

Looking Through the Lens of Polyvagal Theory Deepening Your Practice



Deb Dana, LCSW
rhythmofregulation.com

With gratitude to Stephen Porges for his
development of Polyvagal Theory...

The science of connection...

The science of feeling safe enough to fall in love with life
and take the risks of living...

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Polyvagal Theory was developed by Stephen Porges in the 1970's and 1980's and first presented to the clinical world in the 1990's. Since that time hundreds of peer reviewed papers have referenced the theory and as we learn more about the workings of the autonomic nervous system, Polyvagal Theory continues to be relevant to our understanding of our human biology.

There is lots we don't yet know about our human biology and while we have many hypotheses, the coming years will bring additional research to guide the application of this theory.

<https://www.polyvagalinstitute.org/background>

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Through the Lens of the Nervous System

- Regardless of the therapy model you are using, you are engaging with your client's nervous system.
- The nervous system exerts a powerful control over feelings, actions, and beliefs in service of survival.

If you could have thought your way out of this you would
have done so long ago...

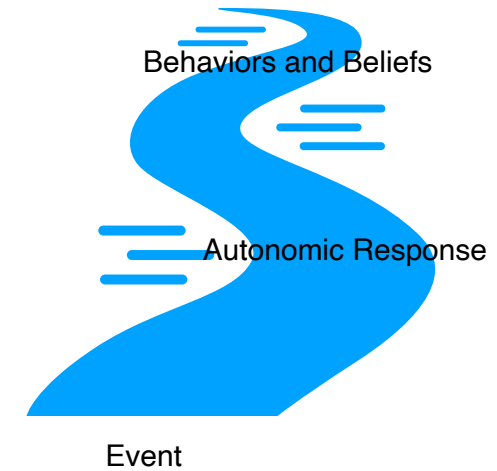
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No matter how irrational the thought, feeling, or behavior, remember the nervous system does not make moral meaning or assign motivation - it simply enacts a response to ensure survival.

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The Intervening Variable



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Illness and Wellness

- Illness is the outcome of a nervous system that is dysregulated in a particular way
- Wellness is a quality of a nervous system that is guided by the ventral vagal system

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A Different Story

What is the nervous system trying to tell us?

- a story that hasn't been heard or told
- not the cognitive narrative
- the story under the symptoms

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A Paradigm Shift

With a regulated nervous system,
symptoms reduce or resolve.

- Can we take the presenting problem and set it to the side?
- Keep it within reach and change the focus.
- Once we create some regulation, we can look at it again and see what has changed.

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Organizing Principles of Polyvagal Theory

Neuroception - detection without awareness

Hierarchy - three predictable pathways of response

Ventral Vagal

Sympathetic Nervous System

Dorsal Vagal

Co-regulation - a biological imperative

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Neuroception Detection without Awareness

This intent listening happens below the thinking parts of our brain and away from our conscious control.

The autonomic nervous system responds to cues of safety, danger, and life-threat from:

- **inside** our bodies
- **outside** in environment around us
- in the relationships **between** us and others

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Take an autonomic adventure... ...tune in to neuroception

Are you drawn into connection with the image and a desire to move closer?

Do you feel a need to get away from the image or a need to fight back against it?

Do you feel yourself fading away not able to hold the image in your awareness?

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Where did neuroception take you?

Our responsibility is to tune into what happens in our own nervous system...

...and be curious about what is happening in another nervous system.

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When there is a neuroceptive match...

...the autonomic state will bring the energy necessary to effectively manage the experience.



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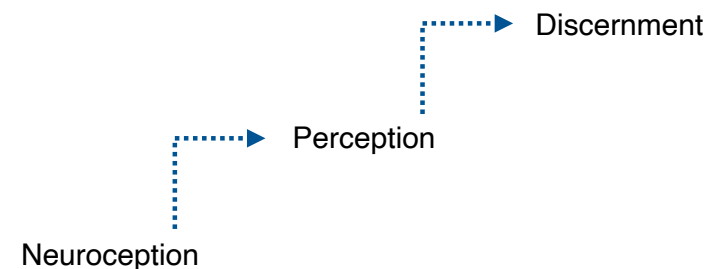
With a neuroceptive mismatch...

Inability to calm defense systems in safe environments
Autonomic nervous system activates a habitual protective response pattern — hypervigilant - alarmed



Inability to activate defense systems in risk environments
Neuroception does not signal danger when there is actual danger; autonomic response is inadequate to manage the situation — dulled, unaware or high risk-taking

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THE DISCERNMENT QUESTION

In this moment, in this place, with this person/people,
is this response/level of response needed?

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Active and Passive Pathways

Passive Pathways:

Neuroception is monitoring *inside, outside* and *between* (body, environment, relationships)

Active Pathways:

actions to consciously influence autonomic state, therapy models, processes, procedures

Regulation of passive pathways is necessary to support work with active pathways.

