

# SOMATIC EXPERIENCING

DR SUSAN KRIEGLER



BASED ON

## WAKING THE TIGER

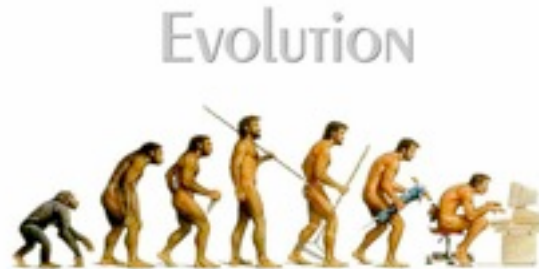
HEALING TRAUMA

by

PETER LEVINE

## How Does SE® Work?

Somatic Experiencing® was developed by Dr. Peter Levine following his observation that animals in the wild do not get traumatized even though daily they are faced with life threatening situations. Dr. Levine observed the mechanisms by which animals are able to shake off the high levels of nervous system arousal and return to their daily lives. He then began to ask the question of why humans are so susceptible to the devastating effects of trauma.



(OR IS IT?)

What he realized is that as the **neocortex** evolved, that part of the brain that makes us the most human, giving us the ability to think and ponder deep philosophical questions, our ability to **override our instinctual responses** also came online.

Now, in most cases this is a really good thing. We don't have to automatically lash out and kill someone just because they took our food. We can creatively think up better strategies to deal with threats.

But, as with most things in nature, being given a new and enhanced capability usually involves losing some part of an old one in its place. In this case the ability to override the instinctual responses of the nervous system left us with a **vulnerability to being traumatized**.

In SE sessions, clients are encouraged to tune into physical sensation, which creates the space for our bodies to reconnect with our innate healing response. This naturalistic process resolves symptoms by gently discharging the high levels of nervous system arousal associated with trauma, and helping our bodies return to a more manageable level of functioning.

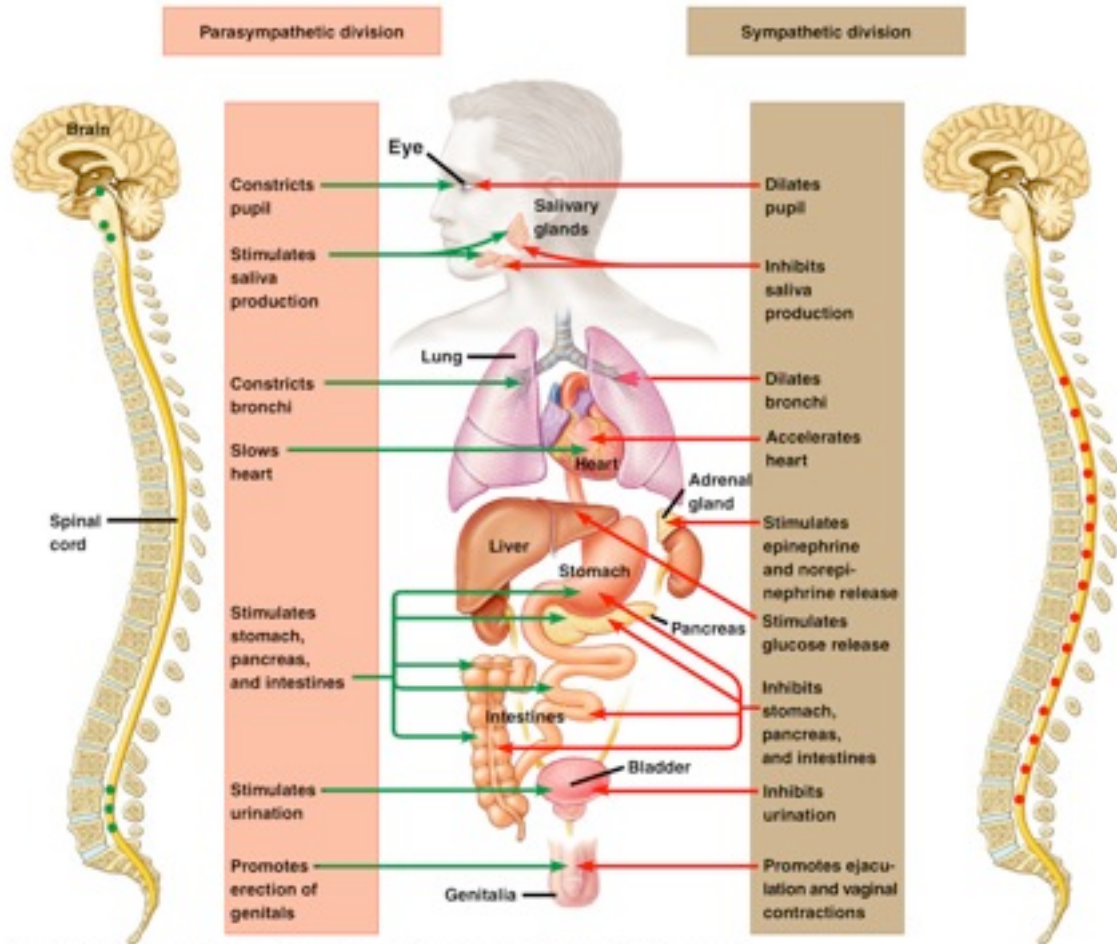
As we begin to reset our nervous system, integration organically occurs. The once-fragmented physical, emotional, cognitive, interpersonal, and spiritual aspects of who we are can once again work together as a whole. This integrative process is deeply healing and enlivening.



