Reaching for Hope: the Interpersonal Neurobiology of Empathy in Early Conflict Management

Offered by Sarah Peyton

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How Early is “Early Conflict Management?”

• The history and expectations the parties bring to the table
• The subcortical response the parties have to the mediator and to each other (in milliseconds)
• An initial sense of mutual understanding
Learning Outcomes for Today:

1. The ability to identify where the clients are in their self-regulation process.
2. The ability to identify the blocks to mutual understanding.
3. A familiarity with empathy from a Nonviolent Communication perspective.
4. Some working experience in feeling the shift to safety.
5. Some tools to move conflict resolution forward.
Outline

1. Mirror Neurons, Subcortical Resonance and the Quality of our Presence
2. Our Brain and Emotional Regulation
3. Naming Experience using Needs Based Language
4. Bringing in the Hemispheres
5. Our Sense of Safety and the Vagal Nerve
6. Naming the Us/Them Problem
7. Open Time for Questions
Interpersonal Neurobiology
What is IN?

• The study of how our brains react, learn, and affect one another in relationship
• Includes the fields of psychology, developmental psychology, attachment research, psycho-biology, cognitive and social neuroscience and complexity theory
The effect of our mirror neurons
Mirror neurons are interwoven into the structure of the motor cortex
Allowing us to interpret intention in gross
And fine movements
Including in the muscles of the face
This shows us how we understand the emotion of facial expressions,
Posture,
And gesture.
We also form first impressions
More quickly than cortical responses will permit
In a matter of milliseconds
When the speed of our reactions shows we are reacting on a subcortical level.
We call this subcortical resonance.
It is seen in the speed of pupil dilation or contraction

• (eye picture)
Mirror neurons and subcortical resonance make emotions contagious
And mirror neurons can bring calm to the table
If we see either party as an enemy, it changes the intersubjective space

- The nonverbal and subcortical
- Microexpressions
Practice

• Close your eyes and allow yourself to sink into the different impressions you have formed of the people closest to you or easiest for you to see in the room.

• Open your eyes and let your gaze move over a line of people. Notice your body and how it reflects your impressions as you glance from person to person.
What Does Conflict Look Like in Our Brain?
Our Limbic System lies deep within our Brain
Where our amygdalae run us with the power of our emotions
Place your thumb in the middle of your palm as in this figure.

Now fold your fingers over your thumb as the cortex is folded over the limbic areas of the brain.
In the Brain in the palm of our hand, our wrist is our Spinal Cord:
In the brain in the palm of our hand, our palm is our BRAINSTEM:

Heart rate, breathing, blood pressure, alertness, sleepiness
In the Brain in the Palm of our Hand, our thumb is the Limbic System, containing the Amygdala.
And our fingertips are our Prefrontal Cortex (PFC):
Place your thumb in the middle of your palm as in this figure.

Now fold your fingers over your thumb as the cortex is folded over the limbic areas of the brain.
When the Amygdala is on alert, it flips our lids (no flow of energy or information to or from the PFC)
Until we calm, soothe and regulate ourselves, bringing our PFC fully on line.
Or are invited to calm by others
Functions of the Prefrontal Cortex

- Regulation of body systems
- Attuning to others
- Balancing emotions
- Modulating fear
- Responding flexibly
- Exhibiting insight and empathy
- Paying attention to the body’s wisdom
- Morality, questions of integrity
The prefrontal cortex names our experience with resonance and self-compassion. It also looks at others in this light.
It keeps our amygdalae from ruling us with our emotions, including anger, fear or sadness.
The Prefrontal Cortex is what we need to activate to move forward in conflict resolution.
The Good News about Emotion and Amygdala Activation: it makes the brain neuroplastic
How we change and heal: 5 kinds of neuroplasticity

• Strengthening connections between neurons
• The growth of new dendrites
• New connections between neurons
• The growth of new neurons
• Alterations of synaptic efficiency related to:
  – Neurotransmitter availability
  – Receptor density
  – Neurohormones and neuromodulators
  – Supportive glial cell availability
Practice – Using Metalanguage About the Brain to Invite Self-Understanding

• In your dyad, imagine that you are taking some time at the beginning of a session to explain how the amygdala, when upset and unacknowledged, takes the brain’s energy and throws up roadblocks to resolution.
Why is Naming Experience Effective?
Different Emotions Run Through Different Areas of the Amygdala
When the correct emotion is named, the amygdala is calmed
And needs...
What is the deeper value?

