foreword by Stephen Porges, PhD

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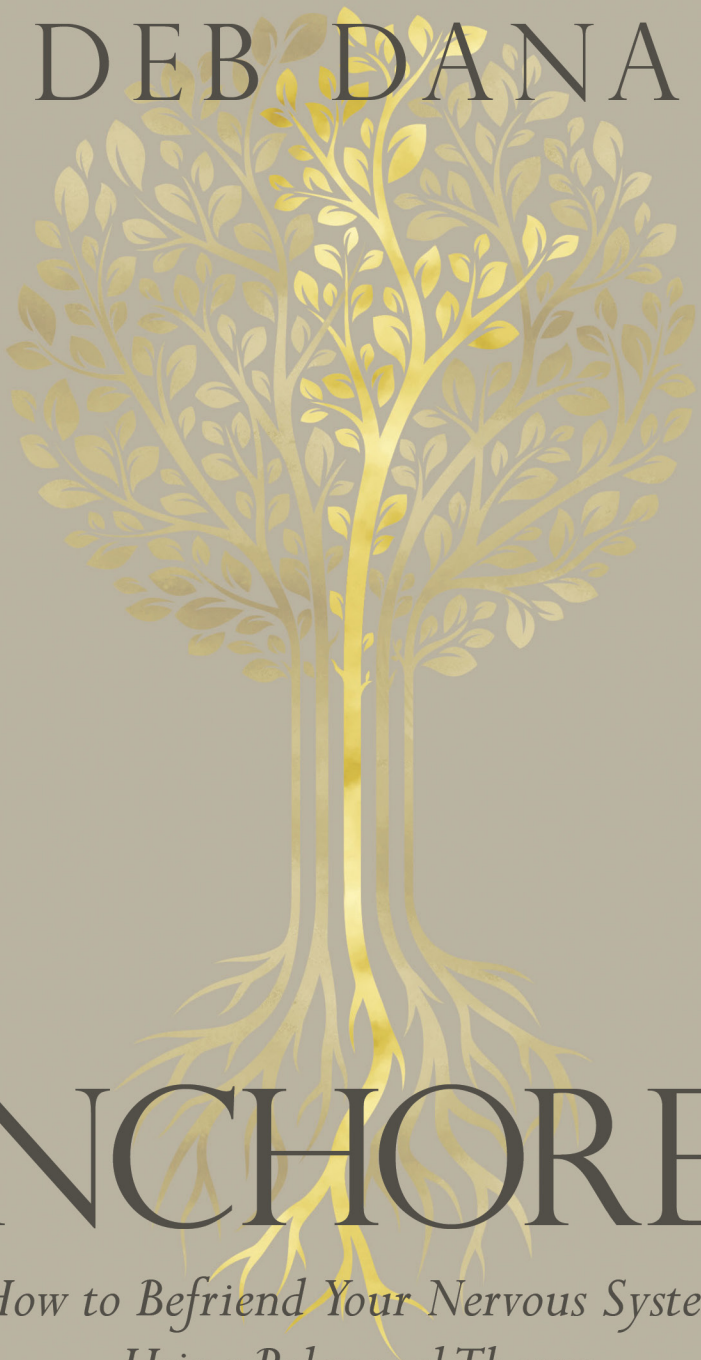

ANCHORED

How to Befriend Your Nervous System Using Polyvagal Theory

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A Quick Look at the Principles and Elements of Polyvagal Theory

The beauty of a living thing is not the atoms that go into it, but the way those atoms are put together.

CARL SAGAN,
COSMOS, EPISODE 5

In his work with premature babies during the 1970s and '80s, professor of psychiatry Stephen Porges rediscovered two vagal pathways in the nervous system that regulate the heart and provide a face-heart connection to communicate what is happening inside our bodies to other people. These discoveries helped define Polyvagal Theory, and we now have an easy way to understand and work with our autonomic nervous systems.

The autonomic nervous system could also be called the *automatic* nervous system since it takes care of our body's basic housekeeping responsibilities (i.e., breath, heart rate, digestion) without our needing to pay attention to them. The wonderful thing about this system is that it not only functions automatically with preprogrammed settings but, with Polyvagal Theory, it can also be adjusted. To do so, we have to understand the following three main principles:

1. Autonomic hierarchy: The system is organized around three building blocks that work in a certain order and come with preset pathways.

2. Neuroception: The system has a built-in surveillance system that watches for signs of safety and warnings about danger ahead.
3. Co-regulation: Having moments of safely connecting to others is a necessary ingredient for well-being.

