

Qi, Meridians, Yin Yang, and 5 Element Theory

Qi

Qi is a **central concept** in Chinese medicine. A strong understanding of Chinese medicine and its theories must start with a full understanding of qi. Chinese medicine, in its most basic form, understands all illness, injury, and pain as blockages in qi flow and excesses or deficiencies in qi.

Most people who have heard qi simply know it as “energy” or “vital force” or “life energy.” Please **FORGET WHAT YOU THINK YOU KNOW** about qi. After reviewing these notes, go back and think about what you read and what you thought before. Ask yourself how they are different and renew your understanding of qi.

The word qi, as it is used in the English language, is a “lump” term. What Americans know as qi, the Chinese actually understand as *qi, xue, wei, ying, shengjing*, and a number of other concepts. Qi in the English language is somehow supposed to encompass all these concepts. In the last 20 years, it has also become understood to include everything physical and cosmological. The unfortunate lumping of many concepts into a single one leads to a lot of confusion about what qi is, its behavior, and its plausibility.

Qi as “Life Energy”

In 1917, the French consul to Shanghai went back to France after 16 years of service. While he stayed in China, he became very interested in Chinese medicine and learned as much as he could about it. When he got back to France, he popularized Chinese medicine in France and has greatly influenced the development of Chinese medicine in Western cultures. Today, France is known for its acupuncture, especially ear acupuncture. Many people travel to France for ear acupuncture, particularly for detoxification from drug addiction.

The French consul translated qi as “energy,” supposedly for “lack of a better term.” He also translated *jing* and *jingluo* as “meridian.” Meridians are actually vessels – a part of a vascular system. This vascular system is related to the circulatory and nervous systems, but it is a separate system. Meridians follow circulatory and nervous pathways for about 80% of their length. Meridians, however, are not a static piece of the anatomy; meridians move

Qi is a new concept to Western thinking. Therefore, it is unfortunate that it got translated as “energy,” a familiar concept to westerners. As a new concept, qi should have been explained simply as qi or given a new name to embody this new concept.

Problems with “Life Energy”

“Life energy” sounds mystical, new age, and fake. It automatically gives a sense of falsehood and hurts the credibility of Chinese medicine. Hopefully, after this section on qi, you will better see the science behind Chinese medicine.

When people hear the word “energy,” they automatically think of electromagnetic energy. This is natural because that is the type of energy we experience on earth and understand well through physics. Electromagnetic energy manifests as all the energies we are familiar with: light, heat, electric, atomic. Translating qi as “life energy” has driven scientists and physicists to search for qi as electromagnetic energy. And they’ve found it!

Scientific Evidence for the Presence of Qi

Scientists have found that when placing a current at a random location on the skin, the current randomly disperses in all directions. If the current is placed on a meridian or, better yet, an acupoint, the current travels along the skin in the pathway of the meridian. They also found that at each acupoint along the associated meridian, we would see spikes in the intensity of the current. In this way, we can trace all 12 meridians and map their pathways on the body. This technology has developed into small acupoint finders that some people use to help train in acupuncture (as demonstrated in class).

So how do we know that we’re not simply mapping electric impulses from the nervous system? In the 1950s before stringent ethical codes were developed, French scientist injected people with radioactive tracers in the arm. Some people were injected randomly and others were injected at the Large Intestine Meridian source point, LI 4 “hoku,” which is in the muscle tissue between the index finger and the thumb. Large Intestine was chosen because it was easily accessible and it has a zigzag at the deltoid muscle of the shoulder. Those who were injected randomly had their tracers move in a small, circular area around the point of injection. Those who were injected at LI4 had the tracer move up the arm, following the zigzag, and through the neck. Because of the zigzag, scientists knew that the tracer was not being carried by the circulatory or other system. The tracer, in fact, traced the pathway of the Large Intestine meridian as drawn and described in Chinese texts.