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The Safety/Danger Equation

Cues of safety outweigh cues of danger
ready for connection
new stories emerge
change is possible
physical and psychological wellbeing



Cues of danger outweigh cues of safety
survival responses activate
stuck in a story
closed to change
disease & dis-ease

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Neuroception exerts a powerful influence over our physiology.

Gene expression occurs in response to our perception of physical and social environments.

“...our physiological state on any given day can influence our molecular make-up for weeks and months into the future.”

Slavich, G. M., & Cole, S. W. (2013). The emerging field of human social genomics. *Clinical Psychological Science*, 1(3), 331-348.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3707393/>

<https://www.youtube.com/watch?v=C62lDmGKZzg> (Elisa Epel and Steve Cole - The Mindful Human Genome)

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Wellbeing

Being safer does not necessarily make us feel safer.

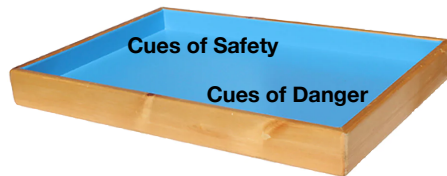
It is not just the reduction/removal/absence of cues of danger but also the active experiencing of cues of safety that our autonomic nervous system needs.

We need to attend to the BOTH/AND of danger and safety. If we only pay attention to one and not the other our clients cannot fully experience wellbeing. A regulated system depends on both!

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Notice, Name, Change, Replicate

- when therapy stalls and a client is stuck - rebalance, remove, change, add
- when there is a flow and change is happening - celebrate and savor, bring in objects to deepen



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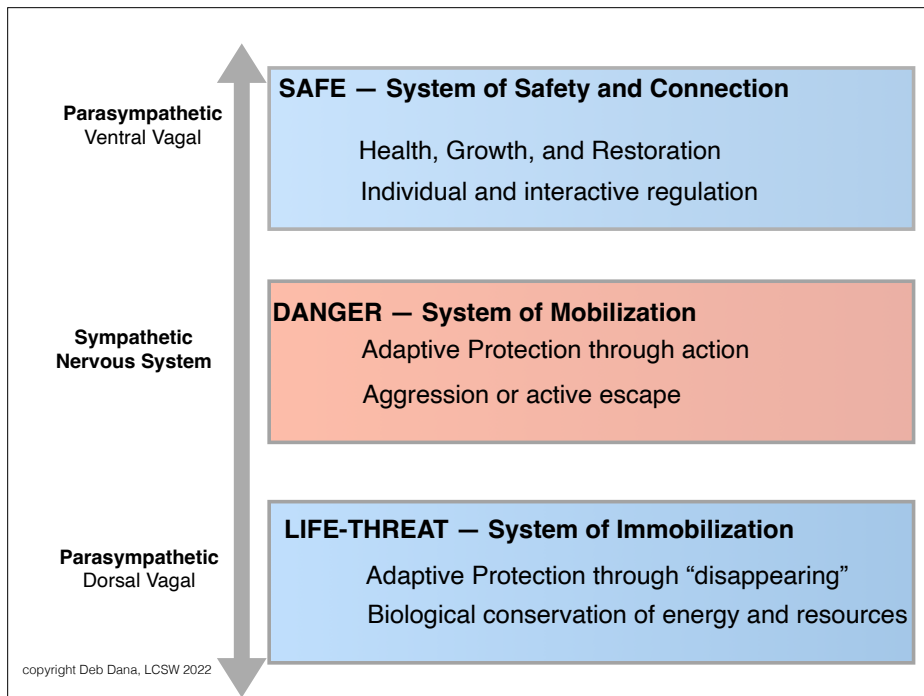
The Autonomic Hierarchy



The autonomic nervous system is the common denominator in our human experience.

The autonomic hierarchy outlines predictable pathways of disconnection, mobilization, and engagement.

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The Parasympathetic Branch

The Vagus Nerve
the “wanderer”