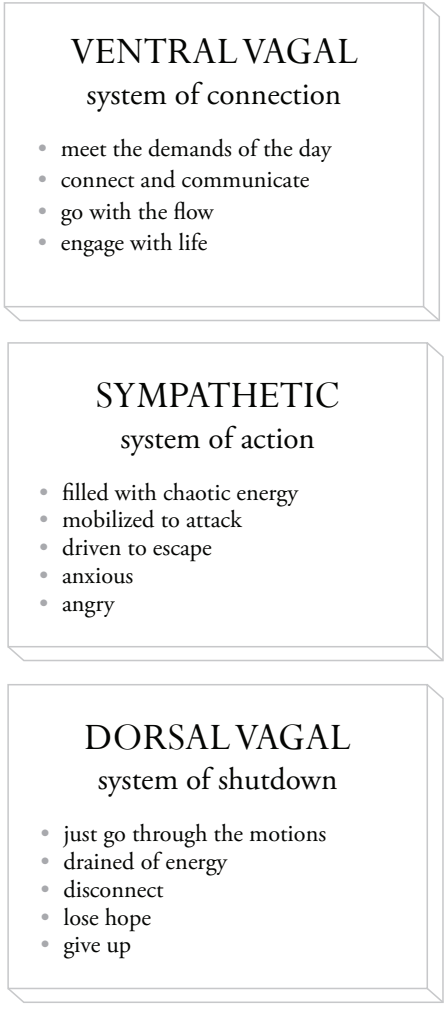

Image 1.1 Three building blocks and emergent qualities

Autonomic Hierarchy: The Building Blocks of Experience

Through the process of evolution, three building blocks came into being one after the other: dorsal vagal (shutdown) around 500 million years ago, sympathetic (activation) around 400 million years ago, and ventral vagal (connection) around 200 million years ago. This sequential order, called the autonomic hierarchy, is key to understanding how the nervous system anchors in regulation and reacts to challenges in daily living. Each of these building blocks works in a specific way, affecting our biology through connections inside the body and impacting our psychology by directing how we see, sense, and engage with the world.

The ventral vagal building block, the newest of the three, provides a pathway to health and well-being and the place where life feels manageable. We connect and communicate with others, and may join a group or be happy on our own. The common irritations of daily living don't feel so big and when our coffee spills or the commute is too slow, instead of getting angry or anxious, we're able to go with the flow.

Following the pattern of the hierarchy, when something happens that feels overwhelming, when too many things happen all at once, or when it seems like life is a series of never-ending challenges, we move down a step to the next building block and the action taking of the sympathetic pathway. This is commonly known as the place of fight and flight. When our to-do list doesn't ever seem to get smaller, there is never quite enough money to make ends meet, or it feels like our partner is always distracted, we lose our sense of being safe in the present moment and our ability to see a larger picture, and we react either by attacking or escaping.

If we continue to feel trapped in a cycle of endless challenges with no way out and no way to manage, we follow the hierarchy down to the final step to the first building block of the nervous system and the dorsal vagal feeling of collapse, shutdown, and disconnection. Here, the spilled coffee, the never-ending to-do list, and the partner who never seems to be present with us no longer matter. We begin to shut down and disconnect. We may still go through the motions, but with

no energy to care. We lose hope that anything will ever change. And because our nervous system follows a predictable sequence, moving from one building block to the next, in order to recover from this place of collapse, we need to find our way to some energy in the sympathetic system and continue on to the regulation of the ventral vagal state.

A good way to get the flavor of each of the three building blocks is by exploring two statements: "The world is . . ." and "I am . . ." Finding the words that describe how you view the world and your place in it brings awareness to the beliefs that are stored in each state. Start in dorsal, the building block at the bottom of the hierarchy, and feel into the experience of disconnection, collapse, and shutdown. Fill in the two sentences "The world is . . ." and "I am . . ." You might find the world is unwelcoming, dark, or empty, and you are untethered, abandoned, or lost. Move up one building block to the overwhelming sympathetic flood of energy and explore the same two sentences. Perhaps the world is chaotic, unmanageable, or terrifying, and, from this place of disorganization and chaos, you are out of control, dysregulated, or in danger. And now move up to the final building block and the state of ventral vagal safety and regulation. From here, how do you fill in the sentences "The world is . . ." and "I am . . ."? You might experience the world as welcoming, beautiful, and inviting of connection and feel okay, alive and well, and filled with possibility. Working in this way with the autonomic hierarchy, we begin to understand the different experiences each autonomic state creates. Reflecting on the two sentences "The world is . . ." and "I am . . . ," we see how dramatically our stories change as we move from one state, one building block, to another.

Neuroception: Your Internal Surveillance System

The second principle of Polyvagal Theory, the internal surveillance system, is defined by the wonderfully descriptive word *neuroception*. Stephen Porges created this word to illustrate how the nervous system (*neuro*) is aware (*ception*) of signs of safety and signals of danger. With a neuroception of safety, we move out into the world and into

connection. A neuroception of danger brings a move into sympathetic fight and flight, while a neuroception of life threat takes us into dorsal vagal collapse and shutdown.

