



Essay

Tai Chi and Movement Forms for Psychological Health



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Although existing evidence supports the plausibility of the direct role of postures in mediating the benefits of traditional Chinese medicine (TCM), verifying this hypothesis empirically poses significant methodological challenges. A primary obstacle is that of isolating the postures from the myriad of additional factors influencing the TCM practitioner. During a typical training program, in addition to following verbal, modeled, and/or touch-guided choreographical instruction from a TCM teacher (e.g., arm and leg positions, torso orientation, etc.), individuals are also commonly instructed in breathing patterns, attentional focus, mental imagery, and philosophy (e.g., “go with the flow,” “don’t try too hard”). Subtle differences in the language used during instruction may influence the quality of the students’ posture and movements. Sometimes training includes motivational elements in the form of encouragement or critical feedback.¹

Osypiuk *et al.* have addressed a wide range of postures in their study, but as in most cases, they have conducted a static analysis of Tai Chi, and in this cognitive science review, a mere short paragraph is dedicated to Tai Chi in motion.¹ This and other studies of Tai Chi strip it of its kinesthetic dimension. Tai Chi exists in its movement as a dance where there is no separation between the dancer and the dance. The body in motion makes Tai Chi present. Tai Chi (dance) requires insight into the time-space-movement dimension, revealing the bodily resonances of pulsing, heating, and coloring simultaneously.

This essay is grounded in several presuppositions. *Intensity* is an important concept within both Chinese philosophy as well as Western philosophy. Intensity is affirmed in the notions of concentration, integration, and slowness, as well as in the silent music of mutation before the breach of Heaven and Earth. When considering the integrative, one is not looking at a thing, or at a logical system, but rather accessing the subject matter of the therapeutic movement of Tai Chi. The movement forms are structural elements known as circulation, polarity, heat, mirroring, image, rhythm, roundness, and water, and they accompany several other kinds of characteristics. The literature allows us to identify various clues that enable us to ferret out an orientation, health of the psyche, by which we may find a pathway through numerous byways to inter-

vene against disease. We will deploy the Greek notion of the *psyche*, meaning animation, life, and breathing origin covered over by modern psychology. The structure of the essay bears a striking resemblance to the spiraling and figure eights of rhythmic breathing.

From the Western point of view, such as Kant’s transcendental esthetic, time and space have been understood as fundamental *a priori*s, best expressed in the explication of the transcendental esthetic. This suggests that there are manifold possible actions based on space and time which are assumed, but which yet are unnoticed in a purely ontological description of the person. Space and time as “the” “underlying context” allow for the understanding of bodily characteristics and take on the context of “presentational thinking”.²

Personal characteristics function by signifying something other than themselves. For example, memory does not merely give us its own functioning as remembering, but it *makes the present* a past. Gadamer has shown that the structure of play is a structure distinct from the physical, psychological, or social characteristics of the player.³ The body of the player, actor, or dancer *appropriately assumes* the movements that are required by the game, the play, or the dance, which in turn reveal the structure of each. The necessity of presentational value is that things of all types may point beyond themselves to arrangements “in” space-time. Expressions of the body are not manifestations of the physical condition of the body, agreeing with the psychological feelings of the body, but instead are a kinesthetic flow of spatiotemporal formation. The body does have a role in expression as it takes on characteristic configurations, and there is a primary distinction between the body’s capabilities and the expressive comportment displayed, whereas, in the sciences, both social and medical, speaking and thinking are normally distinguished from each other. Thinking is a mental activity that is translated for the purposes of communication into speech, counter to experience. There is no concept mediating consciousness and its expression/venue.²

Theories of the brain

In Western thought, theories of the brain are localized in terms of the head; Eastern medicine has focused more specifically on the intestines as the seat of healthy systems. The Eastern balance to brain theory is an emphasis on the viscera called, euphemistically, “gut theory.” Interestingly, the communication dimension shows up in the connection between the brain and the gut in the vagus nerve. Within Western medicine, the mind-body dualism remains, but recognizing the vagus nerve as central to communication between the brain and the intestinal tract of the body is an important step toward

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Abbreviations: TCM, traditional Chinese medicine.