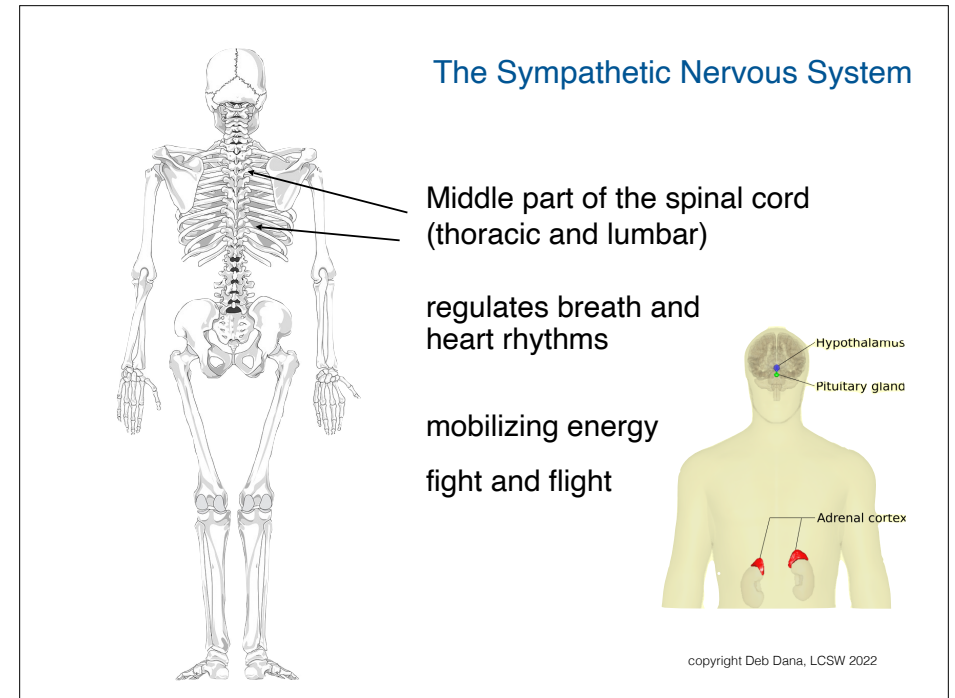
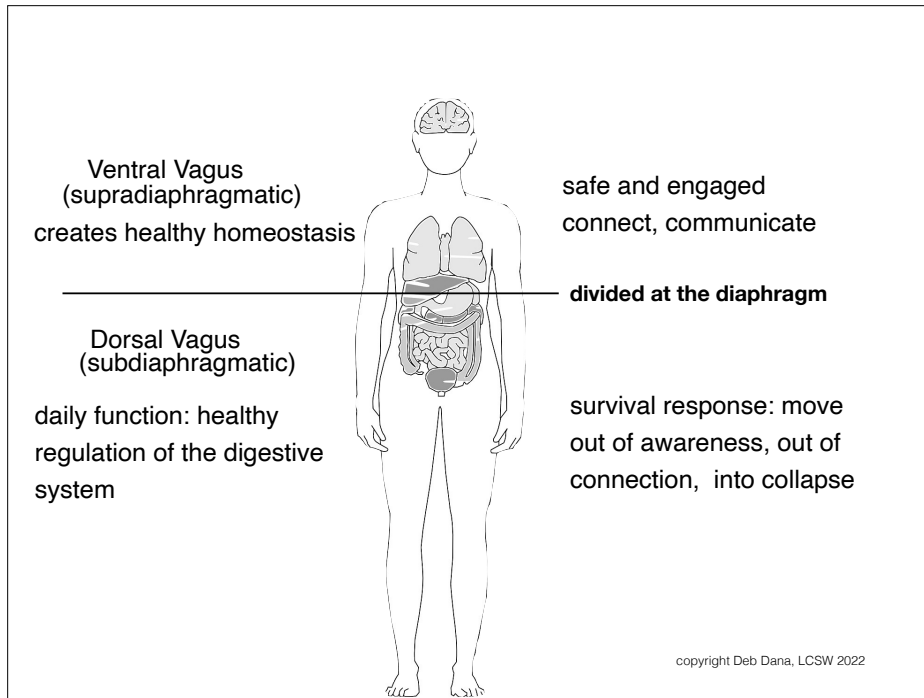
From the brain stem at the base of the head (medulla), the vagus travels down through the lungs, heart, diaphragm, and stomach... and upward connecting with nerves in the neck, throat, eyes, and ears...

...to form the “face-heart” connection

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Emergent Properties

- The autonomic nervous system doesn't assign motivation or make moral meaning.
- What is biologically possible?
- What are the behaviors and stories that are supported from each state?
- What are the behaviors and stories that are not supported from each state?

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- Our biology supports or restricts access to body sensations, thoughts, feelings, behaviors, beliefs.
- The emergent properties of each state are only available when we are in that state.
- When we move from state to state, we gain and lose access.
- This is not a cognitive choice. It is a biological one.

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Emergent Properties of a Ventral Vagal State

- co-regulate and self-regulate
- connect to self, others, the world, spirit
- tune into the moment and tune out distractions
- resourced and resourceful
- reach out for, and offer, support
- explore options
- hope
- compassion, self-compassion
- flexible, resilient

...a story of possibility

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Emergent Properties of Sympathetic Survival

- sense of unease and impending danger
- mobilization of fight and flight
- active aggression or escape
- alarmed, hypervigilant
- looking and listening for danger
- miss and misread signs of safety
- sense of separation - cut off from others
- disrupted connection from self, others, world, spirit