# The Autonomic Nervous System (ANS)

First, let's look at some of the underlying theory on which SE is built. We start with the **Polyvagal Theory** of Dr. Stephen Porges at the University of Illinois.

Physiologists and medical schools are still teaching (incorrectly) that the ANS exists in two states (or phases): fight or flight (sympathetic) and rest and recuperation (parasympathetic).



Dr. Porges observed that we actually have **three states** in the ANS which form a hierarchy. He calls these states '**Social Engagement**' which is parasympathetic, '**Fight or Flight**' which is sympathetic, and '**Freeze**' which is parasympathetic and sympathetic activation simultaneously.

In the human nervous system we still have freeze / dissociation as an algorithm that can be run to protect us. But, in humans it is a bit more complicated. In most cases we can at least partially **override freeze**. Most people have never fully fainted in fear. But, most of us have temporarily been unable to move, or have spaced out, or went speechless in fear.

Some people who have had a near death experience have reported 'going out of their body' when in great pain or fear. In this last case they may report hearing a scream coming from over there, and then realize that that is their own body over there doing the screaming. These are all aspects of freeze/dissociation.

We have several synonyms for freeze, including **dissociation**, immobility, spacing out, deer in the headlights look. In the healthy nervous system it still serves and protects us humans, but often freeze is associated with the residual crippling effects of trauma. Here's what happens that causes humans to get stuck in trauma.

When we are faced with a life threatening crisis our nervous system develops a **motor plan** for escaping it. Usually that motor plan begins to be executed, for example running from a predator. But, when that plan is thwarted by being caught in a dead end situation, we go into freeze. Please note that “life threatening” doesn’t only refer to our physical survival, but also to our emotional survival.

Even though we cannot escape, our protective motor plan **continues to go around in our brain**. In animals when they come out of freeze the energy is drained off by running to escape or by the rhythmic waves of muscle contractions. This doesn't happen in humans every time, or we override the trembling that would help accomplish this.



So, we are left highly activated with an incomplete motor plan still going round and round in our brain. This motor plan wants to complete and so our unconscious mind may continually place us in situations similar to this one so that we can use the motor plan to complete the movement back to safety.

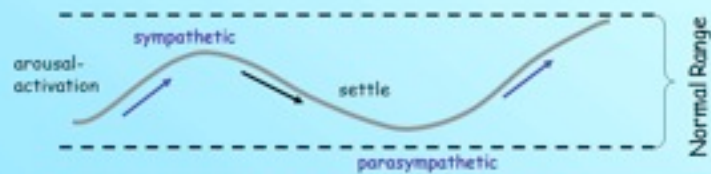
Freud called this a '**repetition compulsion.**' But, rarely is the new situation enough like the old one that the same motor plan can resolve it. Thus, we tend to accumulate more and more traumas which are sort of similar to the original. For example someone who is 'accident prone,' or who keeps having similar sorts of accidents or assaults? This is what's happening in them.