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health. The vagus nerve is the tenth cranial nerve, residing in the neck. This nerve becomes the channel between Western and Eastern theories of medicine, emphasizing a breathing thematic. This connection aids in understanding neurological diseases and provides a foray into discussing Tai Chi as a dance breath. The intensification of the breath holds the movement in a pregnant pause, allowing a Tai Chi movement “to push off” and “out” as the literal and figurative apostrophic exhale against neuromuscular challenges.

Neuromuscular context

Neuromuscular disease can manifest many symptoms. Many of the following symptoms are prevalent in people with Parkinson’s disease: gradual loss of smell, gradual loss of taste/flavors, gradual loss of touch/texture, gradual lessening of normal gait, gradual lessening of breathing capacity, gradual lessening of memory, increased social anxiety, increased obsession, increased potential for hallucinations, and increased immune deficiency. These characteristics are all intensified by the interactional effects in one’s individual world. The experiential correlate of the social body comportment in a world of disease is born of several body tensions of force and counterforce. Moreover, the look of the affective body physiognomic is all too clearly expressed in the tensions inscribed in (dis)eased bodies. Tai Chi offers individuals a rupture that enables them to get on with their everyday lives. A reactivation of bodily sedimentation occurs, in the phenomenological sense, through the passive synthesis of association that conjures up not merely a sensory moment, but an entire situation with its own horizon of anticipation. These are the familiar resonances enveloped in a painful disease. I understand kinesthesia in the sense of being able to move: I can. The principle governing sensuous kinesthetic movement is motivated by the if-then and is considered in terms of one’s sensitivity to corporeal control. I contact this sensitivity if I move in this or that way, and I experience how it feels to stretch. We must shift from thinking in terms of isolated parts to processing articulated wholes. That is, “being with what one is doing” can open up a free flow of movement.

“Tai Chi” has often been translated into English as “supreme ultimate”. However, looking at the composition of the Chinese characters, it means “man upright posture between using Heaven and Earth.” Humans have rhythm in their movement; in a sequence of steps, the whole weight of the body is in stillness for a short time on one leg only. The center of gravity must swing forward-human stance is, in fact, a continually arrested falling. Therefore, an unforeseen barrier or uneven flooring may precipitate a fall. The human stride is an expansive motion, performed in the expectation that the leg will be brought forward and will ultimately find solid ground.

Bodily rhythm is movement on credit. Confidence and hesitancy, elation and depression, instability and insecurity: are all expressed in one’s stride. The stride or pace of a biped is a harmony, alternating from one leg to the other. This balance permits variation in length, tempo, and direction of accent. An interruption of physical well-being is alarming in the experience of disease, it turns our attention to a taken-for-granted ability that is invisible on good days. A healthy person is not concerned about breathing, seeing, or walking.⁴ Such symptomology is often accompanied by *social anxiety*. Anxiety often creates an environment of a fear of something, which then results in a closing of future horizons; hence, the psychological appears as the depression of horizons.

Obsession and hallucination in words

The phrase “For all the things that bother me, I cannot find the

words” illustrates a bond between indistinct links and the unsayable. The balance between the word and its absence can dominate a landscape, as if the dissolution of the world were to coincide with the failure of the word, and the world and its clear order of things dissolve as unnamable objects and become distant. The hidden power of the word is in its own secret struggle. One should be able to give a name to things and events. Words have this power to control the world, and the hold is taught to obey (magic). The fear of a world in decay can become a homogeneous decomposition, one becomes incapable of action; in the unvariegated landscape, one sees oneself as diseased. In disease, one’s obsessiveness can move into hallucination; the word issues an order I must obey.