...a story of an unsafe world and unsafe people

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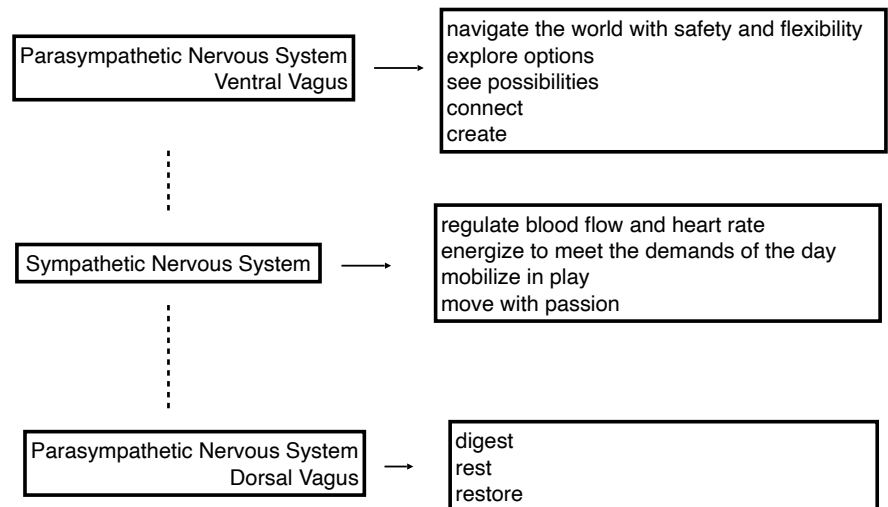
Emergent Properties of Dorsal Survival

- body enters conservation mode
- numb, foggy
- collapsed
- disconnected, untethered, floating
- alone, lost, abandoned, unreachable
- hopeless
- disappear
- safety and hope feel unreachable

...a story of despair

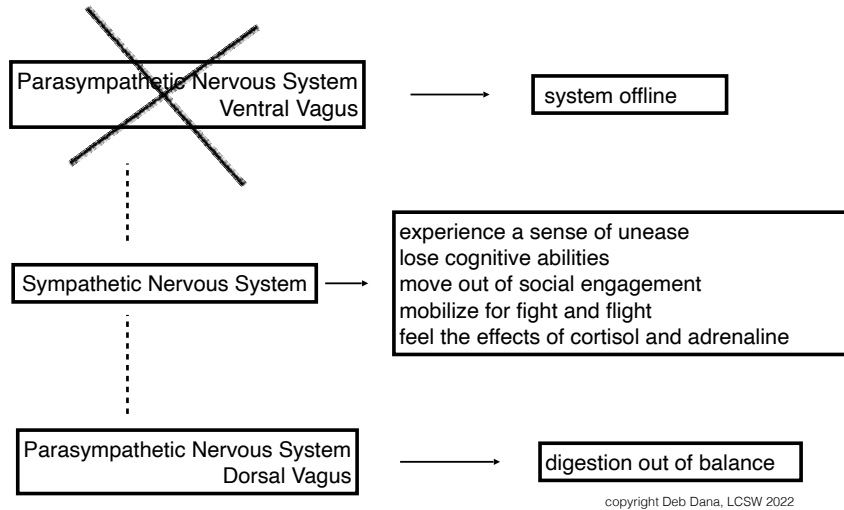
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Ventral Vagal Oversees the System All Systems Online

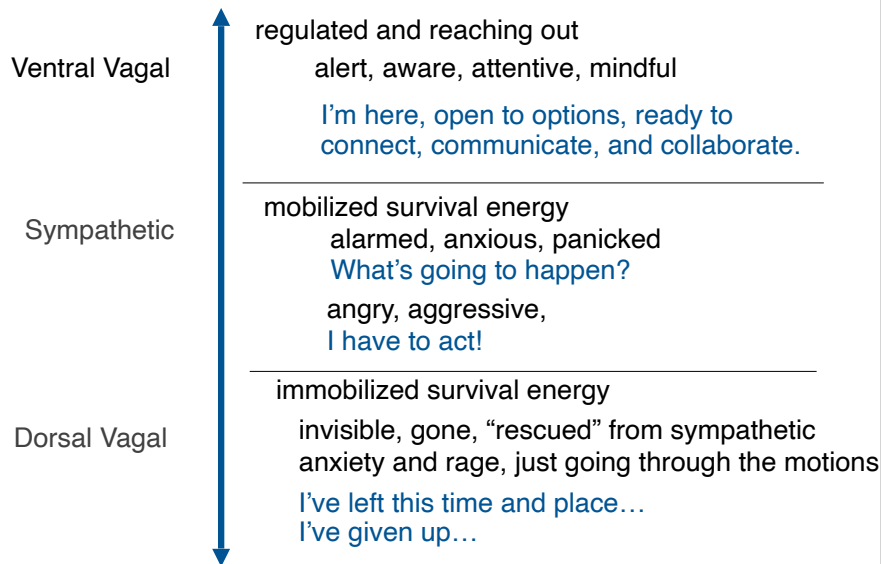
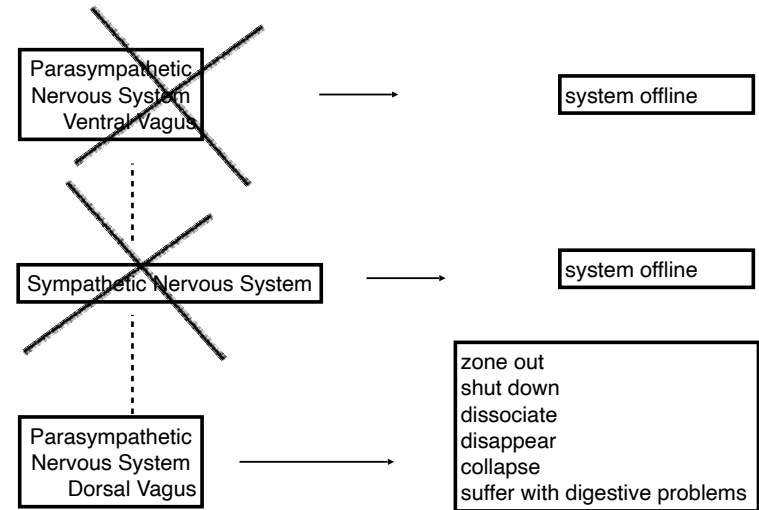


