

“It is by virtue of the twelve channels that human life exists, that disease arises, that human beings can be treated and illness cured. The twelve channels are where beginners start and masters end. To beginners it seems easy; the masters know how difficult it is.”

- The Chinese medicine classic, Spiritual Pivot, chapter 17¹

CHAPTER FIVE

CHANNEL THEORY

The next few chapters involve channel theory – a crucial part of Asian medical theory and the key to understanding the anatomical changes that occur in a person with Parkinson’s disease. This chapter will explain how the pertinent channels behave in a healthy person – or at least a person who does not have Parkinson’s.

INTRODUCTION TO CHANNEL THEORY

What are channels?

Channels are pathways of energy that circulate through the body. The energy in the channels is referred to as channel *Qi* (pronounced chee).² The term “channels” refers to the *directions* and *locations* in which the electricity-like channel Qi is most likely to flow, as it traverses the various tissues of the body. The channels are *not* structures. They have no tangible existence if no energy is moving. There is *no* physical, conduit-like tube through which the channels flow.

Channels in living organisms are rather like shipping lanes on the open sea. Shipping lanes are specific, preferred routes. They can be drawn on a map. But if you fly over the ocean and there are no ships in sight, no shipping lanes are visible. Their presence cannot be measured. As far as the ocean is concerned, shipping lanes are only a theoretical construct.

Likewise, the channels only exist when moving current is present. A dead person, a person in whom no energy is flowing, has no apparent channels. In a living person, when the largest, closest-to-the-skin, electricity-like channel Qi flows, it *tends* to flow in specific, detectable routes through the body’s tissues, especially the fascia tissues. These routes are called channels.³

¹ The translation is from *A Manual of Acupuncture*, Peter Deadman and Mazin Al-Khafaji, 1998. *The Spiritual Pivot* is thought to be approximately 2000 years old.

² Qi is defined in depth in appendix #xxx. For now, consider Qi to mean “energy.” If you have a background in Vedic studies, Qi means the exact same thing as the Sanskrit *Chit* (pronounced “Chee” with a nearly silent “T” at the end). Chit is one of the three attributes of God. For example, “Sat-Chit-Ananda” (Wisdom-Energy-Bliss), is one of the many definitions, or “names,” for God. While there are few books expanding on the full meaning of “Qi,” a mysterious, undefineable force, there are tomes explaining the physics and straightforward ramifications of “Chit,” all of which mesh perfectly with our most modern understanding of modern physics and quantum theory.

³ When western scientists first learned of channel theory, they were highly dubious. One doctor did a careful dissection of a corpse and announced that there was no evidence of any structures that corresponded to the description of the primary channels. Therefore, channel theory was, for nearly a century, mocked and reviled. Channels still cannot be detected in a corpse. When the body is dead, no electrical currents flow.

Is channel energy the same as electrical energy?

For the most part, the Qi that flows in channel routes behaves like electrical currents: the Qi is subject to resistance and is influenced by parallel currents. It can even “short circuit” into other, nearby channels if its own route is blocked.

The currents that run in the channels are unidirectional: direct currents rather than household-type alternating currents. The correct direction of channel flow is crucial to maintaining health.

Qi in channels is *not* absolutely the same as the electrical currents that flow through our kitchen wall sockets. One recently conjectured theory holds that Qi flow may not be the same as electrical flow because Qi flow is the movements of *waves* generated by electrons (or photons, in some theories) but not the movement of discrete, measurable “*bodies*” of the electron or photon. Other reasons that Qi is not considered the same as electricity (or light) per se are somewhat esoteric, and not necessary for understanding what I call the “electrical” aberrations that develop in Parkinson’s disease.

However, to appease the acupuncturists who may be unhappy even if I say that channel Qi moves *like* electricity, here’s an oversimplified explanation of why channel Qi is not exactly the same as the energy that flows through your car battery.

Thoughts and feelings generate electromagnetic waves (brain waves). These waves, in turn, necessarily influence the body’s electrical currents. These electrical currents, thus influenced, are affected along the length of their route. Thus, thought waves and the wave patterns generated by feelings influence the body-wide electrical currents. Also, ancient Vedic

Since the late 1970s, some western researchers have been preoccupied with proving the western hypothesis that acupuncture channels are dependent on the nervous system. While some studies have shown that the nervous system can be, in fact, affected by stimulation of the channels, and anesthetized nerves are not responsive to acupuncture, no studies have been able to prove that channels need the nerves in order to exist. The Asian theory would say that even single-celled organisms have channel Qi flowing over the surface of the cells. Nerve structures develop in response to the channels; at the smallest, cellular levels of channel electrical flow, the channels influence DNA expression and the formation of cellular structures, including the nerves.