Neuroception follows three streams of awareness: inside, outside, and between. Inside listening happens as neuroception attends to what's happening inside your body—your heartbeat, breath rhythms, and muscle action—and inside your organs, especially those involved with your digestion. Outside listening begins in your immediate environment (where you are physically located) and then expands out into the larger world to include neighborhoods, nations, and the global community. The third stream of awareness, listening between, is the way your nervous system communicates with other systems one-on-one or with a group of people. These three streams of embodied listening are always working, micro-moment to micro-moment, below the level of our conscious awareness. Running in the background, neuroception brings about the autonomic state changes that either invite us into connection with people, places, and experiences or move us away from connection and into the protection of fight, flight, or shutdown. Our story, and how we think, feel, and act, begins with neuroception. And while we can't work directly with neuroception, we can work with our body's response to it. When we bring perception to neuroception, we bring an otherwise nonconscious experience into awareness. We can work with our experience by taking the implicit experience of neuroception and explicitly noticing it and turning our attention toward the state that has come alive. As we keep traveling the pathway of awareness, we connect with feelings, beliefs, behaviors, and finally the story that takes us through our days. When we learn to attend to neuroception, we can begin to shape our stories in new ways.

Co-regulation: Wired for Connection

And finally, the third principle of Polyvagal Theory is the need for finding safe connection with others in the experience of co-regulation. Co-regulation, regulating with another, is an experience that is necessary

for survival. We come into the world unable to fend for ourselves and, for the first years of life, we need to be cared for by others. We are physically unable to regulate on our own and naturally turn toward the people around us to meet both our physical and emotional survival needs. As we grow, these experiences of co-regulation offer a foundation to explore regulating on our own.

Even as we learn to self-regulate, the need for co-regulation continues. This is both an essential ingredient for well-being and also a challenge to negotiate. In order to co-regulate, I have to feel safe with you, you have to feel safe with me, and we have to find a way to come into connection and regulate with each other. We turn to a friend to listen or look to a family member for help. We depend on certain people in our lives to show up with a regulated system when we are in need. While the world seems to be increasingly focused on self-regulation and independence, co-regulation is the foundation for safely navigating daily living. We carry the ongoing need to connect with others, and every day we long for and look for opportunities to co-regulate.

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It is through these three principles—hierarchy, neuroception, and co-regulation—that we have a way to acknowledge the role biology has in shaping how we move through the world and a guide to engaging with our biology in ways that bring well-being.

Three Elements for Well-Being

The three principles of Polyvagal Theory—building blocks of the hierarchy, internal surveillance through neuroception, and regulating with others—are where we begin to understand and befriend our nervous system. Next we add the elements of well-being—context, choice, and connection—which help the nervous system anchor in safety and regulation. When these three elements are present, we more easily find

the way to regulation. When any one of these elements is missing, we feel off balance and experience a sense of unease.

Context comes from the Latin word *contexere*, meaning "to weave together." Through the lens of the nervous system, context involves gathering information about how, what, and why in order to understand, and respond to, experiences. We get cues of safety from explicit communication of the details surrounding an interaction. When contextual information is sent through implicit pathways and not explicitly shared, we often respond in the present moment based on our past experiences. Without explicitly stated information, we are more likely to sense unsafety and move into a pattern of protection. For instance, a friend sends me a message canceling our planned lunch, and without hearing her voice, seeing her face, or having more information, I'm pulled into anxiety and a story that I've done something wrong and my friend is upset with me. When I find out she didn't feel well, the context changes, and instead of feeling abandoned, I feel care and concern.

Choice is the second element necessary for a regulated nervous system. With choice it's possible to be still or move, approach or avoid, connect or protect. When choice is limited or taken away, or when we have a sense of being stuck or trapped without options, we begin to look for a way out. In this search for survival we may feel the mobilizing energy of the sympathetic system with some form of anxiety or anger, or we may feel our energy draining as we are pulled into a dorsal vagal collapse. Even as we move through the simple activities of a day, we are more able to stay anchored in safety and regulation when there are options. On the other end of that experience, when there are unlimited options, we can feel at sea, unable to make a choice. Too many choices can be overwhelming and adhering to a rigid schedule too restrictive. There is a sweet spot for each of us where we have boundaries to create a framework for our choices and routines that include flexibility.

The final element, connection, brings a sense of relationship. The experience of connection encompasses four domains: connection to self, connection to other people (and pets), connection to nature and

the world around us, and connection to spirit. With connection we feel safely embodied, accompanied by others, at home in the environment, and in harmony with spirit. When there is a rupture in our sense of connection (losing our sense of self, experiencing a misstep in a relationship, being cut off from nature, or becoming distanced from our experience of spirit), our ability to anchor in safety and regulation is challenged, and we turn to communication and social engagement to try to find our way back into connection. When there is an ongoing disruption of connection, we often reach out in desperation before retreating into despair.

With this beginning look at the organizing principles of Polyvagal Theory and the elements of a regulated system, we can now turn to exploring our autonomic pathways and trying some explorations to engage the nervous system to bring us a sense of well-being.