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Sympathetic Nervous System Takes Over

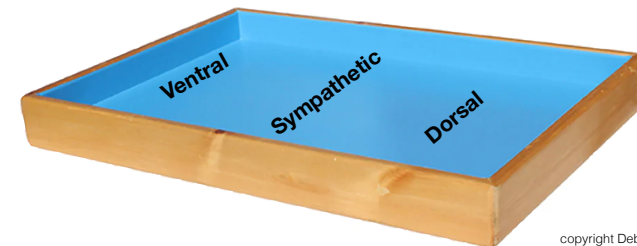


Dorsal Vagal System in Charge



Your Map in the Sand

- create the hierarchy
- get to know individual states



Three Things

- select an object to represent each state
- notice the characteristics that drew you to each
- arrange your objects in different ways - notice what changes
- play with regulation - dysregulation - return to regulation

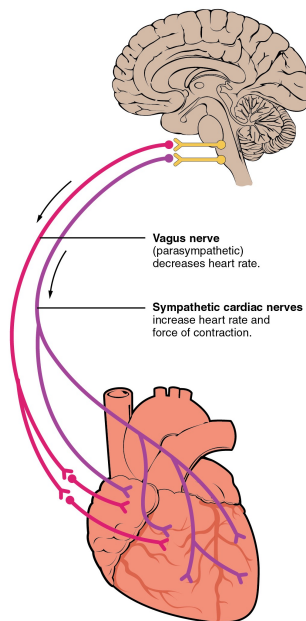


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The Vagal Brake

- is a ventral vagal circuit to the heart's pacemaker that speeds up and slows down the heart
- keeps the ventral vagal system online and in charge while allowing in more sympathetic energy without activation of the HPA axis
- creates the ability for flexibility of response — to respond and not automatically react
- supports smooth transitions

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Download for free at <http://cnx.org/contents/14fb4ad7-39a1-4eee-ab6e-3ef2482e3e22@6.27>.

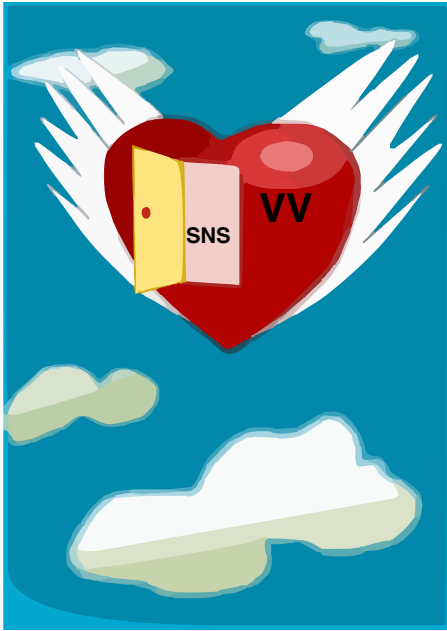
A System of Regulation through Relaxation and Re-engagement

The vagal brake:

- allows us to rapidly engage and disengage
- to quickly energize and calm
- brings a sense of ease to transitions

When the opportunity to exercise the vagal brake is a missing experience, the ability to move between states is impacted.

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Step into the energy of your sympathetic system from an anchor in ventral.

Open and close the doorway to activation.