The repetition compulsion causes people to stumble from one abusive relationship to the next, or they provoke the same quarrel they had with their parents, in their marriage. A person may also flip from victim to perpetrator, for example if they were sexually abused as a child, they become an adult sexual abuser of children.

These incomplete motor plans **continue to run long after the original event**. They waste mental energy and they continually activate the nervous system towards fight or flight or even push it into freeze with the right kind of threat. Many people are always hyper, or hypervigilant. They look like they have had too much coffee. Those are people who have gotten stuck in the sympathetic system activation of fight or flight.

Many people always look spacey or confused. Those are people who are caught in some degree of freeze.

## A Healthy Nervous System



### When my Nervous System is balanced and my activation is low

I feel:

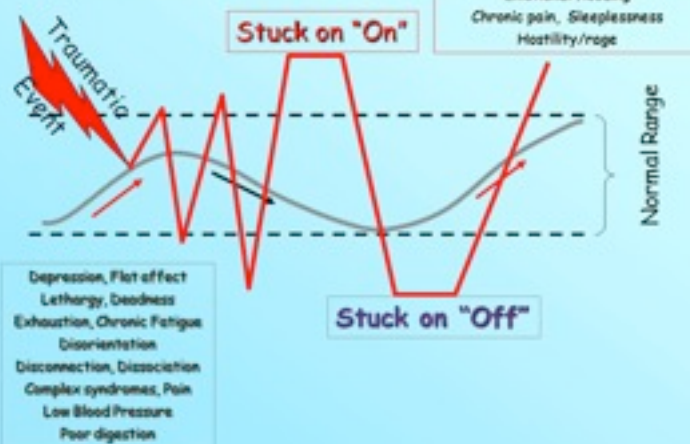
Open, curious	Relaxed yet alert
Embodied	Appropriately reactive
Available for connection	Able to be present
Fluid, resilient	Emotionally stable
Competent - a sense of mastery	Healthy - symptoms are manageable

### I have choices and options

I recognize when I am moving out of my functional range and have tools to return to stability and stabilization

I know when to reach out for support when I can't do it on my own

### Symptoms of Un-Discharged Traumatic Stress



**Being stuck** is like when your computer slows to a crawl when some error causes a program to get stuck in a continuous loop, eating up CPU cycles. You sit there waiting and waiting for the task at hand to complete.



When the brain is stuck with several of these protective motor plans running all the time because they can't complete, our brains run slow and inefficiently, just as our computer does.

In Somatic Experiencing what we do is work to resolve the incomplete motor plans and to facilitate a **resilient moving of the ANS** from state to state, rather than becoming fixated in one state.

When these old motor plans are allowed to complete in the SE process the nervous system can return to processing the task at hand rather than burning up brain power defending against a threat that is no longer there. This is just like rebooting your computer to get it back up to speed on the task you want to work on.

**But the most visible and dramatic sign of being frozen in fight / flight is rapid, shallow chest breathing (hyperventilation), often accompanied by rapid heart-beat, cold, sweaty hands, and neck spasm.**

We need to pay **special attention to the breath**, firstly because it is the respiratory system is the the only major system in the body which is usually involuntary, but which can also be voluntarily controlled.

We need to pay special attention to the breath secondly because it is a very powerful and centrally important system. Somewhat like the flywheel in a car engine, the breath regulates all the other autonomic systems, including brain function.

As yogis have known for centuries, controlling and changing the way we breathe, can go a long way towards **getting us unstuck** from the debilitating effects of central nervous system over-activation.

To restore the balance in the ANS, we need to change the chronic habit of subtle or more obvious **hyperventilation** (chest breathing) to **diaphragmatic** (belly) breathing, which is natural in normal, happy people, and all animals. If you don't believe me, take a look at a happy baby, or your dog.

## Evolution of the ANS in Mammals

Let's look at how the three Central Nervous System responses work in **other mammals** and see why these states have evolved.