Even though a few experiments are finally being designed to look for Qi flow patterns that are not directly related to nerves, these studies are few and far between. There is simply not much profit to be made in objectively proving the existence of channels. The existence of acupuncture points has been objectively proved: machines can easily detect decreased electrical resistance in the skin at the locations of the known acupuncture points. (In fact, some doctors who play at being acupuncturists use these machines to locate the points instead of memorizing the general vicinity of the point locations and honing in on the exact location by a trained sense of touch.) But the currents of moving energy that *connect* those points cannot yet be definitively measured by machine. The best way to feel the *directions* of the currents that run in the channels remains the seemingly subjective method of feeling the Qi by hand. It is quite easy to learn. It is like learning to differentiate the difference between the feel of velvet when stroked with the nap or against the nap.

While western researchers sneer at this subjectivity, I am reminded of a cartoon strip in which Doonesbury character Alex tries to assess the electrical engineering professors at the colleges to which she is applying. She asks them this question: “Two black boxes, each hiding an internal circuit. Using workbench tools, how do you tell which is the current source and which is voltage?” Several teachers are stumped. Finally, one professor gives her the correct answer: “Well Alex, they’re Thévenin and Norton equivalences, so tools are useless. You’d have to hold the boxes in your hand. Since the current source has a resistor, it’d be warmer.” (From the cartoon anthology collection, *Heckuva Job, Bushie*, G.B. Trudeau, Andrews McMeel Publishing, Kansas City, 2006, p. 223.)

At this stage of scientific research, electricity-measuring tools are still useless to single out the *direction* of Qi flow amidst the various bits of electrical forces that can be detected on the skin. At the present time, if you want to detect the dynamic flow of Qi, tools are useless; you have to feel it with your hand.

theory explains that there are five types of electron vibrational patterns. Chinese medical theory recognizes that these five *types* of electricities (usually referred to as Five Elements) direct different aspects of cellular and organ functions.

In Asian medical theory, one could say that the energy that moves through the channels is a life force- and brain wave-driven transition from electromagnetic fields into moving electricity-like current. These currents have specific electron-vibration patterns.

Your car battery or an electric generator is only concerned with getting a charge to move from point A to point B. The type of subtle electron vibratory movement is of no consequence in a car battery.

In bodies, the *type* of electron vibration pattern in each channel helps make up the characteristics of that channel. The type of electron vibration pattern determines how the currents will influence on the cells over which they flow.¹

A spot of theory

When it comes to studying Asian medical theory, the western medical paradigm tries to understand Asian theory using archaic western medical constructs. The western medical model turns a blind eye to the new findings in modern physics, and quantum theory in particular. The 19th and 20th century paradigms of western medicine hold that the *structures* of the body – nerves, organs, blood vessels – must be creating and determining the paths and mode of effectiveness of any electrical currents that may or may not exist. Further, they insist that, if any electromagnetic fields exist alongside of the currents, they are the *result* of the currents – currents that are generated by chemistry in the cellular structures. There is no “which came first, the chicken and egg” mystery in western clinical science. The structure is assumed to be the dumb template on which chemical and electrical events take place.

In Asian medicine, we recognize the *mutual* effects of the electromagnetic fields (such as those generated by thoughts and the various electrical events in the body), the currents (directed by the fields), and the cells (created based on the instructions provided by *both* the currents (channels) and the materials provided by the structures (cellular chemistry, including DNA). Working together, the somewhat *stable* electrical properties of physical structures of the body and the electromagnetic fields with their fast-as-a-thought-wave ability to *change or influence* moving electrical currents, provide both stability and dynamism to the underlying electrical nature of the chemistry of living systems.

The vibratory (electromagnetic wave) aspect of a person, not the chemistry, is the ultimate driving force behind the ever-changing structures and molecules that make up a person’s physical being. Again, the vibratory forces – the electromagnetic fields, thought waves and electromagnetic heart waves – direct the currents of Qi in the channels. The currents then direct the cellular performances.

