

INTERVENTIONS, PRACTICES,
AND STRATEGIES



POLYVAGAL PERSPECTIVES

STEPHEN W. PORGES

Reviewed by Nancy Eichhorn, PhD



In the Beginning

As a laboratory scientist, Stephen W. Porges felt driven to understand what he called the vagal paradox. He noted that humans have two vagal systems: one orchestrates calm states and social engagement behaviors, while the other— a vestigial defensive system—is potentially lethal to mammals. Porges wanted to understand how the vagus nerve was both protective (when expressed as respiratory sinus arrhythmia, RSA) yet threatened our lives when expressed as bradycardia and apnea. His research identified the vagal mechanism underlying the paradox, which evolved into the polyvagal theory (pg. 24).

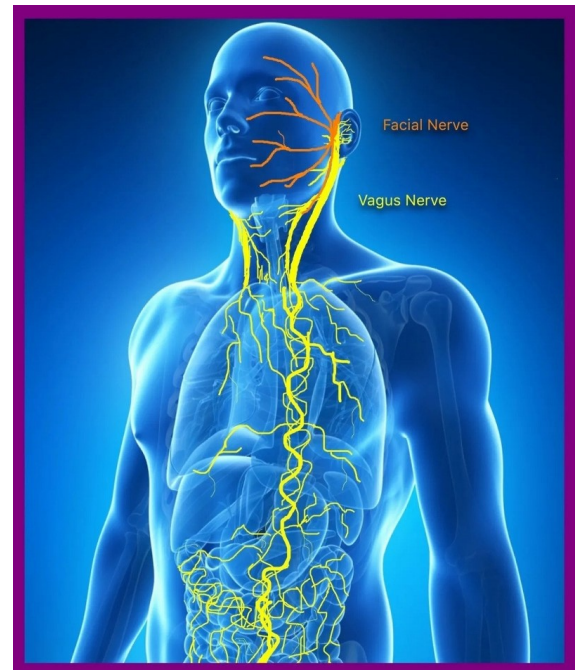
When Porges presented his polyvagal theory (PVT) in 1994, his work reframed our clinical understanding of the autonomic nervous system's role in mental and emotional health, including its impact on stress, resilience, social connections, and our sense of feeling safe (which allows us to reach out and connect with others).

Decades Later

After decades of witnessing misunderstandings and misrepresentations, he wrote *Polyvagal Perspectives: Interventions, Practices, and Strategies* (the title is taken from a paper he published in 2007) to set the record straight. He wanted to "clarify his original theory and rectify potential misunderstandings by documenting its scientific foundation" (pg. 24).

Porges didn't propose that PVT be proven or disproven. He wanted further research to inform and modify the theory and provide "a perspective to frame research questions—it is not a static theory" (pg. xiv). PVT consists of two components: a series of hypotheses "driven and future-oriented which could potentially lead to enhancements of mental and physical health" (pg.70) and a descriptive model. Porges wanted to emphasize the role of our autonomic state as "an intervening variable in how we respond to internal and external cues" (pg. 71).

Porges offered scientists a challenge to "incorporate an integrative understanding of the role neural mechanisms play in regulating biobehavioral processes" (pg. xiv). He offered his polyvagal perspective to encourage "a shift in research from theoretical strategies toward a theory that drives paradigms dependent upon explicit neural mechanisms" . . . "Foremost, a polyvagal perspective emphasizes the importance of phylogenetic changes in the neural structures regulating the ANS" (pg. xiv).



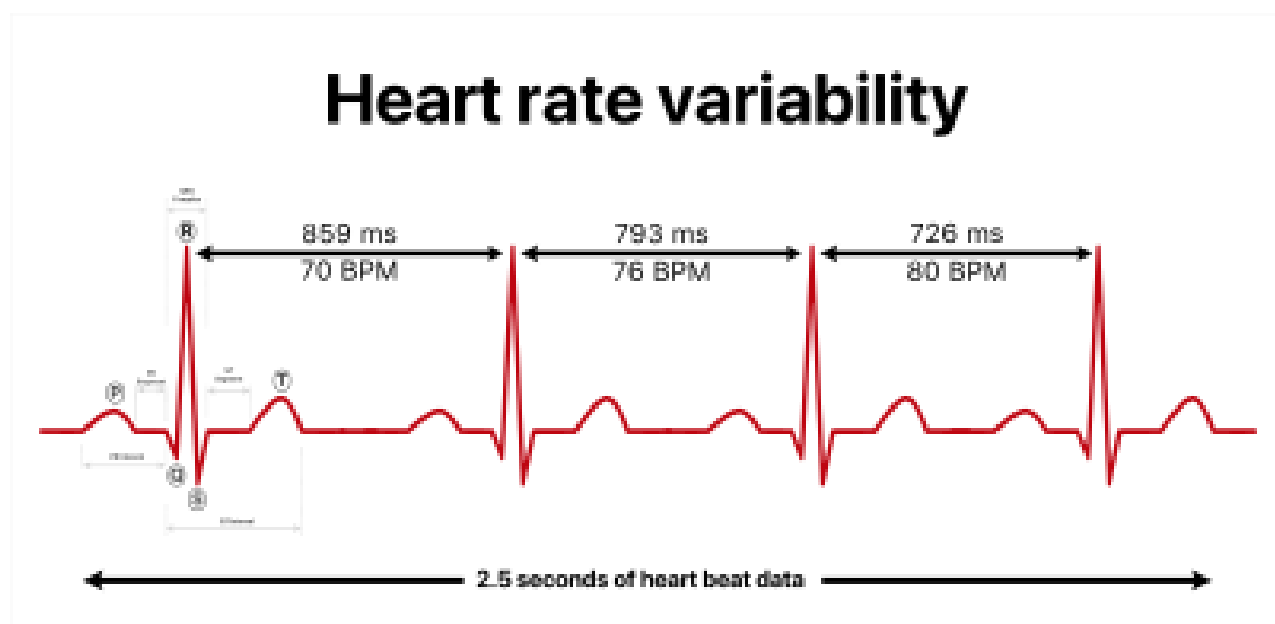
Part II involves clinical applications of PVT. Three topics include appeasement and the Stockholm Syndrome, sensitive patients, and neuromodulation. Porges used computerized altered music to treat a ten-year-old child with a functional neurological disorder as part of his Safe and Sound Protocol TM (SSP).