<table>
<thead>
<tr>
<th>Ease, Flow, Balance</th>
<th>Self-acceptance</th>
<th>Faith, Trust, Hope</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Understanding</td>
<td></td>
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<tr>
<td>Love, family</td>
<td>Meaning/</td>
<td>Compassion/</td>
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<tr>
<td></td>
<td>Purpose</td>
<td>Empathy</td>
</tr>
<tr>
<td>Play, Fun, Humor</td>
<td>Predictability,</td>
<td>Partnership/</td>
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<tr>
<td>Celebration</td>
<td>Dependability</td>
<td>Mutuality</td>
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<tr>
<td>Intimacy, Connection</td>
<td>Peace, Beauty</td>
<td>Independence,</td>
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<td></td>
<td>Harmony</td>
<td>Choice, Freedom</td>
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<td>To Matter and</td>
<td>Creativity, Self-</td>
<td>Exploration,</td>
</tr>
<tr>
<td>Belong</td>
<td>Expression</td>
<td>Discovery</td>
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</tbody>
</table>
Beyond Strategy

NO TOOLS
LEFT IN THIS
VEHICLE OVERNIGHT

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That calms the emotional system and balances the hemispheres.
Needs language allows us to capture resonance in words.
Practice – Referencing Needs and Values

• Making a list of needs and values
• Experiencing the resonance that needs words capture
• Introducing empathy using needs language
  – Demo
  – Empathy circle
• Small group practice in naming what’s important in conflict
• Transforming an enemy image with needs language
What do we mean when we say that using needs words balances the hemispheres?
Our hemispheres are structurally different
These two structures lead to the two different ways in which each of us are capable of viewing the world:

Left Hemisphere:
Attention to detail
Precision
Narrow view
World as to-do list, mechanism
What are the tools?
Representation
Preconceptions
Top-down processing

Right Hemisphere:
Attention to environment
Comprehensiveness
Big picture view
Who are the people involved? What is the social picture?
Presence
Openness
Bottom-up processing
Our left amygdala holds emotions that are named and within our window of tolerance
When we are outside our window of tolerance, and dealing with as yet unnamed emotions, our right amygdala is running the show.
The importance of the mediator’s window of tolerance
When the mediator loses connection with the high right hemisphere, so do the parties.

• Moving into disconnection, emotional overwhelm, discouragement, silence, giving up, or trying to problem solve before connection is created
So the mediator needs to bring their right orbitofrontal cortex back to life
By calming and soothing the emotional system
And then, since we are made to regulate one another, the mediator can serve as the room’s right OFC
How Safety is Perceived in the Body: The Vagal Nerve Complex
Safety...

- Our nervous system is continuously evaluating:

“Do I feel safe?”
Our amygdala tracks our sense of safety, and is the gear shifter for our nervous system.
Moving us between fight, flight and freeze

The 3 Channels of the Vagal Nerve
1. Social Engagement and Self Connection
2. Fight or Flight
3. Freeze
Safety: Social Engagement and Self-Connection

- Ventral vagal channel
- Parasympathetic, fully myelinated
- We listen and see differently
Threat: Fight or Flight

- Sympathetic channel
- Fully myelinated
- We superimpose hostility on neutrality
Giving up: Freeze

- Dorsal vagal channel
- Parasympathetic, not myelinated
- Confusion, hopelessness, shame, overwhelm
Safety motivates the gear shifter

This system is fully hierarchical. The less safe we feel, the farther down the ladder we move, and the safer we feel, the more we move into social engagement and self-connection.
Theory of Dissolution

“The higher nervous system arrangements inhibit (or control) the lower, and thus, when the higher are suddenly rendered functionless, the lower rise in activity.”