Oppositely, cellular injury, illness, or toxins, can cause changes in the cells, which then cause changes in the electrical currents. These changes potentially can, in turn, cause changes in organ function and in organ electrical wave patterns, and even in one’s thought waves. The extent to which illness or injury can change one’s thought waves depends on the opposing vigor

¹ The five different natures of electricity flowing in the various channels helps keep the channels running true even when they intersect with each other. Also, in case you’re curious, the five senses – vision, hearing, touch, smell and taste each use only one of the five types of electricity. The nerves and neurons that process a particular sense only respond to the type of electron movements that apply to that sense’s electrical type.

with which one mentally resists yielding to the “vibrations” of illness or pathology. The ability to oppose changes in thought waves in the face of insult and injury depends on the strength of one’s consciousness, one’s sense of self.

Ironically, in order to maintain his composure and self-control, many a PDer has opted for dissociation, a psychological stance that denies him full awareness of his “self.” Thus, he renders himself *less* able to consciously feel the pain and the eventual pathological changes set in motion by his ignored injuries. He cannot consciously resist the damaging changes caused by his injury because he cannot feel the injury. He can summon up his will power in the struggle to keep functioning *in spite* of worsening illness and injury, but so long as he is dissociated from his ability to feel his injury, he cannot summon up the consciousness that will trigger a *healing* process.

In summary, the flow of energy in the body, while obeying the laws of electricity, is considered to be far more than just a mindless flow of electrons. This electricity-like energy is referred to as channel Qi. When acupuncturists refer to channel Qi, they most often are referring to that portion of body-regulating electricity that flows in large, detectable streams near the surface of the skin. Healthy current flow is unidirectional, not alternating. The electrons for any given physiological task are vibrationally specific.

Channel Qi behaves like electricity, but it is much more than mere voltage and amperage. Therefore, in the field of Asian medicine, we do not say that channel Qi is electricity. We tend to say that “channel Qi is the *energy* that flows in the channels.”

Next, to futher appease any sticklers with a background in Asian medicine who may insist that Qi is too mysterious to explain or that Qi is *not* the same as electricity but they can’t say what it is, I repeat: when I refer throughout this book to the currents being “electrical,” I mean electrical in terms of being made up of electron movement *but also* derived from and driven by electromagnetic thought waves and forces related to brain waves, consciousness, subconsciousness, and superconsciousness. Channel Qi is a transitional form of energy in which thought vibrations, having created electromagnetic fields, are being condensed into electrically charged flows of tangible energy – moving energy that can be felt. These currents influence and are influenced by the chemistry and structure of the body.

What size are the channels?

There are currents of varying size and strength. The largest currents integrate the bigger parts of the body: the head and limbs and the internal organs. The very smallest branches of the currents are made up of the ever-fluxing electrical charges (on molecules) that surround each cell, thus determining DNA expression and other cellular functions.¹

¹ “DNA expression” is a term that refers to activity in small sections of the huge DNA molecules. Small sections of the molecule are called on now and then to manifest a few of the thousands of bits of genetic instructions that reside on the DNA molecule. Most of the DNA molecule is inactive most of the time. Electrical charges that bathe the outside of the cell contribute to the regulation of chemical activities in the cells, including activities in the cells’ DNA. These electrical charges are manifestations of the very smallest branchings of the channels.

To appreciate just how small the channels can be, consider the one-cell organisms; in single celled organisms, their surface-of-the-cell electrical patterns *are* their “channel Qi:” their shape- and function-determining electromagnetic structure.

The largest currents that are accessed in Asian medicine run just under the skin. These larger currents have enough force that they can be felt by hand, by simply holding one's hand directly over the course of the current. It takes a bit of training to feel them, but not much. Nearly everyone can learn to feel the current in the larger channels.¹

The larger currents branch into smaller currents, and then into still smaller currents, and even smaller currents. The larger currents traverse and integrate the whole body. The smallest currents are mere electrons shifting back and forth. These tiniest electrical currents and their associated electrical fields can direct cellular chemistry. These smallest electrical "switches" and their matching electrical/magnetic fields give instruction to cellular DNA. These switches signal the cell's DNA to express genomes (execute particular genetic instructions) at the appropriate times.

Overall, the current-generated electrical signals trigger necessary biological events in the cells, organs, and the body. Together, the physical and chemical structures of the body work side by side with the electrical currents that run over and through the entire body. The former, the structures, provide some structural stability. The latter, the currents, provide the ability to grow, change and respond to an ever-changing internal and external environment.

