



Stephen Porges: Co-regulation

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Serge Prengel, LMHC is the editor the *Active Pause* project.

This transcript was lightly edited.

Serge: *Okay... So, Stephen, we're having this conversation... with the intention of having fun and seeing where it carries us.*

Stephen: Absolutely. Looking forward to some expansive ideas and unanswerable questions.

Serge: *We started before the recording... You were asking me about what it is that in my early adulthood I didn't like about what I was doing. I described to you the sense of being hemmed in, being in business, having an advertising agency where there was a mixture of fun and being creative, but also a sense of not connecting with kindred spirits.*

Stephen: I think there's a common feature among people who want to be connected with people, although their life experiences may draw them into pathways that take them away from interacting and connecting with others. For me, I was interested in how the mind worked, how people interacted with each other, and how these interactions were linked to an underlying physiology. However within the world of academics, as you probably have already experienced, Universities and research institutions share many of the features of businesses, which often isolate people and minimize opportunities for employees to interact both socially and collaboratively.

An opportunity to be creative attracted me to academics. However, due to the constraints of the working environment within Universities and research institutions, creativity, discovery, and translating ideas into practice are hard to accomplish. I think constraints on social interactions and collaborations are the common features that limit feelings of enjoyment, connectedness, and safety in all work environments. Maybe it is this definition of constraint that distinguishes work from play. Work, by definition, has well defined constraints that limit how creativity is expressed. For me, during the latter stages of my academic career, I am enjoying opportunities to interact with people and to translate my ideas into practice.

Serge: *What I'm hearing is that, in a way, the constraint is not just a constraint but also an invitation to dance with it and play with it.*

Stephen: I often use the word 'navigate' instead of the word play to describe the dynamic interactions with the constraints that define work. Implicit in the concept of navigating is a respect for the constraints, because the constraints of a system may also be supportive. For a University Professor, the academic institution that is providing the constraints is also providing opportunities to discover. It also provides credibility to be creative. It is also providing the salary to live a good life.

Serge: *There is a tension between living up to the constraints and being creative.*

Stephen: I think that's an accurate description and of course the success of the individual is how they feel about themselves, which is often linked to this tension. The balance between the imposed constraints and the individual's ability to be creative or to have a degree of self-fulfillment is a dynamic tension, a dialectic. When we ask someone if they are comfortable within the profession they elected, you're really asking them if they find fulfillment in their work? Academic researchers frequently emote about the dynamic tension between the wonderful opportunities to be creative, while simultaneously being distressingly concerned about the constraints related to obtaining resources to conduct their work. The academic environment with both its opportunities and constraints have defined my life. Being a Professor also enabled me to do things outside the academic constraints. It was a balance. It was an understanding of opportunities to be creative within boundaries. Consistent with this dialectic, within the University, we may apply a similar 'balance' metaphor to describe our own internal dialectic between implicit and explicit actions, bodily feelings versus the constraints of our cognitive world. This tension between an individual's implicit bodily needs and the explicit constraints of our society is paralleled in the work environment of a University Professor, who is attempting to keep a balance between creativity and the constraints defined by the demands of the environment, which focuses on generating resources, whether it is publishing more articles, obtaining more grants, or being elected President of a prestigious professional society. It's no different than other professions. In all cases you have to maintain a balance between the bodily needs and a sense of fulfillment of self; the implicit feelings of

being a complete person and how those feelings can co-exist, while reacting to the constraints in the work environment.

Serge: *I want to slow it down a little bit because as I'm listening to you, it feels very rich. So, maybe I'm going to focus on a small part of what I'm hearing as an entry point. You're talking about the dance between the implicit and the explicit... and the explicit is in lots of ways the specific demands that the environment makes on you to produce, to publish, to produce, to do things. The implicit, I'm hearing as something that is that felt experience of what gives you a sense of "I'm having a good time. I'm okay. I'm happy. I'm satisfied with my life".*

Stephen: I can extend this metaphor even further. Part of the implicit feelings is a sense of fulfillment and a feeling of being safe within one's own body. We need to understand and to respect the full value of what these implicit feelings can give you. It's a sense understanding the value of occupying your personal space, feeling real, and feeling present.

Serge: *This is very existential in a non-bullshit, non-philosophical way. but in a very deep lived way - - that sense of feeling real.*

Stephen: Yes. I think the whole issue can be reduced to another metaphor in which we estimate the degree in which we live inside our body or outside our body, whether we witness ourselves or respect ourselves, or whether we are subservient to the explicit world and the defining features of everything around us. It's not that one strategy is right and the other one is wrong, or one is good and one is bad. It's that there is a dance between the two. I think this where we started our conversation.
There's a true balance between these different features, because we live in an environment that has demands. If we're a spouse or a parent or a colleague, we have well-defined explicit responsibilities and they may not always be consistent with what our bodies tell us it wants to do. There's always this dialogue occurring with the understanding that we have to satisfy both portions of whom we are; and if we don't satisfy both, we pay a price.

