the window of tolerance is too small process interweaves appear in-effective so resorting to the two other forms of interweaves becomes necessary (Content & Relational)

Content Interweaves

- A good interweave brings exactly the missing information within reach of the client, no more, no less.
- It is not random or involving trial-and-error, but instead it is an interweave used from the therapists knowledge of the client.
- A content interweave can also take the form of a hypothesis of what is missing or might provide a liberating insight, or the releasing of pivotal words
- Ref: Farrell, Dworkin, Keenan & Spierings 2009 (in press)

Types of Interweave

- Content Interweaves are used to:
  - Connect to specific necessary information
  - Give the brain a clue; to help the client get in touch with information that comes up spontaneously in successful processing
  - Metaphor of the document and the programme

BLOCKS, OBSTACLES & RESISTANCE

- *What is the missing information?*
  - A good interweave brings exactly the missing information within reach of the client, no more, no less
  - Not at random or trial and error but with “surgical precision”
  - Formulation, hypothesise what information is missing?

- *What is the underlying fear?*
  - fear of loosing control?
  - fear of being disloyal?
  - fear to betray family?
  - fear to violate the vow of silence? (being punished or hurt)

Underlying fear cont:

- fear of being guilty?
- fear to be an accomplice?
- fear that you may not be believed?
- fear that the memories are made up? not real?
- fear that you are even more damaged than you thought?
- fear to loose your “old self”?
- fear of getting well [more responsibility]
- fear that the trauma is too much for the therapist?
- fear the therapist will judge and reject you?
- fear to trust and be abandoned again?

OTHER BLOCKS AND CHALLENGES

- *Crying is weak!*
  - *Crying is the healing of sadness*
  - *Crying is for the soul, what soap is for the body [proverb]*
- *Being weak is dangerous!*
  - **“weak” may have been dangerous back then, however your life is different know…it is safe to cry.**
- *If I cry he’s won and he does not deserve that!*
  - **Back then it was important, not to cry, it helped you survive. Now healing is more important, you can choose to cry!**
- *He is not worth my tears!*
  - **Is that child worthy of your tears?**

ANGER

- *If I allow my anger to come, I will loose control!*
  - ..and how many times has this happened in the past? Are you insured? (black humour)]
- *If I release my anger, I will kill someone!*
  - How many people have you killed so far?
  - Remember a fear is not a prophesy
- If I allow my anger, I am just as evil as the perpetrator!
  - Psycho-education re anger
  - Survival value of anger: fight response
  - Similarities and differences between you and the perpetrator

GUILT

- What would you say to your daughter/son?
- Accuse another victim and have the client defend them.
- Who is wrong there? Image by Image.
- Have the client say in detail what he did and then ask her to comment on who was in control.
- Badness as a defence: *It is better to be a bad child with good parents than a good child with bad parents!*
- Remember if the guilt has a defensive function, then no amount of interweave will take it away

GUILT…SOCCRATIC QUESTIONING

- Who invented the idea, you or him?
- Who worked it out, you or him?
- Who had the initiative/was in charge, you or him?
- Who began it, you or him?
- Who longed for it, you or him?
- Who enjoyed it most, you or him?
- Who insisted on, it you or him?
- Who insisted that it stay secret, you or him?

- …..So who is guilty, you or him?

I AM BAD

- Would any other person in your situation be bad to? or just you and only you?
- So in your opinion who would be bad and who would not be bad?
- Could not this have happened to anybody?

I AM DIRTY

- WHO IS THE OWNER OF THE DIRT?
- RETURN TO SENDER: Give it back to the owner

- PEOPLE CAN SEE WHAT HAS HAPPENED TO ME
  - Then tell them what happened
  - Tell me how to see such things, tell me what to look for

I AM WORTHLESS

- *BANKNOTE*

VIOLATING THE VOW OF SILENCE

- I am not allowed to speak; if I do I am bad and I will be punished
  - How realistic is this in your life now?
  - How strong is the power of the perpetrator in your life now?
  - How do you imagine this punishment will happen? (work out in detail)
  - Why did the perpetrator make you swear to be silent? (Inevitable conclusion: because he knew he was wrong and knew he could be punished)

ANGER THAT FINDS NO RELEASE

- Depending on the client's processing style: mental or physical
- Mental: *just imagine…*
- Physical:
  - Where in your body do you experience this anger most strongly?
  - Which impulse or inclination comes with it?
  - Give a menu: slap, push, thrust, shake, cut, strangle, tear, pull, throw, smash, kick, stamp, crush, bite?
  - Provide material for a safe version of the response

VIOLATING THE VOW OF SILENCE

- Everything you tell me between these four walls is under my professional boundaries: I am not allowed to talk about it (unless …. Preparation Stage)
- It's your right to choose to whom you tell what
- Your boundaries are yours

GUILT

- A staccato of questions
  - Who invented the idea, you or he?
  - Who worked it out, you or he?
  - Who had the initiative, you or he?
  - Who began, you or he?
  - Who longed for it, you or he?
  - Who enjoyed it, you or he?
  - Who insisted on it, you or he?
  - ……..So who is guilty, you or he?