Take for instance an impala grazing on the savannah in Africa. The impala will be calm and relaxed as it grazes with other impalas in its herd. It will be alert and will be orienting to the environment around it to assess for potential danger through its senses of sight, smell, and hearing. The other impalas are doing the same, orienting to possible danger and orienting to each other for signs that they spot danger. If they see a dangerous situation they will alert the herd to it.



The impala gets a jolt of adrenaline. Its nerves become activated with electric charge. Its muscles tense. Blood begins to shift from its abdominal organs and its periphery to its large muscles to prepare it for flight. The lioness is still far enough away as to not pose immediate danger so the impala continues to track the lioness with his senses.

At a certain point the lioness goes away. The impala now has to deal with all of the energy that has built up in its system that is no longer needed to flee from the lioness. It does this by a rhythmic shaking in waves of muscular discharge. The flight energy is dissipated and the impala goes back to grazing.

In another scenario the lioness crosses an imaginary line that is close enough for it to be a threat to the impala. The impala takes off running to escape the hungry lioness. He is now actively in fight or flight.

His behavior is flight. His nervous system state is fight or flight. The charge that had built up in the impala is coming in useful at this point, this is life or death.

As the lioness closes in on the impala and is just about to grab the impala in its powerful jaws something odd happens.

The impala collapses and can no longer run, can no longer even move. The lioness pounces and grabs the impala in its jaws. What just happened?

The impala went into **freeze**. In humans full-on freeze is called **fainting**. Technically, freeze is called the 'dorsal vagal reflex.' How does freeze serve the impala? To the lioness freeze looks like death. So, the lioness doesn't have to break the impala's neck because it already appears dead. Because the impala is paralyzed in freeze it can't even lick its wounds, a behavior that would signal the lioness that the impala was still alive.

Also, to keep the impala from screaming in pain if it sustained bites, nature assured that in freeze the impala is disconnected from pain by causing **dissociation in the brain**. With a heavy shot of **endorphins**, those heroin like chemicals in the brain, and some rewiring of the brains switchboard, the brain literally disconnects the sensory centers from the feeling centers and the rest of the brain.

The lioness has just run a strenuous race itself and if she laid down right then and there to devour her prey the lioness would be vulnerable to hyenas or other second string predators stealing her meal.

So, the lioness drags the impala back to her lair while catching her breath. Maybe the lioness goes to round up her cubs for dinner. During this time the impala comes out of its freeze state and runs away. So, what we see here is one more mechanism that evolution has devised to assure survival. Pretty ingenious, no?

## Trauma

The debilitating symptoms after a **perceived life-threatening or overwhelming experience**. Its actually about anything that threatens our physical / emotional / social / financial / spiritual survival.



No two people are alike. We are different in genetic make-up, our history of trauma, and family dynamics. We become traumatized when our ability to respond to a perceived threat is in some way overwhelmed.



Certain kinds of early childhood experiences can severely diminish our ability to cope and be present in the world.

Especially children can be overwhelmed by what we think of as common everyday events.

Over time, a series of **seemingly minor mishaps accumulate** and can be as damaging as a single major catastrophe.



Examples include automobile accidents, routine invasive medical procedures, falling off a bicycle, parents fighting...

Trauma can impact in ways that don't show up for years. Most of us have been overwhelmed by a series of less dramatic events and have lasting symptoms that are not so obvious.

In short, trauma is about **loss of connection** - to ourselves, our bodies, to our families, to others, and to the world around us. It is often hard to recognize, because it happens slowly over time.

We may simply sense that we don't feel quite right, experience a gradual undermining of our self-esteem, self-confidence, feelings of well-being, and connection to others and life.

Our choices become limited as we avoid certain people, situations, and places. The result of this gradual constriction of freedom is the loss of vitality and potential for the fulfillment of our dreams.



Human beings are born with an innate capacity to triumph over trauma. **Trauma is curable**, and the healing process can be a catalyst for profound awakening - a portal opening to emotional and genuine spiritual transformation.