Serge: *I want to not directly go where you are, but do a sideways thing, which I think is in sync but maybe is not. What I'm hearing is a sense of the distinction between being aware of one's feelings - - that's the implicit part - -and the explicit constraints. Being directed by one's feelings. One's feelings can be very much like "I hate this" or "I want to do that".
Not just having a dance with the explicit constraints but a dance within how we define ourselves. Having this dialogue and this dance with our feelings or implicit sense of self in saying, "I'm realizing how much I want to do this or how much I don't want to do that and yet I choose to do this or that." In this process is the sense of feeling ourselves to be alive, and being a person. Is that what you're talking about?*

Stephen: Yes. I'm also saying that the things we do, which we often don't really want to do, frequently are valued within the world that we live in. There's a degree of not

merely respecting our body's needs but also respecting the context in which we live. That's a difficult dialectic to maintain.

Serge: *Also then maybe what I'm hearing is the notion that the context in which we live has its own wisdom ... Not always - - it can be oppressive. It can be against us. But it can also be supportive. And in some way the dance is figuring out when it is.*

Stephen: As you were talking, I got an interesting visualization. I visualized that the explicit world has organic features as well as our implicit experiences. It has organic features – an implicit set of features embedded in the explicit world. It's circular, but the world constrains us if we react to it. It is sensitive to some of the same features that we're sensitive to.
I think it has to do with a different understanding of what is our implicit, our own personalized view of the world, versus our connectedness with other human beings. As a connected human being, our connectedness with others makes others, who often define an important feature of our explicit world, are also experiencing the world on their own implicit level. We can literally be rocking between these different implicit domains. I'm thinking my experiences observing the current political campaign.

Serge: *Can we hold it for a moment?*

Stephen: Sure.

Serge: *I wanted to come back to what you were saying and then I'd love to continue with the election. What I'm hearing is... you're talking about essentially... the opposite of the experience of life as "I'm alive. I have this implicit. I have this objective consciousness and the world outside is like a machine and this pressure". Instead, it is about conceiving of the world outside as actually an enormous living organism. We're interacting with other people. You and I are both these breathing organisms so we're interacting at this level ... Also the world as a whole can also be felt the same way. We're in that sea of implicit ...*

Stephen: Exactly. What we maybe interpreting as an explicit constraint on us is, in a sense, is also implicitly organic. An implicit feature of that external world that behaves as implicit feature of others, because we're connected.

Serge: *I like it very much as you add the word - - you say "implicit" and you say "implicitly organic". "Organic" is life. So it's no longer a sense of "I'm life against the machine". It's navigating - - navigating relationships - - with all the pleasure but also the enormous frustrations of human relationships.*

Stephen: I think our discussion has serendipitously moved into the notion that the whole history of the study of mental and psychological processes has been so focused on the individual's responses yet the individual's responses are being framed and interacting through a connectedness with others. The others don't have to be human. They could be organic, dynamically changing and reacting, features in the environment.

Serge: *In a way, we go to a standard way of thinking: Focusing on “me”, a separate person, is like imagining that a person could exist without an environment. In fact, this may only be a window into that larger theme, or a facet of the diamond, or an aspect of it, but certainly not the whole entity.*

Stephen: I look at it more like a Rubik’s cube. It’s part of a complex system determined by multi-dimensional interactions. The Polyvagal Theory that I’ve developed forces an attention away from the individual to the individual within context.

Serge: *In a way, that mechanism, the Polyvagal mechanism, is the biological way in which that interface - - between the organism as an individual organism and the world at large - - is regulated.*

Stephen: Absolutely, because as I started to develop the theory, the realization came to me that we’re not about self-regulation, we’re about co-regulation and mammals are functionally defined by their need to co-regulate with another and we are mammals. Once we define ourselves as an organism, whose survival is dependent on opportunities to successfully co-regulate, then we have moved into the life space of others. Thus, we become the events and actions that elicit implicit reactions in others, although to these ‘others’ our implicit reactions may appear to create explicit constraints in their lives. This is in a sense how a human life starts with the parent and the child, with the child being regulated by the parent. The child’s implicit visceral feelings are being contained or structured in a way as not to be too chaotic or disrupted. Tantrums are ameliorated.

Serge: *In a way, from that big sense, whenever we talk about “self-regulation”, we miss the boat.*

Stephen: We miss the boat.

Serge: *And “co-regulation” or “interface” or things like that have more to do with the reality of the process.*

Stephen: Our biology, defines many of our attributes, including our vulnerabilities. There’s an overall paradox in that individuals who appear to be efficient in regulating themselves are the ones who have had more opportunities to effectively co-regulate with others. Their nervous system has a history of neural exercise that would promote resilience. In contrast to the older more traditional model that would argued that if an individual was supported too much, the experience of support would compromise the individual’s ability to take care of themselves. I believe this a misunderstanding of the needs of humans. Humans need to be co-regulated, because experience being co-regulated develops resilience that will enable a human to self-regulate in the absence of opportunities to co-regulate.

Serge: *The old model was essentially that adversity is good for you, it builds character, that kind of stuff. The transition was to talk about regulation - - as in “we’re*

teaching you something, which is how to regulate". But, actually, what is being taught is the ability to interface.

Stephen: Right. The success of the interface is seen in the bodily response. When the body becomes more physiologically regulated, it is calmer and this physiological state promotes opportunities to feel of safe and to develop trusting relationships. An added bonus is that a history of successful and predictable co-regulation tunes the nervous system to be sufficiently resilient to function during periods of separation. It's almost as if it's a paradox but as a therapist, you can see what happens when those experiences early in life are not met. When people are not co-regulated, their ability to self-regulate is severely compromised and their behavior can be disruptive.

