# Cellular Memory & Zangfu Theory

## By Attilio D'Alberto

#### Introduction

"Cellular memory" is defined as the capacity of living tissue cells to memorise and recall characteristics of the body from which they originated. Organ transplantation has applied the advances of technologically driven orthodox medicine for more than 50 years. However, its only in recent years that the recipients of donated organs have begun to report strange phenomena - atypical newfound memories, thoughts, emotions and preferences that are uncharacteristic, i.e. that "seem not to belong" to the recipient. These phenomena are new and often upsetting to the organ recipient; they are perceived to "belong" to their donor. How could this be, and has the phenomenon of "cellular memory" any applications in medicine?

Host rejection of donated organs is commonplace; with considerable failure rates. Orthodox medicine uses potent immunosuppressive drugs and other technologies to prevent organ rejection. Does the phenomenon of "cellular memory" elicit the cause of organ rejection. If so, are there any applications to prevent or treat organ rejection?

The *Huang Di Nei Jing* (Yellow Emperor's Internal Medicine Classic) is the oldest and most important medical book to originate from China. Its author and origin is unknown, but is thought to have been written during the Warring States period (475- 221 BC) by numerous authors (Yanchi 1995, p2). The basic foundations of Traditional Chinese Medicine (TCM) came from this ancient classic, comprised of two books - the *Suwen* "Plain Questions" and the *Lingshu* "Miraculous Pivot". The *Huang Di Nei Jing* introduced Five-Element Theory, *Yin-Yang* Theory, external and internal causes of disease, *Zangfu* (Organ & Viscus) pathology and physiology, the interaction of *Qi-Xue* (Energy and Blood) and the *Jing-Luo-Mai* (Channels, Collaterals and Extraordinary Vessels) system. All subsequent texts built upon the foundations laid down by the *Huang Di Nei Jing*. As was the case more than 2000 years ago, the theories of the *Huang Di Nei Jing* still are the core of Chinese (and all related) clinical practice today. Can *Zangfu* Theory, as proposed in the *Huang Di Nei Jing*, shed new light on these modern findings known as cellular memory? The aim of this paper is to answer that question.

#### Discussion

The Zangfu consist of 5 Yin (Zang, solid) organs and 5 Yang (Fu, hollow) organs. Each Yin organ (Zang) has a function, an element, an associated Fu (Yang organ), taste, emotion, spirit, tone, planet, animal, season, colour, etc. Appendix A summarises these correspondences. Within this paper we shall direct our

focus to each Zang organ's emotion and spirit in relation to cellular memory. Table 1 summarises the relationships. However, in orthodox medicine, it is mainly the heart, lung, liver and kidneys (HT, LU, LV, KI), the solid Zang (Yin) organs that are transplanted.

Element Zang(Yin Organ)	Fire HT	Earth SP	Metal/Air LU	Water Kl	Wood LV
Related F (Yang Organ)	iuSl	ST	LI	BL	GB
Emotion	Joy	Pensiveness	Grief	Fear	Anger
Spirit	Shen-Mind	Yi-Intellect	Po- Corporeal Soul	<i>Zhi</i> -Will	<i>Hun</i> -Ethereal Soul
Spirit Acupoint	<i>Shentang-</i> Spirit Hall- BL44	<i>Yishe</i> -Idea Abode-BL49	Pohu—BL42	<i>Zhishi</i> -Will Chamber- BL52	Hunmen- Soul Gate- BL47

Table 1. Elements, *Zangfu* relationships, Emotions, Spirits and Spirit Acupoints\* (\*TCM practitioners apply acupuncture, moxibustion, tuina, or other stimuli at these points to normalise dysfunction of the related emotion or spirit).

TCM is a holistic medicine that views the body-mind-spirit as one and is based upon the theory of *Yin* and *Yang* as introduced by the *Huang Di Nei Jing*. *Yin* and *Yang* originates from original *Qi*. Original *Qi* or *Yuan Qi*, originally transformed into the *Qi* of heaven and earth and underlies the entire theoretical infrastructure of Chinese medicine. In its primordial state, the existence of original *Qi* meant that all things were One. The *Qi* of *Yin* and *Yang* retains this connective or unifying potential (Zhang and Rose 1999, p50).