### **Obvious Causes of Trauma**

War, Natural disasters, Death of loved ones  
Severe childhood emotional, physical, or sexual abuse  
Neglect, Betrayal, or Abandonment  
Parent's divorce  
Experiencing or witnessing violence  
Rape, Armed robbery  
Catastrophic injuries and illness  
Immobilization, Casting, Splinting  
Pre-natal stress / rejection  
Birth stress, for both mother and infant  
Illness of a parent / sibling / grandparent



### **Less Obvious Causes of Trauma**

Minor car accidents, Falls, Minor injuries  
Medical or dental procedures, especially when involving anesthesia  
Pelvic examinations  
Being left alone, Waiting to be fetched from school  
Being lost in a strange place  
Feeling unloved, criticized, unsupported, unrecognized  
Parent who drinks, rages, withdraws, gambles, is sick, anxious or depressed,  
Parent who often comes late, breaks promises  
Financial difficulties in the family  
Moving house, Changing schools  
Birth of a sibling  
Having a sibling who is more intelligent /  
gifted / beautiful / popular / loved  
Illness, High fever, Food poisoning  
Death of pets  
Not being picked for the team / to be prefect  
Not being invited to a party  
Being teased / bullied by peers  
Unfair / harsh punishment  
Hurtful comments by teacher / parent  
Being rejected by a friend / boyfriend

Trauma is often about something that **didn't actually happen**, for example a child who expects to be punished, or a parent is going to leave / die, a mother who thinks her child could die, or is on drugs, a woman who thinks she could be raped, or that her husband is having an affair...

## Symptoms and their Order of Appearance

### **Hyperarousal**

Increase in heart rate  
Rapid, shallow breathing  
Cold sweats  
Muscular tension  
Repetitious thoughts  
Racing mind  
Worry

If these thoughts and feelings have their **natural flow**, they will peak, then diminish and resolve. During this process, we may experience trembling, shaking, vibration, waves of warmth... followed by fullness of breath, slowed heart rate, relaxation of muscles, and feelings of relief, comfort, and safety.



### **Constriction**

Hyperarousal is initially accompanied by a constriction in the body and a narrowing of perceptions. The nervous system does this to ensure that all our efforts are maximally focused on the threat.

Breathing, muscle tone, and posture are altered. Blood vessels in the skin, extremities, digestive system, and internal organs constrict to allow more blood for the large muscles.

### **Dissociation and Denial**

“I’m not afraid of dying. I just don’t want to be around when it happens.” (Woody Allen)

Dissociation protects us from being overwhelmed by escalating arousal, fear, and pain. Nature’s internal opium, the endorphins, soften the pain, enabling the person to endure what is too much to cope with.

Denial is a lower-level form of dissociation. There may be a disconnect between the memory of the event and the feelings about it. We may deny that it happened, or that it was important.

A part of the body may be disconnected. Chronic pain may represent a part of the body that has been disconnected.

## Feelings of Helplessness, Immobility, and Freezing

Hyperarousal is the nervous system's accelerator; a sense of overwhelming helplessness is its brake. It is the sense of being collapsed, immobilized, and utterly helpless. It is not a trick of the imagination, a belief, or a perception. It is real.



Exaggerated emotional / startle responses  
Mood swings / temper tantrums / frequent crying  
Difficulty sleeping / nightmares / night terrors  
Shame and lack of self-worth  
Feeling stressed out / can't deal with stress

### Medium Term Symptoms

Panic attacks, anxiety, phobias  
Perfectionism, Obsessive-compulsive Disorder  
Mental blankness / spaced out feelings  
Avoidance behavior (places, people, activities, movements, memories, feelings)  
Chronic shallow chest breathin  
Cold, sweaty hands  
Attraction of dangerous situations  
Addictive behaviors  
Exaggerated / diminished sexual activity  
Amnesia, Forgetfulness, Concentration problems  
Procrastination  
Inability to hug, laugh, love, enjoy life, be spontaneous  
Fear of dying / disease / poverty  
Self-mutilation  
Loss of sustaining beliefs

## Long Term Symptoms

Excessive shyness, Low self-worth  
Diminished / exaggerated emotion



Indecisiveness, Inability to plan for the future / make commitments  
Chronic fatigue, Low energy, Depression  
Immune system / endocrine / thyroid / allergy problems  
Psychosomatic illnesses, Headaches, Migraines,  
Neck / back pain, Chronic pain, Fibromyalgia  
Asthma, Skin / digestive / premenstrual problems  
Emotional baggage may manifest literally as overweight, or underweight  
Feelings of impending doom, Feeling detached / alienated / isolated  
Feeling empty inside / “living dead syndrome”

Symptoms can be stable, or come and go, and be triggered by stress. They can remain hidden for decades and suddenly surface.