Another technology that has developed is Kirlian photography. Please see the website <http://www.kirlian.org/kirlian2.htm> to read about Kirlian photography. Make special note of the color photograph depicting the experiment with the couple. Whenever two people are within 2 feet of each other, they not only enter each other’s psychological and personal space, but their qi space as well. I once knew a doctor who used to say “Be careful when you carpool with your friend’s wife, or pretty soon she will become your wife!” Our qi interacts with each other’s. Whenever someone extremely angry enters the room, there is a different feel to the atmosphere. Sometimes we don’t even have to look to notice the change. Or if someone very happy enters the room, their joy and lightheartedness quickly spreads. People with very large *wei* qi, qi that forms a protective barrier around our bodies, will often have animals following them. Children and animals are very sensitive to qi.

In 1996, research done at the Acupuncture and Electro-Therapeutics Research Center in Tokyo resulted in the publishing of a scientific paper called “Emission of Extremely Strong Magnetic Fields from the Head and Whole Body During Oriental Breathing Exercises.” Oriental breathing exercises refers to qi gong, a practice of circulating and building one’s qi. Researchers placed people in giant magnetic coils and measured the strength of their biomagnetic fields. When people were told to do qi gong, they regularly reached a strength of 0.013 Tesla (note that this value and the following ones are slightly different than the ones I told you in class! I reread the article to get the precise figures for the notes). The following values are from their findings:

Experienced practitioners:	0.013 Tesla
A particularly strong master:	0.3 Tesla
Earth’s Magnetic Field:	5×10^{-5} Tesla
Human ground state:	same as Earth
Refrigerator Magnet:	0.01 – 0.035 Tesla

Experienced practitioners were capable of generating fields of about the same strength as a refrigerator magnet. One master was able to generate a field **10 – 30 times** the strength of refrigerator magnets! Conclusion of the study: qi gong stimulates unusually large biomagnetic field emission.

So, researchers have been able to find qi . . . **sort of**.

Even though we have found qi electromagnetically, electromagnetic energetics and physics CANNOT explain qi behavior (if it did, everything on earth would be qi, which I mentioned earlier many people in the last 20 years like to believe). Electromagnetic energy doesn’t flow in curved paths along surfaces. It does not “move” or “circulate” around or within objects. It moves from a potential energy state to a kinetic or thermal or light energy state to a lower potential energy state.

But, as was just pointed out, we can detect qi electromagnetically. Therefore, electromagnetic energy is a **component** of qi, and a **marker** of its presence. Just like in chemistry we place a color-changing indicator to detect the occurrence of a reaction. Or if I stand around a corner and you see my shadow, you know I’m there. My shadow is not me, but it indicates my presence. Or if I stick a roasted chicken in a box, I know there’s a chicken in the box because of the smell. But the smell is not the chicken; it just indicates that the chicken is there. In the same way, the electromagnetic energy component of qi allows us to use our current technology to detect the presence of qi. Energy is a component of qi, but **qi is NOT energy**.

Resolving the “Life Energy” Term/Model

As mentioned earlier, when we hear the word “energy” we automatically think of electromagnetic energy because this is the kind of energy we experience on earth. But, other types of energy exist!

A good example is dark energy. When studying astronomy, we know that the universe is expanding. According to electromagnetic and gravitational physics, this expansion should be slowing down. However, in the 1990s, astrophysicists were astonished: they discovered that the expansion of the universe is actually *accelerating*. To explain this expansion, physicists are now researching **dark energy** and **antigravity**. Black holes are also full of **dark matter** and **dark energy**. Black holes are enormous collections of mass and energy. Light goes in and never comes out. There are plenty of areas of low potential energy in space; why doesn't this energy flow to the areas of low potential? To explain these phenomena physicists are studying this newly discovered **dark energy**.

Obviously, dark energy operates on a set of laws completely different than those of electromagnetic energy – often it seems that dark energy and electromagnetic energy behave in an opposite manner. Why do we call dark energy and electromagnetic energy “energy?” It is simply a way to describe something that is insubstantial. Since different types of differently behaving energy exist, there is no reason we can't call qi “life energy” and expect it to behave with its own set of laws distinct from electromagnetic energy's. If dark energy can behave differently, why can't life energy?