EXCITEMENT

- My own body reacted with getting excited / orgasm
- Psycho-education on reflexes
- Mental experiment:
  - What happens when I shine a touch into your eyes?
    Your pupils contract
    But what if you don't want this to happen?
  - What happens when I blow in your eyes?
    You blink
    But what if you don't want this to happen?

The Relational Interweave

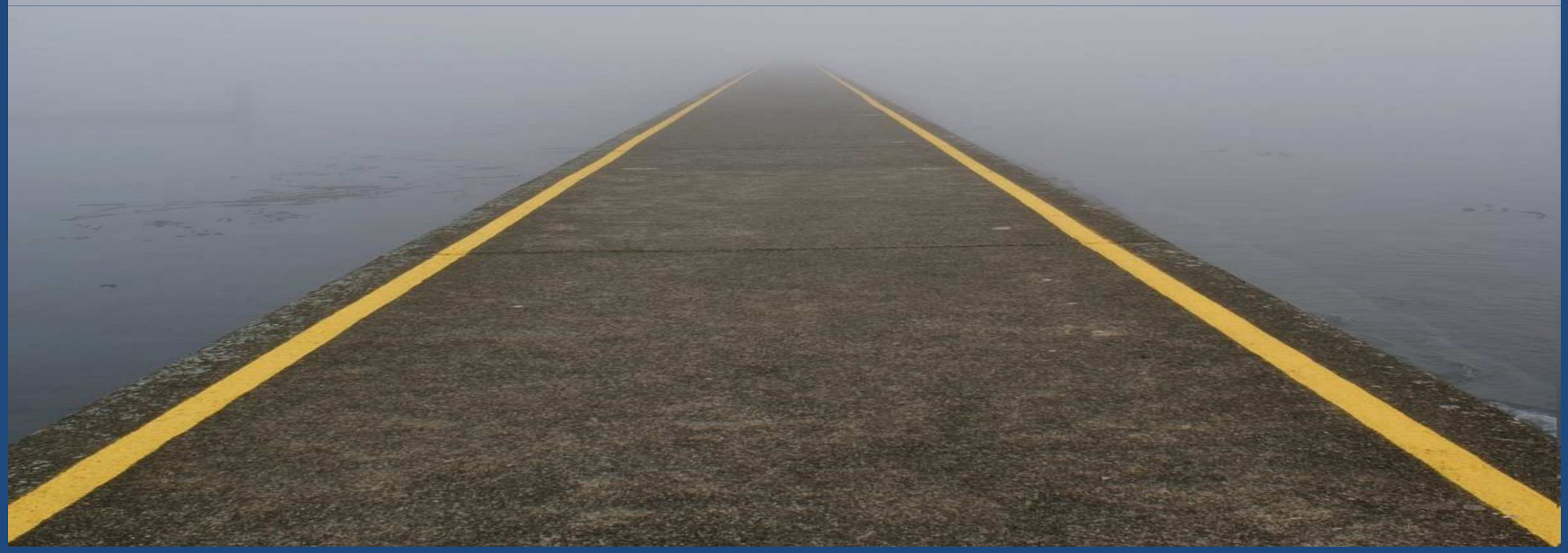
- Facilitating blocked processing can be helped by looking at the inter-subjective process between a client and a clinician within the context of the EMDR treatment
- Attunement may be compromised by a counter-transferential experience
- The relational interweave is a type of interpersonal intervention to deal with these transference and counter-transference phenomenon.
- (Dworkin et al , 2009)

Relational Interweaves

- Strong Therapeutic Relationship
- Transference
- Counter-transference (Soma sensory, Feedback, Reality Check)
- Self- Disclosure (Benedictine)
- Senstitivty

- Ref: The Relational Imperative (Dworkin, 2005)

With Ci's there is no right or wrong, just gaps to bridge the AIP. Its all just part of our collective empiricism in finding new ways of learning in getting to a better place



On a Rock, between a Rock & a Hard Place – There is always a way

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