In *Yin-Yang* theory, everything within the world is made-up of two opposing forces, each containing the seed of its opposite (figure 1). The seed or eye grows at equal rates within each sphere until it limits are achieved. This allows a constant state of dynamic flux and balance. As Suwen, Chapter 5, states: "*Yin-Yang principles guide all things. In the mutual victory or defeat of Yin-Yang, the situation will be of numerous varieties, so, Yin-Yang are the parents of variations* "(Wu and Wu 1997, p31). Rephrased, this says that *Yin-Yang interaction shapes everything and decides all outcomes. All situations and things of any kind depend on the relative strength or weakness of Yin and/or Yang, i.e. Yin-Yang interaction is the origin of all change or no change; it decides the outcome of everything. Everything on earth and in heaven is created from <i>Qi* and the qualities of *Qi* as described by *Yin* and *Yang* are rigorously expressed in all creation (Zhang and Rose 1999, p67). Therefore, everything contains the essence (seed) of the whole.



Figure 1. The Yin and Yang symbol.

Yin-Yang theory is the same as its modern western equivalent; the holographic principle and is the basis of cellular communication with the body-mind in dynamic interplay. As Gerber (1996, p48-9) points out, the holographic principle prescribes to the theory that "every piece contains the whole" and can be seen in the cellular structure of all living bodies. It is well known that every cell contains a copy of the master DNA blueprint. From these two identical theories, we may conclude that although each Zang organ contains its own function, emotion, spirit and so forth, each organ contains the functional essence of all the characteristics of the Zangfu organs and the body as a whole. After Yin and Yang the three treasures, Jing, Qi and Shen, can be understood as the next stratum of complexity in the taxonomic organization of phenomena on Chinese philosophical and medical traditions (Zhang and Rose 1999, p66).

As shown in table 1, Heart houses the Shen (mind). As Pearce (cited in Mercogliano and Debus 1999) points out, the idea that we can think with our hearts is no longer just a metaphor, but is, in fact, a very real phenomenon. We now know this because the combined research of two or three fields is proving that the heart is the major centre of intelligence in human beings. Molecular biologists have discovered that the heart is the body's most important endocrine gland. In response to our experience of the world, it produces and releases a major hormone, ANF (Atrial Natriuretic Factor), that effects every operation in the limbic structure, or what we refer to as the emotional brain. This includes the hippocampal area where memory and learning take place, and also the control centres for the entire hormonal system. Neurocardiologists have found that 60 to 65% of the cells of the heart are actually neural cells, not muscle cells as was previously believed. They are identical to the neural cells in the brain, operating through the same connecting links called ganglia, with the same axonal and dendritic connections that take place in the brain, as well as through the very same kinds of neurotransmitters found in the brain.

Quite literally, in other words, there is a brain (*Shen*) in the heart, whose ganglia are linked to every major organ in the body, to the entire muscle spindle system that uniquely enables humans to express their emotions. About half of the hearts

neural cells are involved in translating information sent to it from all over the body so that it can keep the body working as one harmonious whole. And the other half make up a very large, unmediated neural connection with the emotional brain in our head and carry on a twenty-four-hour-a-day dialogue between the heart and the brain that we are not even aware of (Mercogliano and Debus 1999).

The heart responds to messages sent to it from the emotional brain (limbic structure), which has been busy monitoring the interior environment of dynamic states such as the emotions and the auto-immune system, guiding behaviour and contributing to our sense of personal identity. The emotional brain makes a qualitative evaluation of our experience of this world and sends that information instant-by-instant down to the heart. In return, the heart exhorts the brain to make the appropriate response. In other words, the responses that the heart makes, effects the entire human system (Mercogliano and Debus 1999). Looking selectively at the spirit and emotion of the Zang, we can see that each organ "houses" its own respect spirit and emotion (table 1). Based upon the theory of Yin and Yang each Zang organ also houses the essence of all the other organ's emotion and spirit within the body. For example the HT in TCM, "houses" the Shen (mind) and is the organ that controls all the Zangfu. This is because it also "houses" the seed or essence of the rest of the Zangfu and the body as a whole. The Suwen chapter 8 stated that: "Heart is the sovereign of all organs and represents the consciousness of one's being. It is responsible for intelligence, wisdom, and spiritual transformation" (Maoshing 1995, p34). An analogy would be that of a computer. The Zangfu are the hardware, the emotions and belief systems are the software, the mind or Shen is the operating system and the brain is the microchip.

Biophysicists have discovered that the heart is also a very powerful electromagnetic generator. It creates an electromagnetic field that encompasses the body and extends out anywhere from eight to twelve feet away from it. It is so powerful that you can take an electrocardiogram reading from as far as three feet away from the body. The field the heart produces is holographic, meaning that you can read it from any point on the body and from any point within the field (Mercogliano and Debus 1999).