–John Hughlings Jackson (1835-1911)
Father of English Neurology
Quoted by Stephen Porges 11/01
As facial mobility
And prosody
Invite others into a neuroception of safety.
Step One – Self-Connection

• When we are calm and self-connected, we offer an invitation to safety in the first 14 milliseconds
• Are we bringing our own stress into the room?
• Are we nervous about the process?
• Are we seeing all participants as human?
Step Two – Curiosity about Others

We wonder where our clients are in the regulation process, in relationship to history and to one another in the present moment.
Signs that parties do not feel safe

• Frozen facial expressions
• Flat voice
• Averted gaze
• Collapsed posture
• Expressions of hopelessness
• Criticism, blame
• Moralistic judgment
• Prejudices and “-isms”
Defusing in-group and out-group thinking by naming experience

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And inviting the parties to see one another as human
The Mediating Parties as a Complex System

• A small amount of clear communication may not just bring us back into a regulated state, it may create a huge breakthrough in integration and possibility.

• In complex systems, you cannot predict the effect of small improvements in the flow of energy and information (integration).
Using our Mirror Neurons for Good

“Be the peace you want to feel in the room.”

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How do we get all brains in the room on board?

1. **Self-empathy (our PFC)**
2. **Naming any group affiliations**
3. **Inviting the step into humanity**
4. **Naming experience for others**
5. **Inviting mutual acknowledgment of needs or values**
Appendices
The Mind’s Domains of Integration

1. Integration of Consciousness: Presence
2. Vertical Integration: The Embodied Mind
3. Bilateral Integration
4. Memory Integration
5. Narrative Integration
6. State Integration
7. Temporal Integration
8. Interpersonal Integration
9. "Transpirational" Integration
Key Concepts of IPNB

a. Every person’s mind, including mine, is hard-wired to reach for integration and connection.

b. Rigidity and chaos are expressions of places where my mind is not in full expression of its capacity to be integrated – flexible, adaptive, coherent, energized and stable.

c. My brain is neuroplastic, and always learning. I can change my implicit experience into explicit experience and transform rigidity and chaos into integration. (*see next slide*)
Key Concepts of IPNB cont.

• c. (continued) I can transform old neural networks into new relationships with the world. States become traits with practice. When I focus energy and information flow in an integrative practice (being aware of my awareness, paying attention to my intention) I strengthen the integrative fibers of the brain, shifting my baseline response to approach instead of withdrawal, improving my immune system and my blood pressure, increasing my empathy and my relationships with others.
d. The more integrated I am, the more able I am to see behind words or action to the reach for integration and connection, and to have mindsight into the experience of others – attuning to their internal experience, and respecting their ability to be distinct from me, thus making our interpersonal connection more flexible, adaptive, coherent, energized and stable.
Foundational Ideas of NVC

a. Everything that people do is an attempt to meet needs, in other words, we are always and only reaching for life.

b. When I understand this, I know that no matter what a person is expressing, it is an attempt to enrich life.

c. I do not want to have my needs met at the expense of others' needs, that is, I want to value another's needs as I do my own.
Foundational Ideas of NVC, cont.

d. I know that when my needs are seen empathically and when I see another’s need empathically, that it stimulates natural compassion. We then want to contribute to each other’s well-being.

e. All attacks, criticism, etc. are tragic expressions of needs.
NVC

• (for Grok cards) www.cnvc.org
IN Resources

• Books by Daniel Siegel, Bonnie Badenoch, Louis Cozzolino
• The Norton series on Interpersonal Neurobiology
• Dr. Dan Siegel’s website for presentations and info:  http://www.drdansiegel.com/
• PSU’s IN (IPNB) certificate program: http://www.ceed.pdx.edu/ipnb/
• Dr. Allan Schore’s website: http://allanschore.com/

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• BRAIN RESEARCH:
  • Matthew Liebermann:  http://www.scn.ucla.edu/papers.html