They may come in groups. They may grow increasingly complex over time, becoming less and less obviously connected with the original trauma experience.

## Symptoms Deliver a Message

Any or all of these symptoms may appear no matter what kind of event caused the trauma. The symptoms can and will disappear when the trauma is healed.

We need to learn to trust the messages our bodies are giving us.

The symptoms are **internal wake-up calls**. Don't be upset by the symptoms - be grateful that your body is sending you these messages that healing needs to happen.

## The Vortex System

The next part of SE theory that we want to look at is called the 'vortex system.'

Dr. Levine observed that when trauma strikes it is like a meteorite falls from space and has a huge impact on the earth below.

In this metaphor, there you are gently rafting down the river of life and a huge meteoric trauma impacts just outside of the containing boundaries of your river of life.

This creates a deep hole and the water rushes from the river into this hole. Like water going down a drain it creates a spinning vortex that spins faster and faster and becomes more and more inescapable as you go down the hole.

This vortex, like a tornado draws you in and sucks you down if you get near to it. This is very much what it is like for people who have unresolved trauma. Anytime they get into a situation that closely resembles the trauma event they are in extreme danger of being sucked down into this trauma vortex.



The closer they get the more they are drawn in. It is scary, it is painful, and it feels life threatening getting sucked in and not being able to stop.

As we go through life we tend to accumulate more and more of these unresolved trauma vortices. People will go way out of their way to avoid the life threatening danger as they make their way down this stretch of their river of life again.

They develop **avoidance behaviors** and even **phobias** in order to stay away from the threat, which is really just a physiological memory of a threat. In so doing their world becomes smaller and smaller.



One day they may wake up with agoraphobia, the fear of going outside, along with an accompanying **panic disorder**. Or they may, as stated earlier, develop a **repetition compulsion** and keep being drawn to and even seeking out behaviors that will end up with them going down the vortex.

Going down a trauma vortex will take you from social engagement to fight or flight on the way down, as you panic to save yourself, to freeze when your body realizes that you are stuck and nothing you do can rescue you now from this vortex's draw.

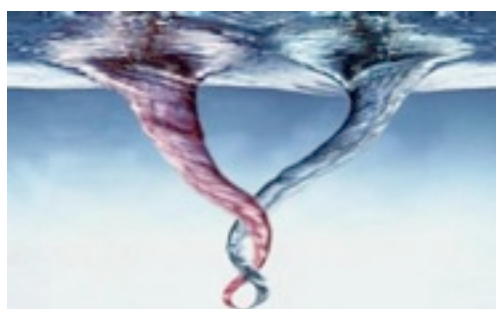
In working with trauma victims Dr. Levine observed that whenever they began to recite the story of what happened to them, along with the account of danger and panic there was always **something pleasurable and life affirming** that seemed to be in proximity to the threat.



For instance, a shark attack victim may be talking about seeing the shark coming and how big its teeth were. And, in the next thought he may say, "But at the same time I was noticing how crisp and cool the water was that day and it really felt refreshing." Or, someone emerging from a near death experience will declare in wonder, "I'm alive!" **The two always seem to occur together.**

So, the other half of the vortex theory is that when a trauma vortex is created, simultaneously an **equal and opposite countervortex** forms in the river. This would not be surprising to a river rafter. Rafters are used to dealing with eddy currents where water flowing downriver can actually turn and go back upriver as it passes obstacles.

In our trauma model **two vortices** are formed, one of which is life threatening and feels terrible so we denote it as the 'Red Vortex' to denote danger, and the other of which is life affirming and feels pleasurable, so we denote this one as the 'Blue Vortex.' We will use this in a very clever way as you will see below in order to heal from the trauma that created these vortices in the first place.



The trauma vortex represents the activation of the sympathetic nervous system and the countervortex represents the soothing, healing thought or feeling which allows the nervous system to return to the homeostasis of social engagement.