The above examples illustrate a social anxiety that Straus and Ludwig Binswanger called paradoxical intentionality.^{5,6} The basis of this approach is that, rather than deny or run away from fear, disability, or disease, one transforms the fear by becoming it. Straus gives us the case of stuttering.⁶ Instead of asking one to stop stuttering, the stutterer is *asked to stutter*. When trying to stutter, the stutterer is transformed into a nonstutterer. A similar technique asks people with Parkinson’s disease to walk backward even though they feel unbalanced by walking forward. The task is performed without any hesitation in their gait. This technique can serve as a strategic category of therapeutic intervention with Parkinson’s disease and with other neuromuscular and psychological challenges.

Neuromuscular normals

Often, the stiffness of a foot or some other restriction affects one’s gait. To become fluid, one must pick up a rhythm that allows both arms to fully swing freely. The impediment soon appears to release a rhythm that is both undertaken and taken up. When one’s speech is impaired, singing rhythms are picked up, and soon stuttering is eliminated by singing. Breathing, a circulating movement, and kinesthetic weight set the tone for the meaning of “I can” in one’s body. In Eastern philosophy, and generally, tuning in to one’s body to become self-aware allows one to restructure how the body can move, as the body finds a way. Tai Chi works within the wholistic of renewal. An intense self-consciousness of one’s body in relationship to one’s-body-in-the-very-activity-itself supports this renewal. To activate body (re)alignment, sedimented habits dissolve, and the way movement is performed allows for the possibility of alternative body alignment.

Benefits of Tai Chi

Tai Chi offers improved aerobic capacity, the lowering of blood pressure, reduction of stress, increased strength, and better sleeping patterns. As Kathryn Sharp and Jonathan Hewitt explained,⁷ the benefits of Tai Chi include memory rejuvenation, improved stride, improved flexibility, and the regeneration of connective tissue. Yet, this may be the most startling of all. In 2018, doctors discovered a new organ within the body, and in want of a name, they labeled this organ “the interstitial stitch” (<https://www.the-scientist.com/daily-news/is-the-interstitium-really-a-new-organ-29893>). The interstitium, or fluid-filled spaces, fill the “intervals” in connective bodily tissues. We will return to this important research fact later.

Tai Chi is more often seen as an exercise than as a martial art. Tai Chi was originally part of a ritual dance. Tai Chi imbues a person with a silent stillness; this benefit holds a comparative point within the tango. The tango draws power from what we might call a figure eight or a mobius configuration, which has strategic pause-

es or suspensions that allows for the possibility of the next movement. The strategic pauses result in a slow, intensified explosion, a type of divine power. Both dances—Tai Chi and the tango—fall into a category that we might call the Yin/Yang, figure eight, or the moebius of meditative dance. The fascinating power of Tai Chi (and the tango) resides within the concepts of spiraling and yielding, centering and sinking, and exercising a great power of softness to dance both dances. There is no stress on the interiority of oneself in a relationship with one's partner in either Tai Chi or the tango.

Working on strengthening, stretching, and body realignment prevents one's gait from freezing. Blockages borne by disease create patterns of muscular tensions in a body attitude or a psychosomatic nature. Relaxation and ease of movement are keys to openness, balance, and stillness. Bodily stillness is an intensity of gesture applied to the balance of walking before placing the foot on the ground and shifting one's weight from one side to the other. Balance negotiates weighting, with stabilizing in each step. In turn, balance allows the simultaneous formation of patterns of rhythm and timing. An anchoring posture requires one to maintain both feet on the ground in a pregnant pause. This posture shifts the place of breathing from the upper chest to the abdomen, to the *dan tian* in particular. In principle, Tai Chi offers access to an alternative embodied style of operation. Entering this alternative requires a kinesthetic activity, one centered on circularity. *Embodiment* can be defined as including emotions; emotion is an e-movement resulting from both centripetal and centrifugal movement between affective elements in dialogue with the environment and one's body resonance, that is, posture, expression, and dispositions. Embodiment is a set of sedimented habits that are activated and enacted by movement in the environment. Hence, the *embodiment* is a here-and-now activity which does not give way to a past, but is a part of one's gestures, even when not in use.