Serge: *Yes. Again, because self-regulation does not exist by itself, we're talking about how we adapt to the environment, whether it's actual environment or perceived environment. In a way, it's about our interactions with threat.*

Stephen: Right. From a clinical perspective what is an important manifestation of many mental health disorders? It is the inability to co-regulate with another. Trauma, abuse, and neglect result in difficulties in co-regulating. These difficulties are manifested in problems in establishing and maintaining good relationships. A reliable portal to evaluating a person's successful adaptation – even their sense of fulfillment - is whether they co-regulate their physiology in the presence of others? The metaphor I'd love to use is that we need to feel safe in the arms of another appropriate mammal - remember some people co-regulate more effectively with their pets than with their spouses.

Serge: *Right. So, essentially, it is to co-regulate in the presence of another mammal.*

Stephen: Yes, because at some point in their life, all mammals need to co-regulate, but social mammals, such as humans, need to co-regulate throughout their whole life. They start with their parents, then involve peers and significant others. The circle is completed when they become parents and are empowered with the role of co-regulating their children.

Serge: *You notice the beauty of this: As we're talking about it in these terms, tasks like parenting become a little different. It's not "I'm going to teach the kids something" but it's "My being with my kids in a certain way is going to implicitly help them be that way".*

Stephen: I agree. I use the word 'neural exercises' to emphasize that use we need to exercise our social engagement system. If we don't, we have problems socially, mentally, and physically. These problems may become exacerbated as we get older and they may even be linked to accelerated aging. The concept of a 'neural exercise' is different than learning. It's not learning through reinforcement, although the benefits may promote positive feelings. It is more dependent on what our nervous system craves, it craves social interactions that provide opportunities to co-regulate. And while co-regulating, the nervous system is

better able to regulate physiological state to optimize health, growth, and restoration. Our mental processes are simultaneously enhanced and our thoughts can be bolder, more expansive and creative and perhaps even spiritual. These emergent features are not going to be expressed, if we're in the state of constant threat, if we're physiologically unable to co-regulate.

Serge: *Again, this is about not focusing on the individual only. Instead, thinking that we exist as part of a context. That all of life exists that way. What we're talking about is finding the conditions under which certain capacities can expand and function optimally.*

Stephen: Absolutely.

Serge: *Now that we have talked about this... maybe we can go back... you wanted to talk about the current election.*

Stephen: The only reason I brought this up was related to my experiences watching the Trump rallies and the Republican and Democratic conventions. I believe that the public wants to be witnessed and without be adequately witnessed expresses feelings of hostility and anger. Their feelings are real and they are expressing deep bodily responses that are linked to their nervous systems' detecting risk in many facets of their lives. When I was watching the television coverage, these organic features of anger and hostility were bombarding me and effecting how I felt.

I was not impervious to their reactions. Now something in my world was triggering in me the feelings that these people were having in themselves. You can see the political themes acting out in real time, in front of you. The basic message that too many people feel that their voices are not being heard, they feel that they are not being witnessed, aren't being listened to, while they believe others are.

In part, they're right because people aren't asking for their story. They're being told what they should do, and what they need to do. But these requests don't match the needs of the people and people aren't really asking that. I'm actually going to give you a short little example in which a mover came to house to pack some furniture in our North Carolina house and move it to our new house in Indiana.

When the mover entered our house he looked at me. Then he said, "You look like an academic." In general, I would interpret that statement as a compliment. But then he said, "I don't like academics, because they have a liberal agenda. I don't want my kid to go to college and be exposed to the liberal agenda." He kept elaborating on his political position and talked about being against increasing the minimum in the wage, even though he certainly was not wealthy.

I mentioned the massive income disparities in our culture and mentioned that there are salaried employees in medical schools, such as a few neurosurgeons, who may make a million dollars. He responded, "That's good. They save lives." I mentioned that in medical procedures, there is an entire team involved in saving

lives. I realized that our dialog could only be oppositional and that he did not want a dialog, he wanted his views to be witnessed.

I just listened and let him tell me what he thought, even though I didn't agree with what he said. He knew I didn't agree. But he needed to be functionally 'audited' and I attentively listened. Two days later, when he delivered the furniture to Indiana, he told my wife what a wonderful conversation he had with me. The point was I didn't get into an argument, but I listened and respected his perspective.

I didn't agree with it. I didn't argue. I listened. Too often people are not a witness. I started to realize the power of what it is to be a witness and as a therapist you obviously understand the importance of witnessing. Listening and witnessing is an important part of building and strengthening the connections upon which relationships are built. We need to understand that witnessing doesn't mean reacting to the person, it means respecting the person's feelings and statements. That's a component of compassion.

A good witness has to have compassion. A bad witness is one that gets emphatic, feels the pain, and feels the injury. They feel the pain, while listening to the narrative of the client, if they are a therapist or the narrative of any other person with whom they have a relationship. Then expressed feelings of the client or the person, with whom they have a relationship is functionally hurting the listener. The victim now feels the shame of hurting another – especially the pain of a person who is trying to be helpful. This victimizes the victim.

