

Rewiring the Nervous System through Taijiquan

One of the most important aspects of taijiquan training at any level is that of maintaining a calm, relaxed center. It is easy to spot when we lose that quality. Sweaty, out of breath, muscles straining. Reptile brain engaged, adrenals pumping, sympathetic nervous system stuck in the "on" position.

Taiji training shows us it is possible to function at a much higher level when not stuck in the fear-based parts of our nervous system. Our DNA, experience, and much of our training takes us into the more primitive areas of our body/mind as our first resort when we are stressed. Taijiquan channels the stress to access the higher levels of human potential.

Internal versus external:

In taijiquan we have a martial art based on movement from the "center". External, "hard" martial arts are based to a large degree on generating momentum, propelling the body's parts in a way that will do the work desired. (Kicks and punches are "thrown".) Internal, "soft" arts (taiji, specifically) emphasize internal connections, particularly connective tissues and internal energy. We extend, withdraw, and move from our center. Taijiquan presents us with graduated training techniques, so that we can learn to maintain that calmness despite increasing challenges to the player.

The Taiji Classics exhort us to find the "stillness in motion", and the "motion in stillness". In taijiquan, we have begun a lifelong quest to discover, explore, and operate from our center- physically, emotionally, mentally, energetically, and spiritually.

"Thirty spokes share the wheel's hub;
It is the center hole that makes it useful.
Shape clay into a vessel;
It is the space within that makes it useful."

Lao Tsu

Our physical bodies are our most omnipresent reminder of our lives in the manifest universe. Their relative condition, health, gives us strong feedback about our relationship to the world. In taijiquan, the ancient wisdom is passed on to us in a way that is much more immediate than words on a page. Each time we do a solo form, we must find "central equilibrium" in our bodies, then maintain it as we move. We then organize our movements around this quiet stillness, creating forms in our bodies that support and allow this quality to inform all our actions.

Nervous System:

The Autonomic Nervous System is the part of our nervous system that handles the more or less "automatic" functions of our bodies. Things like heartbeat, breathing, metabolism, digestion, etc. It is divided into the Sympathetic Nervous System (SNS) and the Parasympathetic Nervous System (PNS).

The SNS is the go-go-go part. It is ENERGY OUT. Playing tennis, arguing with the boss, reading a novel. In MOST people, it is too often kick-started by the adrenal glands (fight or flight hormones) and results in some involuntary muscular tension as we prepare for the activity. Breathing goes to the chest and the chi comes up. The Tendon Guard Reflex is activated.

The PNS is the part of the nervous system that brings it all back into balance. It is the ENERGY STORAGE part. Food is digested. Repairs are made. Toxins are cleaned out. It is largely directed by the "master gland", the pituitary. Deep meditation is largely in the parasympathetic mode.

We need BOTH. We store energy, make repairs, return to center. We express energy, extend ourselves, make stuff happen. Ideally, we seesaw between the PNS and the SNS. Relaxed, active, vital, healthy.

Many people have lost the ability to seesaw. Too often we depend on that charge from the adrenals to kick-start any activity. The adrenal "fight or flight" response was designed to respond to physical threats to survival.

Sabretooth tiger = threat to survival = beat feet or grab something sharp.

Modern living has blurred the distinction between an honest physical threat to survival that can be best dealt with by sending all our energy into our muscles and narrowing our mental focus, and a "damn nuisance" that can be handled best by calmly examining our options and acting efficiently. Even though driving in rush hour traffic is not assisted one iota by tightening our grip on the steering wheel, bunching our shoulders up around our ears, and considering mayhem for the idiot that just cut us off, that is a frequent response, unless overridden by the "higher centers".

Taijiquan gives us practice in making such distinctions.

The Four-Part Brain:

Our brain and that handy opposable thumb are the most obvious physical characteristics that define our humanness. There is a simple model of the brain (this is all influenced by Neil Slade's book, Frontal Brain Supercharge) that I have found to be really helpful in shifting to a higher consciousness. It describes the brain in four basic parts. I will be brief.

Reptile Brain. Most primitive part. Spinal cord, brain stem, pons. Least differentiation. Its behavior is defined by "competition for individual survival". Fear.

Paleo-mammalian Brain (or Mammal Brain). Mid-brain. Limbic system. Computes basic cooperative behaviors. Pack/herd instincts. Suckling the young. Childlike play behaviors. Responding in preprogrammed ways to things that are present. Mammal brain transcends and includes Reptile Brain, so behavior is influenced by both.

Primate Brain. This comprises most of the mass of the human brain. Much more complex. Able to organize simple concepts, group behavior, more complex play. Chimpanzees, gorillas, baboons. Transcends and includes Reptile and Mammal brain.

Frontal Lobes (of the Primate Brain). The stuff just behind your forehead. Language, conceptual thought, refined motor skills, aesthetics. The ability to consider and allow for things which are not present. Able to see "The Big Picture". Transcends and includes Reptile, Mammal, and Primate Brains. Can access each as needed. "For the Highest Good".

Our DNA, experience, and education dictate which part of our brain we access for different situations. A small organ just behind the temples, called the amygdala, seems to be the switch to trigger the activation of the different areas. Techniques have been developed to consciously "switch on" the desired area. By moving more attention to the Frontal Lobes, we can gradually free ourselves from fear-based consciousness and behavior.

Taiji Rewiring:

In taijiquan, we have an excellent tool for first letting go of the physical patterns which plunge us into a reactive state. We learn to relax, letting go of chronically held patterns of muscular tension. To calm the mind and move from the center. We learn new structures which support our bodies more securely and to move more efficiently, thus enabling us to act effectively without resorting to straining. The more secure we feel in our bodies, the easier it is to calm the mind.

We are given lots to think about, which further activates the frontal lobes. In push hands, the challenges to the system gradually increase, enabling us to handle even more activity while maintaining the calmness and healing of the parasympathetic nervous system. In free fighting, we learn to deal with apparent physical threats without retreating to the Reptile Brain,

calmly perceiving the threats for what they are and making the appropriate responses "For the Highest Good".

It is here that the "Supreme Ultimate Fist" merges with the concept of taijiquan as "moving meditation".