Circularity

The opening/closing exchange of Tai Chi pulsates as an alternating rhythm of expanding/condensing. Gestures of opening and closing focus on the "in" space between the articulations of the hands, wrists, elbows, and other cavities, such as the armpits and the backs of the knees. The "out" space is present in the tissue stretching on the back and external surfaces. This is an articulation, creating a looping of energies and focusing on helping the immune system and its defense mechanisms.

Circularity is also present in the movement of one's feet. The pace of the foot is floating, lightness, and the experience of a rippling effect. A stretch of the hand, arm, or leg interconnects movement intention with a single pass. This activates the sympathetic nervous system's relaxation impulse and the parasympathetic nervous system. Deep breathing, inhaling, and articulating demand that the blood becomes oxygenated in circulation, which in turn activates tissue recuperation for internal healing. We are stressing the circularity of the body, and the internal awareness of the Chinese martial art of Tai Chi through the power of stillness. In stillness, the state of being is a pregnant set of possibilities for movement. Our posture can be seen as a type of moving stillness. A standing meditation, entailing a readiness *per se*, enables us to respond to an environment rather than just react to it.

Because our bodies are multidimensional, movements are degrees. When one rotates along the sagittal plane, for example, one engages in extension to remain upright, and what occurs is initially a spiral form. The skeleton bears flesh and blood: described as the process in which the entire body, including gaze, is concentrated

in a series of movements to therapeutically activate one's nervous system against disease. The use of the terms "circularity" and "looping" is appropriate within a two-dimensional space. However, from observation, with the advent of the metaverse and artificial intelligence chat, we should think in terms of a sphere, 365 degrees, and transparency: in short, three-dimensional space and four-dimensional time as stillness.

Vagus nerve

The central nervous system is composed of the brain and the spinal cord. There are 12 pairs of cranial nerves. The tenth cranial nerve, the vagus nerve, is incredibly important in relation to neuromuscular disease. In reptiles, the vagus nerve provides an autonomic response to freeze in times of stress. A similar response occurs in humans as the vagus nerve freezes, and a stress response of "we are stuck" occurs. Activating this part of the parasympathetic nervous system is vital to creating relaxation in Parkinson's disease. This nerve regulates relaxation, promoting digestion, emotionality, and sociality. Another example occurs in autism. When stressed, autistic individuals spiral with their mouths open; they do so to catch their breath. Spinning becomes an orientation tool, helping them balance, and assisting in the integration of all other senses into the body. Autistic individuals tend to extend their hands and flop their extremities to orient themselves.

Interstitialium

The interstitium, the "fluid-filled spaces supported by a network of collagen bundles," is a newly discovered "organ" in the human body (<https://www.the-scientist.com/daily-news/is-the-interstitium-really-a-new-organ-29893>). This organ was not found using traditional methods of scientific research. Rather, an unconventional method of examining tissues under a microscope, and then draining off the fluids, produced the discovery. The interstitium, or space between cells in the human body, can collapse in the presence of disease. To aid in immunity, the interstitium carries white blood cells to the site of infection, removing waste and toxins. While this discovery occurred in 2018, there was a comparative discovery approximately 2,000 years earlier. Most organs are recognized as solid masses for storage and processing; Chinese medicine understood the formless spaces in the interstitium to operate like a rice burner. The interstitium refers to the "triple burner" spaces of the torso: (1) the upper space above the diaphragm for the lungs; (2) the middle space of the heart between the diaphragm, navel, spleen, and stomach; (3) the lower space, below the navel, near the bladder. To maintain harmony, this triple burner connects all these areas.