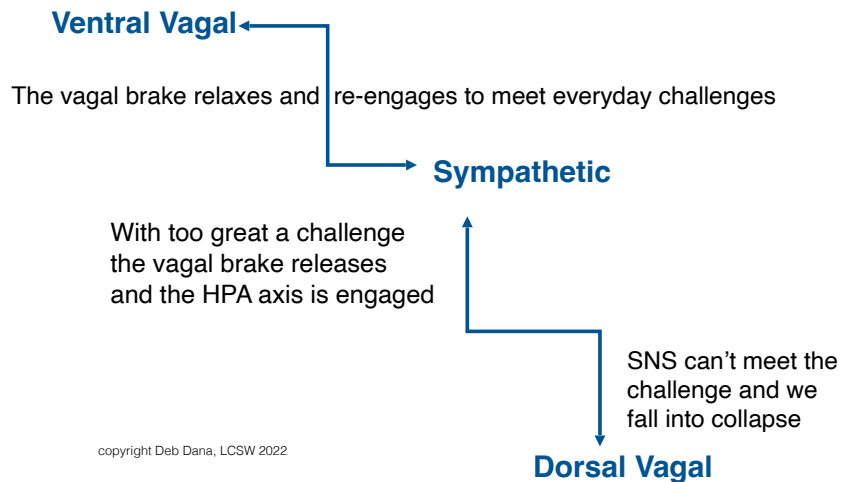
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- find an object to represent your vagal brake
- bring in an object to represent a challenge
- adjust your vagal brake to meet the moment
- readjust and return to baseline
- experiment with different levels of challenge



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Hierarchy in Action



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Listening to the Story of Three States

At any moment, we have three stories — one held in each state.

The story we hear and are held in, is from the state that is most active in our system.

Tuning in and hearing each of the three stories is a reminder that the state is where the story begins.

Listening to three stories uses the lens of the autonomic nervous system to expand perspective and enter into a moment of reflection.

Sharing your stories with someone else brings connection.

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The Listening Practice

- Start with a small, everyday experience that doesn't affect your safety or have a big impact on your life.
- Look through your two survival states and create the stories.
- End in ventral and create the story.
- Look at your three stories in the sand. What is interesting to you? What did you learn?



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Co-Regulation

We are inextricably linked...one nervous system to another...

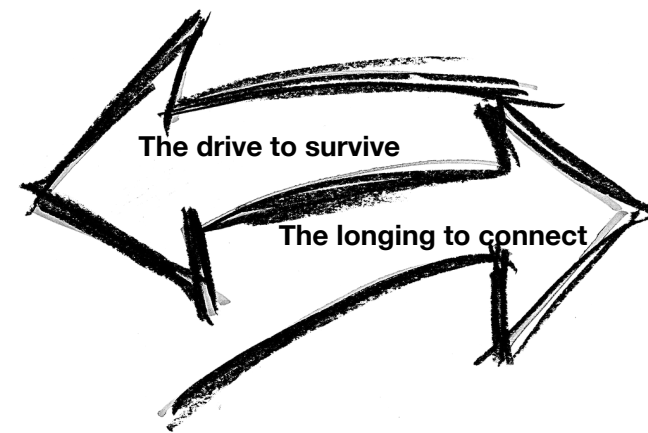


Trauma is a chronic disruption of connection. (Porges)



Kolacz J, Dale LP, Nix EJ, Roath OK, Lewis GF and Porges SW (2020) Adversity History Predicts Self-Reported Autonomic Reactivity and Mental Health in US Residents During the COVID-19 Pandemic. Front. Psychiatry 11:577728. doi: 10.3389/fpsy.2020.577728

Is it safe to connect?



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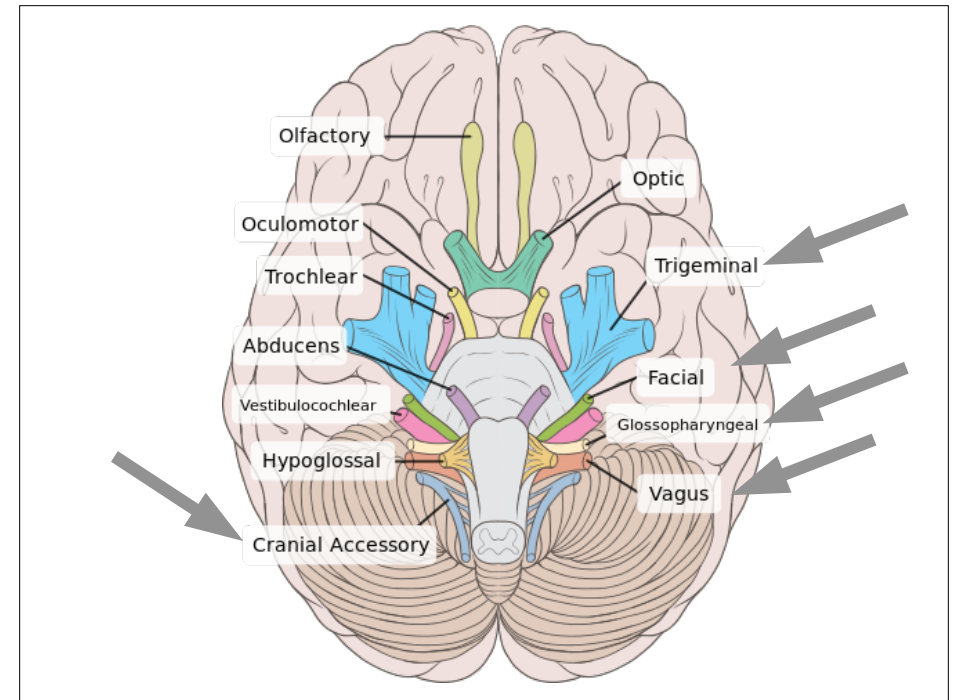
The Social Engagement System