No matter how microscopic the sample is, you can receive the information of the entire field. The intriguing thing is how profoundly this electromagnetic field effects the brain. All indications are that it furnishes the whole radio wave spectrum from which the brain draws its material to create our internal experience of the world. Perhaps most importantly, we now know that the radio spectrum of the heart is profoundly affected by our emotional response to our world. Our emotional response changes the hearts electromagnetic spectrum, which is what the brain feeds on. Ultimately, everything in our lives hinges on our emotional response to specific events (Mercogliano and Debus 1999).

Since the seed (cell) contains the whole then we need to look closer at what actually makes up the cells of the *Zangfu*. The word "cell" derives from the Latin

"cellula" meaning "small chamber". Every cell is 99.999% empty space with subatomic bundles of energy travelling through it at the speed of light (<a href="http://www.cellularmemory.net/cmr.htm">http://www.cellularmemory.net/cmr.htm</a> 2002).

As Gerber (1996, p69) points out at the quantum level of subatomic particles, all matter is literally frozen, particularized energy fields (i.e. frozen light). Complex aggregates of matter (i.e. molecules) are really specialized energy fields. Just as light has a particular frequency or frequencies, so does matter have frequency characteristics as well. The higher the frequency of matter, the less dense, or more subtle the matter. *Yin* and *Yang* are in essence light. They make up everything that is matter, i.e. the physical cells, when light vibrates at a lower frequency and everything non- matter, i.e. the emotions and spirits, when light vibrates at a higher frequency. The emotions and spirits metaphorically trickle down from the non-physical to the physical cells via the transportation of light.

When an organ, i.e. the HT, is transplanted, the energy or cellular memory housed in the cells of the tissues also carries the higher frequencies of light (energy held within the forces of Yin and Yang). This can be attributed to Einstein's infamous equation, E=mc2. This viewpoint sees the human being as a multidimensional organism made up of physical/cellular systems in dynamic interplay with complex regulatory energetic fields (Gerber 1996, p68). If each cell contains 99.999% energy then the cell is in essence light. This allows the cell to contain the seed of the whole organism, as applied to the holographic principle. Each of the Zang spirits can also contain the seed of each other and are therefore able to communicate with each other at a higher frequency of light. If a heart is transplanted, the memory at the cellular level and at the spiritual level, the Shen, will be moved with the donated organ. In addition, the cellular essence or seed of the remaining Zang organs and their relative spirit will also be transplanted with the HT. Literally, the seed of the Hun, Yi, Po and Zhi housed in the other Zang organs will be transported to the recipient of the donated organ. The Shen of the HT is the sovereign of consciousness and in essence is made of higher frequencies of light. This is reiterated in Chuang Tzu's "The Fasting of the Heart", (cited in Diebschlag, 1997): "Look at this window; it is nothing but a hole in the wall, but because of it the whole room is full of light. So when the faculties are empty, the heart is full of light. Being full of light it becomes an influence by which others are secretly transformed".

The theory of neuro-transmitted-emotions is further supported by Pert. She states that peptides and other informational substances are the biochemical's of emotion (1999, p141). This theory is further supported by Pearsall, Schwartz and Russek (2002, p191-192). They suggest that the recurrent feedback loop of energy exists in all atomic, molecular and cellular systems and store information and energy to various degrees. Supporting evidence appears in the study by Miles Herkenham (cited in Pert, 1999, p139) that less than 2 percent of neuronal communication actually occurs at the synapse. If so then in-actual-fact the communication of various parts of the organism to other parts of the body is conducted by the release of emotions that are stored in the body via the release of neuropeptide ligands, and that memories are held in their receptors (Pert

1999, p147). Neuropeptides are found all over the body; HT, LU, brain etc. When a receptor is flooded with a ligand, it changes the cell membrane in such a way that the probability of an electrical impulse travelling across the membrane where the receptor resides is facilitated or inhibited, thereafter affecting the choice of neuronal circuitry that will be used (Pert 1999, p143). By affecting the route of the neuronal circuitry, a different emotion is initiated.

The study by Schwartz and Russek (1997, 1998a, 1998b, cited in Pearsall et al. 2002, p192) gives more evidence that the recipient's rejection process of a transplanted organ, may reflect not only rejection of the material organ (the cellular component), but also rejection of the donated cellular memory (the information and energy stored within the transplanted donor cells). If it is correct, this theory has profound implications for the use of TCM in recipients of donated organ-transplants. As Pert (1999, p141 and 192) states, emotional expression is always tied to a specific flow of peptides in the body, repressed traumas caused by overwhelming and chronically suppressed emotions (especially those involved in the traumatic experience of death) result in a massive disturbance of the psychosomatic network and can be stored in a body part.