Serge: *We're talking again about that co-regulation... thinking that it is like a kind of a physical thing, a door that opens up enough to let things in, but not drown you.*

Stephen: I think embedded in this notion of respect for the other is respect for oneself. If the furniture mover were a more thoughtful person with a more developed sense of compassion, he might have said, "I need to express my feelings about some current political events." He may have said to me, "You don't necessarily have to agree with me but these are my feelings as I don't want to offend you but I want you to understand my perspective or at least hear it."

He was emotive and I had to take the role of being the listener and being accepting. If I had reacted, I would just be fulfilling his expectations of an aloof and arrogant Professor. Since he was anticipating that as an academic, I would be evaluative of his views and dismissive of whom he was.

Serge: *Dismissive... Yes.*

Stephen: This is what Republicans or more specifically Trump is really saying. He is saying to those who follow him, that others are dismissive of their needs. He is telling his followers that the political system and the press are not listening to them. I had my opportunity to be a listener as a University administrator. About 20 years ago I was a department chair. When I was chair, I realized that decisions are made by one person and in the case of an academic department the decisions are made by the chair. When a chair makes decisions, the decisions are seldom

based on consensus. However, you can listen to the divergent voices. Interestingly, this tends to be sufficient even if you don't agree. It appears that voices want and need to be heard. When you listen to them, you respect the individuals making the statements, although your decision may be contrary. This ability to respect other people's perspective is missing or I would say not well developed in our society.

Serge: *I want to go in the same sense and then raise a question. The beauty of the example that you mentioned is that you were one on one. As you point out, the mover did not have that self compassion to point out, "I want to be heard, I want to be listened to. I'm tired of being dismissed"... that kind of stuff.*

But this was one on one, and so there was no implicit threat. I think what happens in the political dialogue that we have within the country is we have blocks. Then within the blocks, we perceive a sense of threat from each other, from each block. From that block, perceiving the sense of threat, we lose our ability to have respect because we don't have a sense of safety. There's the belief, frequently amplified by politicians, that people outside their group are pure evil or they're so completely stupid. This inclusion/exclusion strategy may drag all of us into a catastrophe.

Stephen: I would like to slightly reframe what you've said, that is everything they're doing is to make a separation between people so you don't identify with that. Basically it's like a ban on Muslims or a ban on Mexicans. It's a categorical statement of saying that if someone is different, then they're not us. This difference is now sufficient for us to be concerned about them posing a risk to us. It's very tribal. It violates the whole understanding of connectedness. If we appreciate the connectivity amongst us, then we wouldn't hurt each other. What is war about? War is about creating sufficient motivation to portray the enemy as being different than us, with different core values, and with an intention to hurt us. It's a dehumanization of one group. The strategy of creating a 'safe' in-group and a 'dangerous' out-group is very dangerous. Functionally this is expressed in organizations of people, whether you have a state or country or community that is separate from another. These forms of groups may result in a competition for survival that is distinct from the prosocial activities leading to co-regulation. Feelings of risk to survival permeate our body with feelings of threat, danger, and fear. If our body is triggered by threat or danger, then our capacity to co-regulate another is greatly limited and we limit our capacity to connect. I'm going to discuss another construct. Something we learned when we were undergraduate students and took introductory psychology. Intervening variables is a construct discussed in introductory psychology. We are all familiar with S-R or stimulus-response relationships. Simply stated, when a stimulus is presented. You get a response. However, S-R relationships are seldom deterministic, meaning that there are variations in the responses even when the stimulus is constant. There is something between the stimulus and response that contributes to this variability and, at times, instability between stimulus and response. What resides between the stimulus and the response is labeled an

intervening variable. Consistent with our discussion, the person's own physiological state is an intervening variable that can be helpful in clarifying our understanding of how and why the same stimulus may result in different responses among people and even within the same person when the stimulus is presented at different times. Another way of describing our physiological state is to relate it to the implicit bodily feelings that we have at different times. Functionally, these implicit bodily reactions are manifestations of physiological state, which may distort or change our perspective of the world and influence our responses.

We all do not respond in the same way to the stimulus. And we respond differently at different times. The stimulus, even if the stimulus maintains constant physical features, may shift in valence and relevance to our nervous system based upon our physiological state. However, if our bodies feel safe, we seldom over react, even when the stimuli may vary in intensity and relevance.

Serge: *In a way, just like a filter, it bends a feeling in a certain way. It bends the perception of the situation.*

Stephen: Bend is a beautiful and useful metaphor, because it's like a prism. Similar to bending light, it bends the features of the stimulus. It distorts the stimulus and makes the stimulus appear different and have a different valence and relevance. Thus, the person's reactivity will be based upon how people feel, feel about themselves, and about the context in which they are living. In my world these feelings will be manifested in their physiological state. The same situation or stimulus may either be irrelevant or it may trigger a massive argument. The examples I love to use and I'm sure everyone has a person like this in their lives, someone who is likable. It doesn't matter what he says or she says. People just smile and this person says the most outrageous things. You know that if you ever said anything similar you would be a horrible argument. How do they accomplish this apparent contradiction of saying the most outrageous statements and still elicit welcoming and warm friendly responses. It's because they have a smile, they have intonation in their voice. They're sending cues to the other person's nervous system that they're no threat. It's really quite a powerful example because they can say really outrageous things.