Using fermentation as an example, the triple burner operates in the following manner: The upper torso behaves as a mist of gasses given off by fermentation. The lungs are responsible for breathing in and out. The exchange of the mist disperses the skin-cell waste by keeping the mist in the middle. Water behaves as foam, backing all up to the top of the created stomach "chimney." The job of the intestines is to separate the sediment from the clear fluid. The triple burner controls the entire circulation system. This is also the condition for energy, which penetrates and nurtures the surface and depth of the body. The body, breathing deeply and slowly, summons life, as if I were connected to a great lung outside of myself. The nervous system alternates calls to reinforce, to back up, my breast's rhythm of respiration and bodily movement, which voluntarily awakens me when I have been in a sleep until a world of

Table 1. Chinese elemental color axis

Color	Elements	Organs: Yin	Organs: Yang	Sensory Organ	Climates
White	Metal	Lung	Large intestine	Nose	Dry
Green	Wood	Liver	Gall bladder	Eyes	Wind
Black	Water	Kidney	Urinary Bladder	Ears	Cold
Red	Fire	Heart	Small intestine	Tongue	Hot
Brown	Earth	Spleen	Stomach	Mouth	Wet

significance suddenly becomes the situation.⁸ Breath inhales and exhales, corporeally and rhythmically habituating a world within us. Conversely, we might indicate that this, in the philosophy of communication, resides in the rhythm of renewal. In fact, Western civilization is inspired by Prometheus’ perspiration, as Eastern civilization is inspired by respiration.

Chi

Chi moves in two basic directions, which we can call ascendancy and descendancy. Ascendancy equalizes to a spreading movement of chi, up and out, while descending means sinking. The inward gathering of chi, in simple terms, is moving and resting, Yang or Yin, respectively. When we practice Tai Chi, we are moving toward the surface and using our intent to maintain an outward direction for energy flow. This therapeutic practice has a beneficial effect on the *whole* energy and *energy information* of the body if we persist and perform practices correctly. Chi aims to allow breath and movement to harmonize simultaneously, and it can be identified through color (Table 1).

In Chinese medicine, every bears bear multiple temperaments or qualities, freeing an *axis* of articulation or gradation. In this sense, different colors are not only a bandwidth of light, but also lights of emotions, tones (in a synesthetic sense, tending to all resonance of music, but haptics as well), and energetic inputs into palpable, but fleeting, ecologies, or climates of composition and dwelling. For example, emotion in the context of manic is yellow, while blue in the context of light is moving toward depth. Chinese medicine uses color to differentiate the qualities of being. Fire can betoken an organic subsystem, e.g., heat is a flashback in relation to its Yin partner, the small intestine, an emotional temperament with implications, a predisposition to certain ailments, a time of day, a season of life, and an annual season, not to mention a color (red/orange). The use of color in Chinese medicine reveals the unbroken interconnections between synesthetic and kinesthetic experience.

Axis of articulation and gradation

Russian painter and pioneer of abstract art Wassily Kandinsky used valuations of yellow and blue in his works, as well as intestinal tones analogous to color in Chinese medicine. Yellow is the color code for the wood element or phase in the chart above. In any single emotional climate, yellow can be linked to striving, drive, and ambition. In Chinese medicine, the subsystem comprised of the liver (Yin) and the gallbladder (Yang) is associated with the emotional epiphenomena of wood-energy. In a state of unbalance, this particular energy tends toward *rage* and unpredictable trends in its expression and manifestation toward “addition.” Blue is the color code for the water element and corporeal circulation within the body, regulated by the kidneys (Yin) and urinary bladder

(Yang). Water in Chinese medicine serves as the elemental separation for the pursuit of philosophy. If color occupies a position in Kandinsky’s painting practice which is analogous to *qi* in Chinese medicine, then each composition is a climatic unfolding. In color, an open-ended and unfolding sequence of changes occurs in the operating conditions of spiraling, blandness, and transparency.

Spiraling

Kirlian photography has been used to view the auras/electromagnetic fields of living things. Color has been central to the observation of the aura fields. Kirlian photography has been used in assessing the health/disease polarity. Kirlian photography may help assess kinesthetic coloration before, during, and after Tai Chi movement, and the possibility of colorational changes, which may correlate with the Chinese elemental colors associated with the organs’ healthy colored hues.