All of the following are reports taken from donor's relatives and recipients who have undergone HT transplantation. It is worth noting that these reports involve a major incident in a person's life and are therefore very vivid. Most organ transplant organ recipients are often too ecstatic at the prospect of living a 'normal' life to notice cellular memory phenomena, but some still report having to get used to the 'acnes and pains' of a new body part.

The first report comes from a 19-year-old donor who was killed in an automobile accident. The recipient was a 29-year-old woman diagnosed with cardiomyopathy secondary to endocarditis. The donor's mother reported that before her daughter died she kept saying how she could feel the impact of the car hitting them. The HT recipient reported that she could actually feel the accident that her donor had been in (Pearsall et al 2002, p198).

This report corresponds to Maciocia's (1993, p11) theory that the mind (and therefore the heart) can "feel" them the emotions. Although from a holographic perspective (along with *Yin* and *Yang*) all the *Zang* related emotions and spirits of the donor, especially the strong final emotions of her injury that lead to her death, will be transplanted within the HT cells. Maciocia (1993, p11) goes on to explain that the emotions affects all the other organs too, but it is only the mind that actually recognizes and feels them. Only the HT can feel it because it stores *Shen* (the mind), which is responsible for insight. This is an accurate account of the HT. But viewed from the holographic/*Yin-Yang* perspective, the HT contains the essence of all emotions housed within the body. The HT transplantation will also bring about the transplantation of the other *Zang* characteristics, just as a KI transplant would bring its prevailing emotion and spirit. *Suwen*, Chapter 8, reiterated the importance of the HT: "As the heart is the monarch in the organs, it dominates the functions of the various viscera" (Wu and Wu 1997, p56).

The second report refers to a 34-year-old donor, a police officer, killed while trying to arrest a drug dealer. The recipient was a 56-year-old college professor diagnosed with atherosclerosis and ischemic heart disease. The donor's wife reported that a man with long hair and a beard shot her husband in the face. The last thing he must have seen was a terrible flash. The recipient reported that he began to have dreams a few weeks after his HT transplant. He would see a flash of light right in front of his face that began to feel really hot and would burn. He would then get a flash of a Jesus-like man just before the flash of light (Pearsall et al 2002, p202). Again, we can see that the HT transplant carried memories of the donor. Could it also be that the *Hun* (ethereal soul) "housed" in the LV has apart of itself in the HT and that the traumatised Hun, unable to express its suppressed emotion (due to the death of its host), must express it within the recipient's body, via the *Shen*?

According to Abd-ru-shin, it appears that the soul, or etheric body (LV), draws the astral body with it out of the physical body, but in reality the soul only pulls it off the physical body, because there never was a fusion but only a sliding into one another, like a collapsible telescope (cited in Tymn 2001). The heart seed atom does not depart until the astral form is fully built and, depending on the person's karma, this may take anywhere from one to fifteen hours are death. Organs that are to be used for transplantation have to be removed immediately after the death of the patient has been pronounced. However, removing any organs, especially the heart, before this is completed will severely hinder the soul's progress. (Goble 1993).

In Rinpoche's (1993) book 'The Tibetan Book of Living and Dying', he states that it might take up to three-and-a-half days for the consciousness to leave the body. If the body is touched in a certain place — an injection [or acupuncture needle], for example, it may draw the consciousness to that spot. The consciousness of the dead person may then leave forward the nearest opening instead of through the fontanel, at the crown of the head. If this is possible, then acupuncture may be used at specific locations to stimulate the release of the departing soul. As Abd-ru-shin states above, the soul leaves through the etheric body, via the LV, aswell as through the HT. Perhaps by using the acupoint listed in table 1, Shentang-Spirit Hall-BL44 and adeptly named Hunmen-Soul Gate-BL47, then the soul may be allowed to leave and therefore reduce the quantity or organ rejections.