Serge: *That's a perfect example that the way we communicate with each other is so much more than the words we say, and how words can be overshadowed by the rest of the communication.*

Stephen: Right, because our evolutionary history actually started long before we had language. One of the unique things about mammals is that they use vocalizations for social communication. The mammalian nervous system is tuned to detect the intentionality of vocalizations and not the syntax of vocalizations. The intentionality of vocalizations communicates unambiguous signals of safety, danger or life threat. And our responses are deeply embedded in our evolutionary heritage to insure that we survive.

Serge: *I'd like to jump on this to come back to the discussion of politics, and what happens in a group. As you say, there's tribalism, and it's very hard to get rid of this because in a way we evolved with a sense of being connected... with a sense of the connection that exists in being a tribe. Even when we feel we have evolved out of it, we may be kidding ourselves, because it is a very strong thing. The sense of polarization is about "I'm in this tribe", and there's a comfort in that. It's about "The other tribe is bad and dangerous", and so it gives a nice sense of identity. In that sense, it's similar to how the creed in a religion is about: "if you buy into this point, then you're one of us, and so we're all together in it". This is a very nice feeling, like being part of a group of supporters of the same sports team. It feels inherently nice for our perceptual mechanism to have a sense of being part of a tribe. Then, conversely, this triggers, the sense that the other tribe is threatening. So the vibe that comes out from there is the vibe of, "We're against them. Let's kill them. They're bad."*

From here, I'm going back to your example of the person who could say some nasty words but the total demeanor communicated something else. Even if we have nice political language, part of what we're experiencing is the antagonism that the other tribe is throwing, or that we feel toward the other tribe -- as part of the phenomenon of wanting to be part of a tribe, and therefore wanting to be against another tribe. In other words, what I'm trying to say about this kind of polarization and this kind of intensity... that we might think of it as a normal mechanism that we experience intensely, but is actually pretty basic.

Stephen: I think you're on to something that is quite real and true. The issue is, as the tribes get large, they can create dangerous conflicts. Actually I used to think that there were advantages to being a multi-generational European, who lived in the same area as their ancestors. When I was an undergraduate, I visited Europe and got a better sense of the relationship between the individual and the land. Now I realize that embedded in this strong connection with land is also a bitter history of conflict. Historically, Europe has been almost always at war.

It's basically transgenerational on top of transgenerational trauma. You can see the examples whether it was the religious wars between Protestants and Catholics or between sovereign countries. You can actually see that how something as simple as a religious selection that was imposed on people, not that they selected it on themselves, can create a grouping that will lead into conflict. In Europe you see a similar grouping in terms of language. There are countries in Europe where segments of the country want to secede to become separate sovereign nations based on a common language and people may say: "I don't want to be in the same country that people speak a different dialect or a different language."

It's part of our nature to try to come together to survive. But I think when groups get too large then the cooperative nature of being part of the group may be challenged. At one point in time, I believed that there would have been a dependence to make sure you had a reasonable number of people to fulfill tasks related to survival, which would include obtaining resources and defending the group. Now, the growth of populations that formerly defined functionally groups are now consuming their own resources whether the resources are land or water or other things.

Serge: *What I'm getting from that is the sense that we have this built in mechanism to be tribal, and therefore to be antagonistic. But there is a need for a countervailing force to keep it in check.*

Stephen: Actually, let me just interrupt you. There is actually a dialectic between two different needs. A need to connect. A need to be protective of your tribe. Each one of these needs appears to be diametrically opposed forces, which are actually dependent upon a different physiological state. We may be in a physiological state that supports calm behaviors, co-regulation with others, and more accepting of others or we could be in a physiological state that support defense including mobilization and fight/flight behaviors.

Serge: *Let me amplify a little bit. There's a bidirectionality to this. If we're in a calmer state, then we're going to have less of the experience of the antagonism. Conversely, the antagonism is going to accentuate our tendency to perceive conflict and to heighten dysregulation. I think what you're talking about is the idea that we start to think about being part of a larger organism... that this larger organism has to learn to regulate itself... that we need to increase our ability to co-regulate so that we don't get caught in these spirals of accelerating dysregulation.*

Stephen: I think we have to be taught to be much more aware of what our body is doing in response in different things. I do a little simple exercise in my workshops. I have people take 10 relatively rapid inhalations and 10 slow exhalations and they work with partners and then they take 10 long inhalations and 10 rapid exhalations. I shift the inspiration-expiration ratio and I have them observe each other so they have an observer on one person's breathing and then you role reverse. When people take these longer inhalations and shorter exhalations they see the person observing them as being extraordinary critical. They may say, "What did I do wrong? Why are you looking at me that way?" This occurs because they shifted physiological state by breathing. However, when they breath with a longer and slower exhalation, they say, "Oh, what an attractive person. I like to know that person a little better."

It's a very interesting example of something as simple as our breathing pattern can change our perspective of the person sitting across from us. It's an amazing phenomenon to watch and to hear comments like, "Wow, how did this happen?"