So What is Qi?

Qi in Chinese literally means “air.” This reflects the intimate relationship between our qi and our breath. We can break down the way the Chinese write qi and get a sense of the true meaning of the word:

氣	=	气	+	米
Chinese word for “qi”		ancient (and simplified) way of writing “air”		“grain” or “nutrient”

Some thousands of years ago, air began to be written as the character on the far left. This reflects the recognition of the importance of air as a nutrient and as a source of our qi. Air is the one nutrient that our bodies need the most; we can only survive minutes without air. We can survive days and weeks without water, food, vitamins, cofactors, etc. Based on the way qi is written, we could say that qi means “vital breath.” This definition actually more accurately reflects the concept in the Chinese language, just one of the many concepts embodied by the lump English term.

Because the lump version of the word qi is already widely used, it is pretty pointless for me to try to break it back down into the separate concepts understood in Chinese; you wouldn't understand any of the English literature on Chinese medicine if I did that. Instead, we will differentiate between 2 types of **qi**:

1) Universal Qi: Universal Qi is what we are talking about when discussing things like Feng Shui and auras. It's in everything. All mass and matter contain universal Qi. Thanks to Einstein, we know that $E=mc^2$, i.e. mass and energy are simply two states of the same thing. Energy is simply mass in a different form and vice versa. Universal Qi we can think of as mainly EM (electromagnetic) energy, but it doesn't describe all of universal qi. Universal Qi has flows on an environmental level. In Chinese medicine, we are concerned with Universal Qi when we examine the patient's lifestyle and living environment. A prescription may include a Feng Shui assessment and correction.

2) Life Qi: In Chinese medicine, Life qi is what we are concerned about when examining the health and balance of the patient. **From now on, when we refer to qi, we will be talking about Life Qi.** If there is only one thing you choose to remember about this section of the notes, it should be that

QI IS A LIFE PROPERTY!

If you are alive, you have qi. If you're dead, you don't. If you're inanimate, you never had qi to begin with. In allopathic (Western) medicine, it is very difficult to determine the point of death. A medic must keep trying to revive a victim even if he has no heartbeat and is not breathing. He may be revived. He may not. Only a doctor is legally allowed to say whether or not the victim is death. In Chinese medicine, the point of death is defined as the moment ALL of a person's qi leaves the body. In a person who is in coma, most of the qi has left. He is hovering on the brink of death, deciding whether to live or die. Often we bring loved ones to visit in hopes that will help the decision to be made.

Life Properties have Profound Effects on our Health

There are many properties of life. Below a few are listed:

Growth

H₂O consumption

O₂ consumption (in aerobic life)

Energy consumption: food, light, sulfur (we can think of this as diet)

Motility (even in plants, substances are transported from one place to another)

What happens if we don't get enough water? We get thirsty, our bodily functions become strained, blood pressure drops, and eventually we die. What happens if we get too much water to an extreme? We urinate constantly and our electrolytes go out of balance, eventually leading to poor health and finally death.

What happens if we don't get enough oxygen? We have trouble moving and performing tasks. We may be able to walk, but running results in being out of breath immediately; we're unhealthy. If we are too deprived of oxygen, we die. If we get too much oxygen, partial pressure of oxygen in our lungs increases and that of carbon dioxide decreases. Our lungs never receive the signal to take a breath and we stop autonomic breathing. High oxygen levels in the blood shift the pH of the blood out of the neutral range and metabolic reactions can no longer take place. Our health fails and eventually we die.

We could go through this and any list of properties of life – any excess or deficiency would result in poor health and, in the extreme, death. Life properties have profound effects on our health. *Any property of life out of balance makes us unhealthy.* In this way, qi has a profound effect on our health and we can see dramatic changes when adjusting qi. Imbalances in our qi like deficiencies, excesses, and blockages in qi flow will have negative impacts on our health. Restoring the balance of qi helps restore our health.