Spiraling must occur throughout the body during Tai Chi. There are ancient diagrams of a body coiled in lines, which represent the spiraling paths of silk, reeling energy which is characteristic of Tai Chi. Spiraling is a mode of creating a unique energy. A spiraling object forces all of its energy into its core. This ensures that energy does not leak out from the sides, but is rather contained in its center to be pushed to its extremities (centripetal force). If the body can spiral properly as a result of training its core, energy is intensified in the core of the spiraled body and can travel through the limbs and torso without leaking.

The spiraling body keeps the arches of the body tightly wound and connected, which results in the feeling of being “full.” Tendons are trained every day to twist in opposite directions and withstand enormous amounts of tension and pressure, and the degree of the tightness of the spirals in the body appears to be boundless. The twisting action in the tendons allows energy to be built up and stretched beyond previous limits. The energy of a spiraling object, when it rotates, acts as if it is moving forward when pressure is applied. At first glance, when a screw is pushed down at the tip, the energy only seems to be spiraling downwards. However, one can see that energy is also being pushed back up the threads of the screw. This means that energy is being split and sent out to both extremities at the same time. The split (or division) is a separation of energies that may be termed “Yin and Yang”.

To move without movement in Tai Chi, every push is also a pull to produce spiraling. The spiraling body sinks the shoulder down in front and slightly inward into the armpit. This naturally pushes the elbow out to the side, which should be always pointing down to the ground. As for the hand, it should be twisted in the opposite direction with the palm facing downward at a 45-degree angle. If one is flexible enough to keep the shoulder in this position, pointing the elbow downward, and twisting the hand over so it is facing palm down, a spiral running through the arm will have been created. As

for the legs, they should always be stretched open, and the knees should never be collapsed. This creates a spiral in the thigh. Once the feet are placed, the rear knee should constantly push outward as much as possible. The spiral of the torso is created mainly by keeping the eyes locked on the opponent as the upper and lower bodies turn in separate directions. If the lower back is pushed out and the tailbone is tucked in, the spine is remarkably tightened. When movements are differential, every part of the body moves proportionally in terms of spiral, weight, length, and power.⁹

Body with self and other incorporation

Apprehension is an activity based on the vital structure of I-can, I-am-able-to-move. This capacity to move not only “grasps” another’s activity, but it is also *directed* motion in terms of that which is to be grasped. The activity of grasping is a sensibility which displays the other’s activity as part of our lived world. This activity is prior to any conceptualization, suggesting that we are always directed toward others, and always presupposing that there is a trace of other in me. Hence moving and being moved, grasping and being grasped are virtually nondifferentiated. Thus, I do not require some transcendent movement to find the other, but my experience already has the experience of the other. *The other is a modality of the intersubjective world.* Modality is *embodied* within language at a prepredicative level. Even such an unmetaphorical-sounding word as the verb “to be” was generated from a metaphor. It comes from the Sanskrit *bhu*, “to grow, to make grow,” while the English forms “am” and “is” have evolved from the same root as the Sanskrit *asmi*, “to breathe”.²

The word-field for *breathing* gives us many clues to the psyche, carrying the notion of the breath of life in the following words: *inhaling* and *exhaling*, which are etymologically linked to health, holy inspiration, and expiration. Breathing, inhaling, ties itself to *halo*; one’s breathing is a form of haloing (as in an *aura*). We can touch a feeling, figuring feeling into a gesture, which similarly holds me. We can do this while our body is at rest (relatively speaking).

Technique in movement

The following is most helpful for understanding the conditions for Tai Chi success with neuromuscular disease, particularly Parkinson’s disease. I can consciously harmonize my body by walking in an asymmetrical way, as many neuromuscular sufferers do, as a normative posture. Some movement configurations can be synchronized by finding an asymmetrical posture. For example, if one’s leg goes to “sleep,” or one has a sore foot, and this is outside of one’s embodied awareness, harmonizing movement becomes more difficult. Being stuck is a way of describing the Parkinson’s disease mode of freezing, prompting movement-awareness to strike. Synchronizing one’s body is a way of reinterpreting what is happening to me or inside me, not only by feeling my way into it, but also by experiencing whatever is going on as if it is myself doing what I can (within limits).