Serge: *It's a beautiful example. I want to just repeat it to make sure. The exercise is about the difference between taking slower exhalation versus faster exhalation, how it helps you shift... When you're slower, you're in a calmer place and you're going to tend to see the other person as being wonderful; you're feeling connected, feeling seen, feeling a sense of connection. With the faster exhalation, you experience the other person as being critical and judgmental. So this is a beautiful example of what happens: A physical inner state and its impact on perception of the situation...*

Stephen: It's explainable, because during exhalation the vagal impact on the heart becomes greater. It slows heart rate and calms you down. A slow exhalation is calming because the neural inhibition of the vagus on the heart, it calms you down. With the breathing exercise, you can see this functioning in front of your eyes. As therapists, when you see an anxious person, you can see the person's anxiety in their breathing pattern. You will see fast short exhalations. Sometimes these breaths are very short and appear to be gasps. Breathing this way creates a physiological state that supports the anxiety. When you see someone getting angry, they're doing the same thing. They're shifting their breathing pattern to create a physiological state that supports the anger and the hostility.

Serge: *At a personal level, but also at societal level, the implication is to take emotions less seriously... Emotions are the ways we perceive the world: If I feel angry, or if I feel judged, I'm going to act on it. What you're saying is that experiencing the differences in breathing gives you a sense of how the emotion can be affected by how you process it .*

Therefore, it's not an abstraction to say "don't follow your emotions". Instead of just following the emotion, you can have a different experience of your emotion. You don't have to oppose intellect with emotion, but you can process the emotion within a broader context.

Stephen: I play with these ideas and I talk about it as shifting our personal narrative. When we have a physiological state that mobilizes us and gets us reactive, we of course develop a personal narrative that supports that you are at fault. "Not me, you are the bad person". This anger of hostility directed at you would be driven by my physiological state. If I shift my physiology to a calmer state, I wouldn't be reacting to you or anyone else that way.

Serge: *The part that's very interesting: When you say "shifting", there's an active part. Instead of being a passive receptor of experience, and this experience then dictates what I do, I have a role in how I perceive my experience.*

Stephen: I not only have a role, I can receive and shift my physiological state through a very primitive but voluntary manipulation changing how I breathe. I use two types of processes. I'm talking about a passive pathway and an active pathway. The passive pathway involves the cues you may be signaling me or I may be signaling you. The intonation of voice, facial expression, hand gesture and my body posture may contribute to the passive pathway. But the active pathway would be something like breathing which would come from an awareness of what my body is doing.

We tend to be totally unaware of the cues that shift our physiological state but we are usually always aware of our physiological state shift and if we're aware of it, we can intercede. We can do something. We can take our body out of that place or we can do a breathing exercise. We can respect what our body is doing and say I don't need to create that narrative to justify that physiological state. I can see why that's happened, I reacted and now I need to change my state so I can truly evaluate the situation.

- Serge: *Again, that's very rich. I want to take a little pause. The entry point is the awareness of the physiological experience. From that awareness of the physiological experience, there is the possibility of experimenting with it, of shifting it. Then in shifting it, to experience oneself - - both oneself and the situation - - in a different way.*
- Stephen: Yes.
- Serge: *In a way, what you describe is very in a way simple: Steps, 'how to' steps that we can follow at a very down to earth level. You're saying, "Look. This is what you pay attention to. This is how you shift". You're including the breathing and so on. But, at the same time, it's a very deep concept, a way to answer the question of "who am I". It's that sense of, "I am at the interaction of these various things".*
- Stephen: Actually, it's a great question because who is the real you – are you the reactive person or are you the calm person, but who's the real you. In a sense we are both and both are dependent on our implicit feelings – our physiological state. And, functionally we act out. There is an implicit sense of hierarchy, which assumes that if we're not reactive to the intrusions, then the 'real' person – loving and calm -can express him or herself.
- Serge: *When we put it that way: "Who are you? The calm person, or the angry person or the reactive person?" these concepts are static: Calm, or this or that. The model that you're describing is actually experiencing oneself as a process.*
- Stephen: Dynamically adjusting and experiencing the self as it changes, as we shift physiological states, the shift in our physiology influences our awareness of ourself. Once we are aware and respectful of these changes, we may experience a sense of self-compassion. You start respecting and witnessing what you're doing of basically who you are.
- Serge: *I want to highlight this because self-compassion is one of these words that's often used. It seems like a "good quality", or a "good attitude", with quote marks. But, as you're describing it, you are actually describing a process, that of following reality moment by moment, and playing and experimenting - - as opposed to simply a sense of "I want to be good and open and accepting". It's a different definition and actually one that is more humanly attainable.*
- Stephen: It's again linked to this respect of what the body actually is doing. It's not a cognitive construct superimposed on our bodily experience. It's allowing the body to respond and to truly experience the body responses and to have a degree of awareness. I'm going to use this term, respect for what the body is doing.
- Serge: *It's not "the value is respect and you have to force yourself to be respectful"... but "I'm going to give you a pathway: If you follow the body experience, if you start to play with it and experiment with it and tinker with it in a certain way, then in all*

likelihood you will start to have that perspective where you will have respect for who you are as a body”.

Stephen: Right. What you are just talking about was very good for me to hear, because it reminded me that people have totally different perspectives about what it is “good” or not good in terms of their own bodily reactions. I’m not labeling the reactivity or the calmness as good or bad. I’m saying that you become aware of it and as you respect going through these stages, then you can make a decision about where you want to be.