#### Conclusion

Recent medical literature has begun to publish this fact that recipients of transplanted organs report strange phenomena after surgery, including atypical newfound memories, thoughts, emotions and preferences that are uncharacteristic, i.e. that "seem not to belong" to the recipients. However, to explain how and why the phenomena arise, orthodox researchers suggest that the use of immunosuppressant drugs and the stress of surgery modulate brain perception; this altered perception causes the patient to imagine the phenomena. In other words, the phenomena are imaginary, neurochemically-

induced, and as unreal as those of a "bad trip" experienced by a person under the influence of a psychotropic drug, such as LSD or alcohol.

I disagree that the phenomena are imaginary, induced by the drugs or surgical stress. I suggest that *transferred cellular memory may explain them*. The concept of organs having emotions, and therefore memories, has existed for thousands of years but orthodox researchers have difficulty accepting that the concept could be true.

It is important to continue researching this area, because the reality of "organ memory", if it can be confirmed, has profound medical implications, such as:

Can TCM assist recipients of donated organs to overcome "transferred cellular memories" that upset them? For example can TCM help recipients with dream-disturbed sleep, as in the second report, and release or balance the unexpressed emotion of their donors using the acupoints shown above?

Based on the theory that organ rejection may relate partly to the rejection of adverse "transferred cellular memories", can TCM play a role in overcoming the rejection of donated organs, again by the same means?

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### **Biography**

Attilio D'Alberto graduated from a program jointly run at Middlesex University and Beijing University of TCM with a BSc (Hons) in Traditional Chinese Medicine (Middlesex University) and a MD (Beijing University). He currently practices in various busy clinics in London. Correspondence: <a href="https://www.attiliodalberto.com/contact.php">www.attiliodalberto.com/contact.php</a>

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**Appendix A: Five Phase.** Correspondences and characteristic aspects of the Zangfu (Adapted from Maciocia 1989).

Element	Wood	Fire	Earth	Metal	Water
Season	Spring	Summer	Late Summer	Autumn	Winter
Direction	East	South	Centre	West	North
Colour	Green	Red	Yellow	White	Black/Blue
Taste	Sour	Bitter	Sweet	Pungent	Salty
Climate	Wind	Heat	Dampness	Dryness	Cold
Growth Phase,	Birth	Growth, Puberty	Transformation,	Harvest,	Storage, Senility,
Development			Maturity	Retirement	Decay, Death
Stage .					
Number	8	7	5	9	6
Planet	Jupiter	Mars	Saturn	Venus	Mercury
Yin-Yang	Lesser Yang	Utmost Yang	Centre	Lesser Yin	Utmost Yin
Animal	Fish	Bird	Human	Mammals	Shell-covered
<b>Domestic Animal</b>	Sheep	Fowl	Ox	Dog	Pig
Grain	Wheat	Beans	Rice	Hemp	Millet
Zang (Yin Organ)	LV-Liver	HT-Heart	SP-Spleen	LU-Lungs	KI-Kidneys
Zang Functions	Stores Blood, regulates flow of <i>Qi</i> , controls sinews	Governs Blood, controls Blood vessels	Governs transformation and transportation, controls Blood, controls the muscles and the four limbs	Governs <i>Qi</i> and respiration, controls channels and Blood vessels, controls dispersing and descending, regulates water passages	Stores Jing- essence; governs birth, growth, reproduction and development, produces marrow, fills the brain and controls bones, governs water, controls <i>Qi</i> reception
Emotion	Anger	Joy	Pensiveness	Grief	Fear, Terror, Fright
Spirit	Hun-Ethereal Soul	Shen-Mind	Yi-Intellect	Po-Corporeal Soul	<i>Zhi</i> -Will
Related Fu ( <i>Yang</i> Organ)	GB-Gallbladder	SI-Small Intestine	ST-Stomach	LI-Large Intestine	BL-Bladder
Fu Functions	Stores and excretes bile, controls judgement, controls sinews	Controls receiving and transforming, separates fluids	Controls rotting and ripening of food, controls transportation of food essences and <i>Qi</i> descent	Receives from the Small Intestine, reabsorbs good stuff and excretes bad stuff	Removes water by Qi transformation
Typical sound	Shouting	Laughing	Singing	Crying	Groaning
Opens Into (Sense Organ)	Eyes	Tongue	Mouth	Nose	Ears
Sense	Sight	[Speech]	Taste	Smell	Hearing
Tissue governed	Sinews	Vessels	Flesh, Muscles	Skin, pores	Bones, Teeth, "Marrow" (spinal cord, brain)
Related bodily action	Body movement	Qi-Xue movement	Body strength, power	Respiration, excretion	Stability (physical & mental)
Note/Tone	Jue - E	Zhi - G	Gong - C	Shang - D	Yu - A