However, there is another movement that embraces disability: body reflexivity. We may harmonize with another body’s mobility, and reflexivity thus *becomes a possibility*. Something that is given as simply actual is maintaining a “being this way.” Yet, the act of consciously maintaining it *into a possibility*, which can be actualized here and now, harmonizes the body. By transforming the conditions into *a possibility among other possibilities*, the possibility that actually happens at the moment of other possibilities is

thinkable and doable. Instead of presenting a treatment or corrective, we are prescribing the manifestation of disease surrounding the actual and other possible ways of being. Synchronizing is a means of participation, predicated as a tendency toward a healthy body that encourages autonomy and responsibility, without tearing individuals from their context.

We should note that dynamic movement before differentiation is consistent with modes of ascending/descending, flowing, and sinking. The world resembles the movement of spiraling and the forceful position of a “coil” or “coiling over.” Blandness and transparency are evident in the breathing of an ink painting and in the gesture and gestation of Tai Chi practice. The body’s organs are transparent with kinesthetic color, appearing through dissipation and absorption, as in breathing. The rhythm of a single breath throws back within the bodily movement of wind through the cosmos, showing itself as a reflection between visible and invisible. Breathing is an interfering phenomenon that is a situation in varied elements which are, at the same time, divided and connected. Breathing relates to the lungs, bronchi, trachea, nose, and mouth, but also to air, which would seem to be excluded in such a connection.

Air is something that can be described in chemical terms, and it seems thus unworthy of philosophy’s attention. Respiration is not one of the most common themes of embodiment until one takes the scientific perspective of a purely somatic body, made of more-or less-favored parts, ready to control each other. Within such a perspective, it is clear how, in comparison with the mystery of the brain, the lungs are little more than a pump. However, if this is the case, why did the Indian, Chinese, and Japanese worlds insist so much on breathing to the point of making it a controlled aspect of the world? First, elemental breathing is “being empty.” Breathing is a constant reminder of our incomplete existence. Second, an aspect of breathing is its rhythmic nature. It naturally organizes itself into the two poles of expiration/inspiration, tension/relaxation. And at the core-stillness, “at the still point of the turning world”.¹⁰

Technological developments have resulted in novel methods of biomechanical assessment of posture, such as depth sensor imaging technology and three-dimensional motion capture systems, which provide improved accuracy, but with the drawback of high cost. Wearable sensors provide promising opportunities for naturalistic measurement of posture and movement; however, consensus is needed for selecting anatomical landmarks that provide the greatest accuracy. Although many promising methodologies exist, validation and standardization of exact protocols are lacking.¹ Based on the dimension of time-space-movement, the “how” for accessing the kinesthetic dimension for both research and therapeutics, several innovative technologies can do so, albeit separately, using heat sensors, wearable movement sensors, Chinese pulse sensors, and advanced Kirlian photography for bioluminescence. Many of the new advances in technology are based on quantum physics. Further exploration is outside the scope of this paper.

However, the two key issues in the investigation are, first, understanding how the layering of modalities must be translated or trans-created from one medium to another without a loss of sense; second, as understood by phenomenology, quantum physics/biology and Heisenberg, is that all scientists, therapists, and technologies are both observers and participants in what they observe. Hence, one must account for their intervention in technology and their influence on the observed. Formally, this is called *methodological reflexivity* and instituting a new form of ethical practices. It has been shown that exercise in general can modulate gut microbiota compositions and thereby determine changes in disease.

Gut microbials play a positive role in energy regulation. Tai Chi may affect gut bacteria through vagal modulation.¹¹ As of yet, such studies are not available.

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