Serge: *We totally shifted from a notion of “what is good, what is bad” to being in process, and actually a sense of life and as being in that moment-by-moment process and that dance.*

Stephen: Yes.

Serge: *Being in the dance with oneself and seeing the complexities moment by moment is obviously going to make it easier to see other people as more complex than simply cardboard cutouts.*

Stephen: Right, because part of our own body and our own body reaction is to connect and to co-regulate with others and this dynamic interaction enables the other to regulate. As we regulate with them it becomes a shared responsibility to co-regulate. We shift from the individual wanting something from another to the individual being dynamically involved in sharing with another individual.

Serge: *I want to highlight a little limitation about this. When I go there, it gives me a sense of hope, but also at the same time a sense of fear. The hope is obviously the possibility of coming to a better connection, a better place of co-regulation. It’s also what I experience with a therapist with clients, and what I experience with kindred spirits. But it also brings up a sense of fear. Take the case where you’re in an extreme situation: Say, there’s a mob of angry people and you’re all alone, are you going to be able to do that kind of regulation? There’s probably a built-in impossibility for that kind of regulation to function under certain conditions... in a way, you cannot do more than what you’re capable of doing.*

Stephen: Your body is going to evaluate the degree of risk. It’s not going to be an explicit cognitive decision. If there’s an angry mob people coming towards you, hopefully your body will mobilize to insure escape. However, sometimes, rather than escaping some individuals will be locked in an immobilized state of fear. This immobilization is not based on a conscious decision, but on a bodily reaction not under their control. The threshold to immobilize instead of escape, may be related to earlier traumas or a history of abuse, during which they may have experienced in response to threat a behavioral shutdown or even passed out. Their body ‘reflexively’ made the decision to immobilize outside of a conscious awareness. A therapeutic strategy to deal with individuals who have similar experiences is help the individual respect their body’s decision and not to criticize their body for making the decision to immobilize.

Serge: *We're talking again about that moment-by-moment experience where, to the extent possible, we're freed from the influence of trauma that blocks us from being really in the moment. Also not presupposing that there is a right and a wrong answer. For instance: when facing the angry mob, it's not like you should trust that goodness will triumph and openness and connection will triumph. You take appropriate action in the moment while being able to be present and have all the resources you have.*

Stephen: The real clinical question relates to identifying the appropriate action. In your statement, the appropriate action would be implied in the degree of being present, which means being aware and in control of one's behavior. Some people's bodies will react with a different physiological response profile, which make them more likely to engage in fight-flight behaviors, in contrast to shutting down. The reaction to engage in fight-flight behaviors, similarly is not based on a conscious decision. In either case, we can't get angry at the body for what it's done. We have to understand it and respect it for what it's done. Again, trauma-related immobilization is frequently experienced by people who have been molested or raped. These immobilization experiences are frequently relived by the survivors with feelings of guilt about not fighting or running. Instead of feeling guilt for an involuntary reaction to threat, the client needs to create a personal narrative that incorporates an understanding of the evolutionary 'adaptive' advantages of immobilizing instead of fighting. The client needs to be informed that by immobilizing the client was less likely to be killed or to be injured.

Serge: *The key part I want to highlight here is we're talking about respecting the body. We're putting this in contrast to the experience of trauma and abuse which actually is an experience where the body is disrespected, and there is a learning about disrespecting or distrusting the body. We're making the larger point that it's about the ability to respect the body and contrasting that with trauma.*

Stephen: Even within trauma, the survivor has to respect their own body's reaction and not be angry with their own body.

Serge: *Yes. The survivor has to respect that the body has its limitations due to the trauma. But the complicating factor is the training in disrespect (related to trauma) means that it might be more difficult (for the trauma victim) to respect what you can do at that moment.*

Stephen: Yes.

Serge: *I'm seeing the word "respect" come up and I'm wondering if it's a highlight of what we've been talking about. You emphasize the concept of respect. You are outlining a path for what it means, and how to get to it, that is very experiential and process-oriented as opposed an abstract notion.*

- Stephen: I agree. Now let's shift to another important and related concept, shame. If one respects their bodily reactions, then the experience of shame may be blunted. Because shame is frequently experienced as derivative of our interpretation of our own body's reaction. Shame becomes an important element of the personal narrative, as the individual attempts to place meaning on their own bodily feelings. Shame contributes to the personal narrative, by using our higher brain structures to organize our own body reactions and feelings. Thus, understanding and respecting bodily feelings becomes important. A positive understanding of our feelings helps us understand how we react to various situations.
- Serge: *Yes. Respect vs shame. So shame as lack o respect and humiliation, "you're not okay". A very powerful pole of human experience.*
- Stephen: The shame is embedded in one's own body and that leads to a lack of respect for the body. It's not merely that the person was disrespected, is that they no longer respect their own body.
- Serge: *Respect... we've been talking about it in terms of experience. In a way, respect is the experience of having a relationship with the body where there is a sense of trust and a possibility of that dance. And shame is the experience of not being able to trust the body, of not being able to connect with it... And something I'm not quite able to articulate... we're talking about certain experience... It feels right to think of it in terms of talking about experience and relationship.*
- Stephen: I think what we're dealing with is actually this separation between an understanding of our bodily feelings with the language that we superimpose on those bodily feelings.
- Serge: *Hold on. Let me just repeat that. Talking about the difference between the experience of the bodily feelings and the language we superimpose over this experience, over these bodily feelings.*
- Stephen: That's where this concept of respect comes in, because the body is going to respond, is going to react, is going to have feelings. The question is now, what do we do with those feelings. We understand that our body is doing what it can do, because that's what it does. Gaining a more informed understanding of our embedded physiological responses is a good start towards understanding how our body actually reacts before we try to contain or constrain or get angry at our body for having have those responses.
- Serge: *Okay. The feelings, the experiences, are bodily responses. We're in a process, and all life is interactive. Every living organism that has ever existed has responses to outside stimuli. We have these responses. Now, we're talking about the relationship we have with these responses.*
- Stephen: Yes. We want to complete the circle, because that relationship has to be in a respectful relationship. That's really what I mean by the stating that we need to