¹ When I teach students to feel these currents, they can often feel them within a few minutes of receiving instruction. It takes much longer for them to start to trust what they are feeling. I have found that the easiest way to help them learn to trust their perceptions is to have a group of students all feel the same patient's channel flow and write down what they perceive without telling the other students. Later, when they compare notes, they are amazed that they have all felt the same things, including the same aberrations in the exact same locations. This confirmation lends a sense of objectivity to their as yet "unprovable" measurements. In my years of experience, I have only had a few students who could not learn to feel the flow of Qi.

Possibly because of the very small amperage of the currents and waves that constitute the channel system, these electrical forces that course over the body have been, until recently, utterly disregarded in western medicine. This is starting to change, as the significance of micro-currents is exploding in our faces.

We now have tiny computer chips that can almost fit on the head of a pin – and these chips are directed by micro-electrical systems. In the world of computers, we see very small electrical forces directing very large and complex systems. Even ten years ago, the general citizenry might have expressed disbelief that micro-, even nano-electromagnetic signals might be elegantly regulating the tiny electrical bonds that hold together the chemistries of the body. Today, in the extremely small world of computer chips, we see how a one-electron switch can direct an entire cascade of information to move in a particular direction. This makes it easier to understand how, in a biological system, the electric fields generated by the currents running throughout the body, and the currents generated by fields and wave patterns, including heart and brain waves, might send significant signals to tissues and chemistries in the body.

Until very recently, even most doctors assumed that crude chemical interactions, rather than subtle electrical ones, determined all cellular functions. Even into the late 1990s, many older doctors assumed that the extremely large electrical impulses that run along the nerves were the only electrical processes in the body!

Just a few years ago, in 2001, a middle-aged neurologist sharing a table with me at a wedding got up angrily from her seat and announced that she refused to sit at any table with me or ever speak to me again. This astonishing explosion occurred when, in response to her asking me how acupuncture worked, I started to explain that acupuncture manipulated electrical currents in the body, currents much smaller than those used by nerves. She bristled. Possibly she had expected some esoteric statement about Qi that she could laugh off. She loudly refuted my statement. I reasserted it. She stood up from her assigned seat, announced loudly, "Nerves are the only part of the human body that use electricity! I refuse to listen to this." and stomped off.

Maybe she had forgotten that there is almost no chemical process that is *not* electrically driven. At the time this hostile interaction took place, the research on bio-electrics had been making strides for over a decade.

Where are the main channels?

The easily accessible and detectable portions of the main channels travel in the subcutaneous fascia, a membrane just under the skin. These currents influence the underlying muscles, tendons, and bones and the overlying skin in their vicinity. Branches of these channels travel inside the body, connecting with organs and with branchings from other channels. The body-wide looping system of electrical currents is heavily interconnected.

The twelve primary channels are bilaterally symmetrical: each channel on the left side of the body has a matching one on the right side. Therefore, one might say that there are actually twenty-four primary channels, if counting the lefts and the rights separately.

All of the twelve primary channels flow sequentially: channel one flows into channel two, channel two into channel three, etc, with the twelfth and final channel flowing back into the first one and starting over. All the channels have many points of intersection with other channels and the extraordinary channels, in addition to the over-all sequential flow pattern.

The electricity in our homes flows in very limited pathways: wires. The flow of Qi in the channels is not limited in this way. Channel Qi flows everywhere. At points of multiple channel intersections, Qi is influenced by several factors. It will flow into whatever pathway offers the least resistance while simultaneously being under the influence of the thought waves and the physical and chemical structures of the body.

Nomenclature of the channel system

Primary and extraordinary channels

The channel system's largest channels consist of twelve primary channels and eight "extraordinary" channels. The primary channels are so called because they actually make up one circuitous loop. The extraordinary channels are distinct currents of energy, but they do not form a continuous loop. Also, six of the extraordinary channels do not have named acupuncture points on them. In these six extraordinary channels, their major points of decreased electrical resistance (acupoints) are at intersections with the primary channels, intersection points that are already named via the primary channels. Acupoints, or "named acupuncture points" are areas of decreased electrical resistance. They are located along the primary channels and along two of the extraordinary channels.¹

The two extraordinary channels that have named acupoints are the *Ren* (translated as "Conception") and the *Du* (translated as "Governor"). These two appear to be in the "extraordinary" class because, like the other six extraordinary channels, they are not a part of the sequential flowing loop of the primary channels. Also, the *Ren* and *Du* are exceptional in that they are singular: they are *not* bilaterally symmetrical.

