



CHINESE & ASIAN MEDICINE

From *Qi* to *Yin* (Pt. 2)

EXPLORING THE PHYSICS AND POETRY OF THE FIVE PHASES

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In [part 1](#) [September issue], we discussed the foundational theory of the five phases (elements) as a theory by which one can attain an understanding and poetic experience of the processes of nature and therefore, the dynamic balance of health.

We also discussed how physics supports the theory with the first law of thermodynamics, which states that to produce work or transformation, one needs to supply heat; and the second law of thermodynamics, which states that *qi*/energy (heat) concentrated in one place will always flow to places of lower concentration. The wood/space phase was also discussed.

The Metal/Air Phase

Moving from outer space toward our planet, we encounter the relatively denser atmosphere, or the metal/air phase. The metal phase in Chinese medicine is associated with dryness and contraction and the lung system.

Physics of the Metal/Air Phase

We have transitioned to a phase of greater density and more gravity that brings particles together, consisting of more potential energy. There is also increased activity due to the movement of atoms and molecules.

Poetry of the Air Phase

Air

*Elusive in my hand
Moved away with a puff.
Taken by a big motion
Along with my moisture*

*Parting me cracked, coarse, chill
Unsettled*

- J. Shamosh⁵

The effects of wood/air are arrived at by our experiencing its qualities of movement, cold, dry, rough, light, clear, and subtle.

We know we cannot live without air for more than a few minutes, as it is the main source of food-energy/*qi* for our bodies. It is not only the molecules of oxygen, nitrogen, and other elements, but also the *qi*/energy in the atoms themselves that contribute to our existence.

The Fire Phase

Most people can easily describe heat because its effects are not at all subtle. But less obvious is the heat from metabolism and other transformations heat facilitates that are essential to our digestion and bodily warmth.

Physics of the Fire Phase

The first law of thermodynamics states that energy can be neither created nor destroyed, also known as the law of conservation of energy.

According to physics, when two surfaces are in contact (atoms of the metal/air phase), friction converts this energy into heat. In physics, heat is the measurement of electronic activity.

Heat can also be produced from thermochemical reactions. The thermochemical reactions essential to life are based on acids. Acids result when inert salt compounds are dissolved in water. The water molecules become ionized; that is, separated to form positive hydrogen ions (H+) and negative hydroxide ions (OH-). These ions are no longer water, *per se*, but they impart the quality of fluidity to the fire phase.

Poetry of the Fire Phase

Fire
*Bites my touch
Eats all I give
Dancer of grace
Giver of life
It lights my path*

- J. Shamosh⁵

The qualities of fire are hot, fluid, sharp, light, clear, drying, and spreading. The fire phase is important because without heat, life as we know it could not exist. The fire phase is the source of all transformations essential to life.

The Water Phase

The qualities of water are easily understood and often taken for granted; therefore, many people, when asked about the attributes of water, forget to mention that it is wet!

Physics of the Water Phase

The essential parts of an acid are the separated ions of water: hydrogen (H+) and hydroxide (OH-). As the fire phase transforms, it separates, becoming water and inert salt compounds. In this thermochemical reaction, potential heat is released, condensing matter, leaving the water phase colder and denser than the fire phase. Cold is the relative absence of heat.

Poetry of the Water Phase

Water
Moisture giver
It chills my touch
And unhurried
Runs through my hand
Protesting containment
By its burden

- J. Shamosh⁵

From experience, we know the attributes of water are wet, cold, heavy, slow, dull, and fluid.

Water is essential to life. Our bodies are 60% water and our planet is 71% water. Water moistens our bodies, dissolves and carries nutrients in our bloodstream to nourish us.

The Earth Phase

The earth phase attributes are often taken for granted or ignored unless one is a gardener.

Physics of the Earth Phase

The thermochemical reaction that produced water also produced inert salts. These inert salts represent the earth phase, which is denser and colder than the water phase. Increased density and coldness in matter is due to less space in the molecular structure and relatively slower atomic motion.

Poetry of the Earth Phase

Earth
Unmoving
Arduous
Intense
Chill
Dependable
And oh so loving

- J. Shamosh⁵

The qualities of earth are heavy, dense, solid, cold, static, drying, and nutritious.

Without the minerals of the earth phase, living beings would not have cellular structures or bones. Plants derive most of their nutrients from the nutritious earth phase.

The Value of the Five Phases

The *yin-yang* symbol from Chinese medicine gives us a profound visual concept of the phases and

how they are related. In the sphere, the wood/space phase is where the black and white wave-like forms meet, depicting the continuous transformation of energy to matter and matter to energy. This can be compared to deep ocean rifts where Earth's new crust constantly erupts; and in other locations, where Earth's plates collide, the crust is subsequently submerged and transmuted, but the overall size of our planet remains constant.

The foundational understanding of Eastern medicine is in poetically and rationally comprehending the meaning of the five phases. The fact that modern physics supports the fundamental philosophy and concepts of Eastern medicine truly makes it a valuable form of health care.

Author's Note: Subsequent articles will discuss how the five phases combine to form the six tastes that impart the therapeutic properties of herbs (and foods) and allow us to use herbal medicine more effectively and safely.

Reference

5. Shamosh J. *The Physics & Poetry of Eastern Herbal Medicine*. Glendale: Pure Carbon Publishing, 2022.

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