Part III looks at ways to monitor and stimulate the Vagus. It's part memoir and part historical essay. Porges writes about his seven-decade journey to study heart rate variability (HRV). He was a 21-year-old graduate student; his work was dependent on technology to measure and quantify beat-to-beat activity, so he used cast-off parts to build a machine to measure HRV. He eventually focused his work on psychophysiology when he discovered systematic changes in HRV during tasks involving sustained attention. He wanted to identify mental effort and intentionality from physiological signals.

Part IV is titled Brief Papers. Five previously published papers cover cardiac vagal tone, addiction, autism, Ehlers-Danlos Syndrome, and empathy and compassion.

Part V incorporates five previously published blogs and a 2017 interview with Christina Devereaux from the American Dance Therapy Association. The focus is on the nervous system and its role in survival and safety. Porges discusses ways to keep cool in high-stress situations—aka the anatomy of calm. Porges and a co-author frame Vladimir Putin's physiological state from a polyvagal perspective. Putin, they offer, is stuck in a state of mobilization, meaning he "can no longer access his prefrontal lobe and the behaviors it supports, i.e., the ability to self-regulate, connect with others, receive support, offer support to others, be flexible and resilient" (pg. 257). He lives with an overriding sense of danger (hypervigilant) and alarm, feeling "a dominant sense of injustice and unfairness in what for him is a dangerous world" (pg. 257).

The appendix includes an extensive list of sources for all information shared, a bibliography, and excerpts from his 2007 paper introducing the concept of polyvagal perspectives.



In General

As always, Porges writes well, documents his work with data and references, and uses an academic tone. He integrated new data to support older references and updated several concepts. Articles were republished so readers will note repetitions. While some may find this frustrating, the reality is not everyone can access all of his articles in peer reviewed journals and books. I find it useful to read similar content in different situations to see ways to flexibly use the data. The interviews are not laden with academic terminology but one still needs a background in PVT to participate.

Porges discusses the five principles of PVT and the hierarchy of autonomic reactivity. He confronts PVT critics head-on, noting that their negative responses are based on inaccurate misrepresentations of the theory (pg. 49)—they articulated incorrect versions of the theory. He deconstructs their arguments to show that PVT was scientifically supported, thus nullifying their claims that PVT was false.

He offers neural excisions to improve vagal efficiency, the neurophysiological foundation for our capacity to be self-compassionate and to build trusting authentic relationships. He also talks about ways to use dance and movement, breath work, and grounding exercises to help people mobilize in safe states.

One Last Point: Catching My Attention

Porges' discussion on the neurophysiological roots of empathy and compassion and why some people can't feel one or the other from a polyvagal perspective caught my attention. I never considered empathy a reflexive bodily reaction to pain and suffering in others, an automatic/unconscious response. He writes that empathy is an adaptive shift in our physiology, preparing our body to attack, defend, protect, escape, etc.

Compassion is not a given. First, we feel empathy, then compassion, but only if we are free and clear. If someone else's pain triggers our own too profoundly, we can remain stuck in defensive states—we might not be able to return to a parasympathetic state. Compassion depends on a two-step process for the vagus nerve to calm our feelings of threat and discomfort. First, our social engagement system clicks in, allowing people to return to a sense of safety and connection, which depends on our ability to move between physiological states that support empathy and compassion flexibly. Toggling back and forth involves 'vagal efficiency'—"the effectiveness of our vagal brake in dynamically regulating heart rate and metabolic output to match the demands of the environment, interaction, or situation" (pg. 227).

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