Formed through the evolutionary integration of Cranial Nerves V (trigeminal), VII (facial), IX (glossopharyngeal), X (vagus), XI (spinal accessory)

Controls:

- Facial expression (emotional expression)
- Eyelids (social gaze)
- Middle ear (hear human voice)
- Mastication (ingestion, sucking)
- Larynx, pharynx (vocalizing, swallowing, breathing)
- Head turn and tilt (social gesture, orienting)

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The Social Engagement System

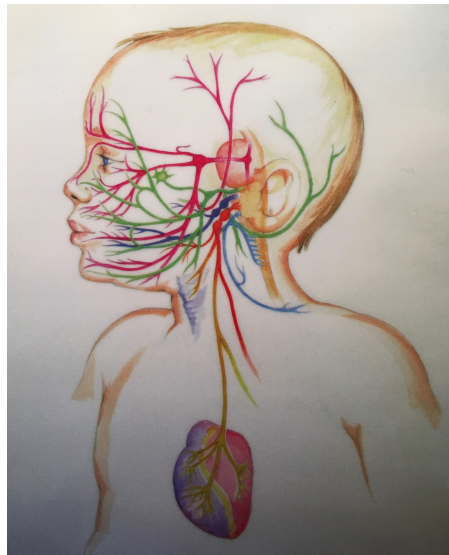
Five cranial nerves joined in the search for connection through our...

eyes

ears

voice

face and head movements

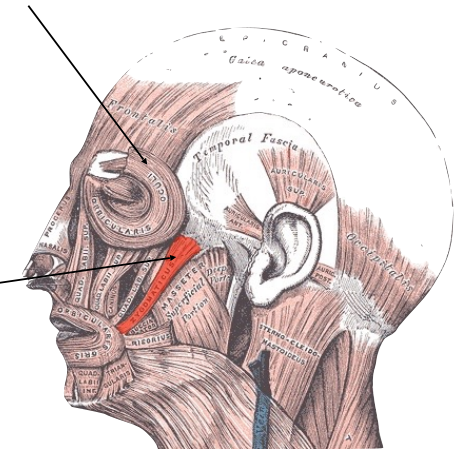


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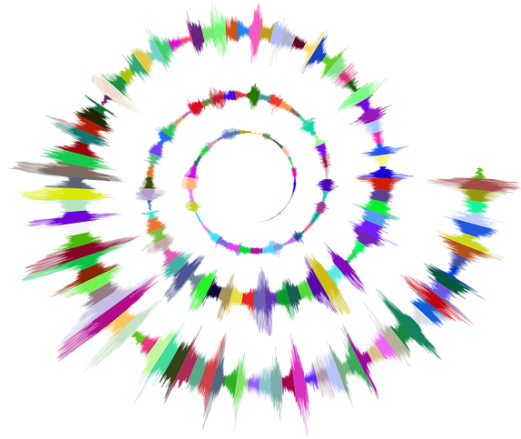
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Moving in and out of eye contact is a regulating action. We use the eyes (orbicularis oculi) to sense and signal warnings and welcomes.

"...the zygomatic major can be willed into action, but only the sweet emotions of the soul force the orbicularis oculi to contract." Duchenne



Gray's Anatomy of the Human Body 1918



The ear collects the spiraling energy from the Cosmos.
Anonymous Tibetan Medical Doctor

The Power of Prosody

- The music of the voice
- Patterns of rhythm and sound
- Frequency
- Duration
- Intensity
- Reveals the underlying intent

Intonation before Information

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Without Words

When you don't know what to say...use a vocal burst.