Just as a mountain climber uses ropes anchored to the mountain to keep from falling down the cliff, in Somatic Experiencing we use the draw of this pleasurable countervortex to anchor the client so they don't fall down the trauma vortex every time they get near to it.

We will spend some time together experiencing the pleasurable, life affirming sensations and feelings, then **let the system swing over** to the draw of the life threatening situation, but then use the pull of the life affirming to draw back from the danger zone. This swinging back and forth is like the motion of a pendulum, so Dr. Levine called it '**pendulation.**'



This is one of the key reasons we can revisit traumatic events without retraumatizing the client. Because we work in **small 'titrated' doses of danger** that are manageable and not overly threatening to the client, but always using the draw of the pleasurable life affirming countervortex to pull us back to safety.



With each pendulation we make around these two vortices **some of the energy of each vortex is drawn off** and the depth of the vortex is decreased. After sufficient pendulations the energy of the vortices are sufficiently removed as to become non-existent and our client can now travel this part of his river of life with no reactivation and no panic. It is now safe.

## What is a Session Like?

Your SE practitioner will first conduct a pre-interview to discuss your health history, discuss your expectations, and answer your questions. He will assess your traumas and try to get a pretty good idea of who you are as a person, and how your nervous system is currently functioning. He will want to get some idea of what phase you may tend to get stuck in, and he will also want to know what resources are available to you that help you cope under stress.



Typically, SE® sessions look a lot like psychotherapy with the practitioner and client sitting across from each other on chairs or sofas, enjoying some conversation at first in order to catch up on the residual results from last week's session and assessing what state you are coming in to the session in.

He will then typically help you to get more settled into the room and get oriented to the surroundings. The **orientation process** helps to settle the nervous system into social engagement. We really would rather not jump right into the heart of any trauma that you are wanting to process, as this is quite over activating and stressful. The objective is to relieve trauma in small titrated doses rather than all at once. Diving in too deeply and too rapidly can further compound and reinforce trauma.

As part of the orientation/social engagement process your practitioner may engage in conversation, talking about some of the pleasurable or good things in your recent life. This helps to solidify the social engagement state before venturing into the areas that are a bit scary and a bit unsettling. The social engagement/orientation state is the home base that we want to start from and keep coming back to. Then we **venture in to fight or flight a bit then back to social engagement/orientation**. This pendulation process may go on for several cycles.

Pendulation is achieved by **focusing the awareness on sensations in the body** along with images, behaviors, affect, and the meaning of what is coming up. Usually sensations in the body are the most important starting point. Remember when we talked about the impala who was in freeze? The freeze caused dissociation so that the impala would not feel pain and writhe around signaling the lioness that it was still alive. So, in trauma we tend to lose connection to our sensations. So, this is why we start with the senses most of the time. We want to restore our ability to sense our environment using a quiet state of **mindfulness**.

This quiet mindful exploration of what is happening inside of your process will tend to lead to what is unfinished trauma stored in your bodymind. Because trauma is life threatening, even with unresolved trauma the body wants to keep coming back to it in an effort to heal it. So, almost always as we settle into mindful observation of sensations the body will begin to swing towards whatever is unresolved and life threatening.



The practitioner's job is to help monitor the body and assure that the client doesn't go too far, too fast and end up getting sucked down a trauma vortex. His job is also to **help provide safety** in the room so that the client feels safe enough to turn inward to deal with the unresolved traumas without being endangered by new threats in the outer environment.

At some point in the pendulation process it is likely to see some micromovements in the arms or legs or core of the body that the practitioner will be able to recognize as the body beginning to run its motor plan for escape again. As we draw awareness to these movements they tend to grow and we encourage the client to **let the body gently and slowly follow what the nervous system is trying to do rather than override it**. In so doing the motor plan is able to complete and that stuck loop is permanently healed. Each time we heal one of these the body's stress burden is lifted a little. That energy which was going into the vigilance of keeping this protective motor plan in play can now go to healing some other aspect of the body and mind.

When the client opens his eyes and looks around the room again everything seems to be crisper and colors bolder. There may be some **aftereffects** of shakiness, or lightness, or fullness of breath as the experience is integrated. There is a quietness that comes into the body and a real sense that something profound just happened. **Something just healed.**