The *Ren* channel runs up the midline of the front of the body, from the genitals to the bottom lip. The *Du* runs up the midline of the back, from the genitals to the top of the head, over the top, and down the front of the face to the upper lip. The *Du* channel regulates energy in the spine and brain, and in the midbrain – and regulates the release of dopamine. The energy in the *Du* channel keeps the brain and spinal currents alive. If the neck is broken and the *Du* channel severed, death or a serious brain-body disconnect will ensue. Protection of the *Du* channel plays a large role in the electrical changes that occur during a severe injury. In the upcoming

¹ As a point of interest, western-medically recognized "trigger points," areas on the body that become sensitive when something is going wrong, are areas of *increased* electrical resistance.

explanation of what goes awry in Parkinson's disease, the Du channel, in addition to the Stomach channel, will be referred to many times.

As an aside, when I refer to "large" channels or "main" channels, I am referring to *both* the extraordinary and primary channels as the "main" or "large" channels.

Channel names

The name of each *primary* channel reflects an internal organ that is located along the course of the channel or along a branch of that channel. For example, one of the smaller branches of the Stomach channel diverges from the main, skin-level portion of the Stomach channel, as the Stomach channel traverses the area just above the stomach. This branch flows deep inside the body at that point and directs the development and function of the stomach. Therefore, this channel was named "Stomach channel."

Acupoint names

The acupoints, the locations on the body that are used most often in acupuncture, are named with the channel name and a number. The numbers are assigned in sequence, starting at the origin of the channel. For example, in the case of the Stomach channel, which flows from the face to the feet, the first named point, "Stomach 1," is near the eye, at the beginning of the channel, and the last point, "Stomach 45," is on a toe at the end of the channel.

In writing, the channel names are usually abbreviated. The point named "Stomach 1" is usually *written* ST-1. In speech, the point names are *not* abbreviated into initials. For example, ST-1 is *not* called "S" "T" "one." When spoken, the points are called by the full name of channel plus number: for example, "Stomach one."

In Chinese, the points are not numbered; they each have poetic names that relate more to the function of the acupoint than to the channel.

THE PHYSICAL BODY AND THE ENERGY CONTAINED THEREIN

"The Qi is the leader of the Blood"

The body's physical structures, whose creation was directed by channel Qi, help influence the channel Qi to stay, somewhat, in the physical path that was created by the Qi.

The Qi directs the growth of the body. Growth of the body produces more Qi.

Qi directs the creation of the body, and the body provides a path for the movement of Qi. In the same manner, the great rivers of the world stay in their river beds – or stray from them in times of changed circumstances. In the river analogy, the initial water flow digs a river bed. The river bed then guides the flow of subsequent water – until a flood or geological upheaval occurs. In the same way, channel Qi will tend to flow in a healthy pattern until a severe injury or scar tissue disrupts the flow of current. When disruptive events occur, the Qi, like electricity or water, will follow the path of least resistance, and may sometimes create a new pattern. In living systems, these "new" patterns are rarely as conducive to health as the undisrupted patterns.

In Asian theory, this famous principle of energy and chemistry's mutual relationship in living systems is expressed as "The Qi (vibrational energy that is transitioning from pure thought and pure vibration into matter, including the electromagnetic energy that is condensing into electrons) is the leader of the Blood (chemistry) and the Blood is the Mother of the Qi."

The first part, “The Qi is the leader of the Blood” might be translated: “Vibrational forces, including electromagnetic and electrical forces, *direct* and sustain chemistry and biological structures and their changes. The second part, “The Blood is the Mother of the Qi” might be understood to mean: “As the structures in living systems multiply or grow larger, they provide a ever larger substrate over which an *increased* amount of electricity can flow.”

The Chinese way of saying it is snappier: the Qi is the leader of the Blood and the Blood is the mother of the Qi. The expanded version, however, might make more sense to a person trained primarily in western sciences.

Hopefully, this is enough general information to be getting on with. The next chapter provides very specific information about the four channels that go haywire in Parkinson’s disease: the Stomach channel, and the three other channels that are affected when the Stomach channel flows backwards. I’ve included the details of their pathways. You do not need to memorize the paths of the channels. However, if you take a few moments to study these Parkinson’s-related pathways, you might sudden see that all the symptoms of Parkinson’s disease fit along these channels. Considering that a person has thirty-two channels, the realization that early stage Parkinson’s symptoms only appeared on one channel, with repercussions into a mere three of the other channels, helped create our initial hypothesis of the cause of idiopathic Parkinson’s disease.