“non-language sounds” we use to communicate
ahhh, mmmm, ohhhh, humph
understood across cultures
understood across species
understood with a high degree of accuracy

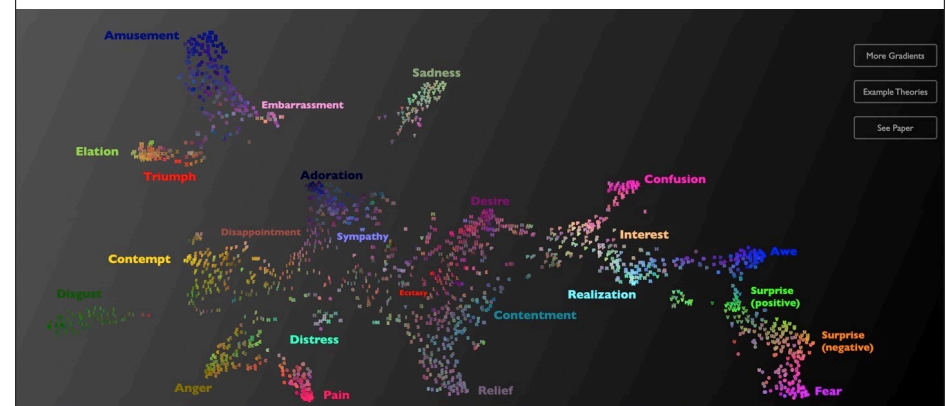
What is the autonomic message you are sending?

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Vocal Bursts Map

Interactive Vocal Burst Worldwide Map

- <https://s3-us-west-1.amazonaws.com/vocs/map.html#>



Head Movement

A straight, unmoving head is an autonomic cue of danger.

A slight tilt to the head broadcasts a cue of safety and an autonomic welcome.

Head nods send a message of connection.



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When we send signals of safety, we extend an invitation to connect.



When we receive signals of safety we feel an autonomic welcome and feel safe to move into connection and co-regulation.

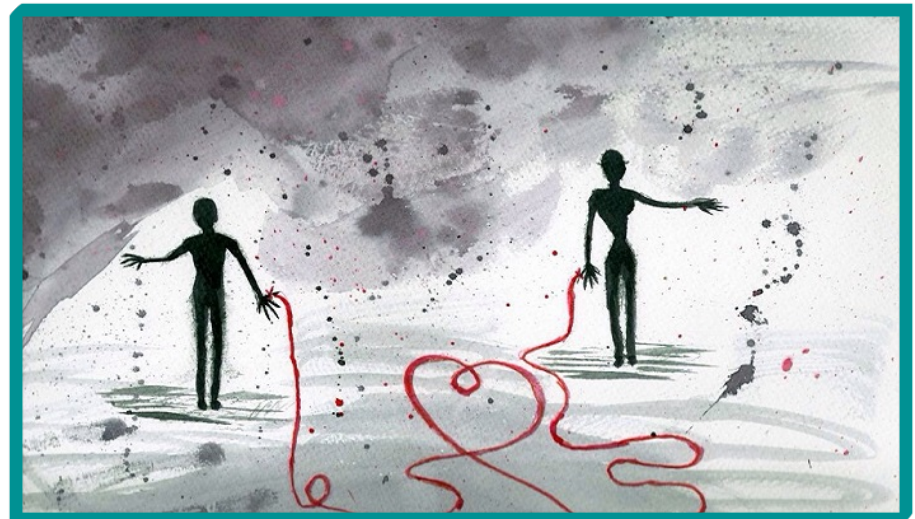
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When we send signals of danger or receive an autonomic warning from another system, reactivity increases and adaptive survival responses are reinforced.



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Pathways of protection and connection grow out of interactions between autonomic nervous systems...



Hope and Worry

- Identify a pattern you'd like to look at.
- Create the worry. If I stepped out of that pattern then...
- Create the hope. If I stepped out of that pattern then...



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Reflect and Review



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Demo...



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*“Earth will be safe
when we feel in us enough safety.”
Thich Nhat Hanh*

An Essential Ingredient

An active ventral vagal state is needed for all states of wellbeing.

Without ventral, the nervous system enters a survival state.

Simply bringing ventral to your work, offering your autonomically regulated presence to your clients, begins to change their experience.

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An anchor in ventral helps us stay hopeful when things feel hopeless, engage an effective survival response in the face of danger, manage levels of stress in an ongoing stressful environment, and keep moving forward when the world around us is filled with suffering.

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The Guiding Questions

- What state am I in?
- What do I need to be anchored in ventral regulation?
- Where is the other person?
- What does their nervous system need in this moment?

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The Responsibility of Being a Polyvagal Informed Human

Autonomic communication is always happening between our “selves”, others, the environment, and spirit.

Our state impacts the world.

We are responsible for attending to the autonomic information we are sending out into the world.

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- Honor the role of the autonomic nervous system in shaping our experiences and our stories.
- Remember the nervous system has an inherent longing to be in regulation and an inherent knowing about how to get there.
- Uncover the pathways that take you home to ventral.

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The Power of Ventral

The scientific definition of contagious: something that is transmitted by either direct or indirect contact

Ventral vagal energy is an unstoppable force!

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Benevolence



The active, ongoing, use of ventral vagal energy
in service of healing...

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