respect our bodily responses. For me, respecting our bodily response is the basis for self-compassion.

Serge: *As you're saying this, I had a flashback to how we started the conversation. We started talking about life, career, external pressures, the explicit and the implicit, the reaction of the cell. I'm not necessarily trying to find a point-by-point symmetry to that... but what we're talking about now is to say that we are an organism; and, like all living organisms, we respond. We have responses. These responses are just how we react to the external.*

Do we have, through our experience of life, the habit of functioning in such a way that we have respect for these responses -- and they provide a useful guide for action? Or are we at war against them, repressing them, not in touch with them, disrespecting them, ashamed of them?

Stephen: Are we hijacked by our bodily reactions? Our bodily state drives our behavior. Since we seldom track our bodily state and bodily reactions, we may not anticipate our shifts in vulnerabilities. Because we haven't really attended to our body reactions we not anticipate the degree that bodily reactions can disrupt us. Instead of developing better skills to monitor our shifts in state, we develop more elaborate narratives to justify how we direct our responses. If we were in a mobilized state that results in a low threshold to become aggressive, we spontaneously generate a personal narrative that our reactions are justified since obviously someone has done something to us and we need to get back at that person. The physiological mobilization, hijacks our perspective of the world.

Serge: *Right. So the evolutionary purpose of these responses, our bodily responses, is to help us orient. Through trauma, or any other form of disconnection, the response is hijacked into the opposite of a helpful response - - because we're disoriented. We create an orientation to something that is not reality.*

Stephen: Our nervous system reacts as if these cues are cues of threat. We don't see it as an opportunity to co-regulate. We see this as a threat, which elicits a more primitive survival oriented response.

Serge: *It's interesting because I often use the concept of Sunflower Mind. As we're talking, this feels very similar to that sense of orienting. The sunflower orients to the sun, but imagine some kind of a big magnet that would pull the sunflower away from the sun. In the orientation with the sun, there is a sense of a dance or a sense of co-regulation, of finding the right place of orienting. What you're talking about is in a way being hijacked instead of being able to be in the dance.*

Stephen: Your metaphor is really good, because as the sunflower grows towards the sun, the sunflower thrives. It's going to absorb the energy from the sun to support growth. Metaphorically this is the opposite of what happens to humans when their physiological state hijacks their personal narrative. It disrupts their ability to co-regulate with another and co-regulation - metaphorically like the sun to a human being.

- Serge: *It feels very right... We were talking earlier about co-regulation and we're coming back to this word, now in light of what we've talked about. There is something very powerful about simply repeating the word "co-regulation". Wouldn't it be interesting if we went through life thinking more in terms of co-regulation? Thinking about what we do in these terms, instead of self-regulation, instead of adapting, instead of arguing. Do you think we're striving to find a right way to co-regulate?*
- Stephen: I think our quest is really for safety, and co-regulation is our typical mechanism to obtain and experience safety. It enables our body to be calm. Remember we're dealing with bodily responses and our use of language is superimposed on our bodily reactions. Our body needs to be co-regulated. We can't do it on our own.
- Serge: *I want to again highlight this. It's very important when you said "safety" as "co-regulation". From a model of threat, we often are tempted to think of safety as absence of interaction: I'm going to withdraw. I'm going into my little corner, curling into a little ball, because that's where I have safety. It's very powerful when you say "safety as co-regulation".*
- Stephen: I do not see safety as removal of threat.
- Serge: *Of course.*
- Stephen: Safety is something added. It's a special missing ingredient and safety cues are for human face to face interactions, vocalizations, intonation of voice, prosody, gesture, proximity, cuddling. Since our body knows what cues signal safety, the removal of threat doesn't make us feel safe. Having people walk around with guns isn't making the environment safe unless the people have cues of safety, such as emotionally expressive upper faces with smiles, voices with melodic intonation, and appropriate gestures. We have to think about what we're doing as a society, when we focus on the removal of threat and assume that is sufficient to create feelings of safety.
- Serge: *I think that, maybe, the temptation to go to removal of threat comes from a place in the spectrum of trauma: "I've been hurt, and therefore I see safety as lack of interaction, as withdrawing, as withholding". The very, very powerful thing that you're emphasizing is that we need to educate ourselves that, as human beings, our nature is to find safety in interaction ... As living creatures, as living beings, we can only find safety in interaction.*
- Stephen: Yes. I think that summarizes it beautifully.