The Pulse and the Individual By Leon Hammer, MD

## I. INTRODUCTION

Chinese medicine is distinguished from allopathic medicine in a variety of ways. Most centrally it possesses the tools to access an individual beyond his "condition" or "disease." We can delineate a person with multiple sclerosis from the disease multiple sclerosis, a person with schizophrenia from schizophrenia. Largely people identify their individuality with their psychological selves. Our discussion today will concentrate on this psychological self. (We do this with the full understanding, that apart from this egocentric perception, in the larger of view of physiology the physical and psychological "individual" are indistinguishable.)

We can communicate this sense of self to the patient, illuminating who they are in ways that they have not been able to articulate to themselves, and we can do this quickly. This profound and shared understanding creates a rapid and strong bond between practitioner and patient that can otherwise take time, if ever achieved, and is usually bereft of all of the issues that arise when, through verbal inquiry, an authority—the doctor—"analyzes" the deeper recesses of another person's personality. Elaine Stern, a student of Contemporary Chinese Pulse Diagnosis (CCPD), accurately observes that "the pulse is used as a place to pay attention to the patient on a different level, without talk, and with deep attentiveness to the patient's rhythms and tone . . . to make an interpretation that is of value, not just to the diagnosis but to the patient, directly, as well."

Through two case studies this paper explores the capacity of CCPD to reveal the psychological individual, as well as the opposite capacity of the patient to obfuscate the pulse's ability to know them.

I must make it clear that each impression made from the pulse must ultimately require confirmation from the patient as well as from other supporting signs before any management plan based on these findings is implemented.

Familiarity with the CCPD pulse form and the system of pulse diagnosis that it represents is not necessary to the comprehension of what follows. Simply allude to the positions on the form and follow the interpretations in the text that are important to the message of this paper. We are not instructing pulse diagnosis, but, rather, we are demonstrating one significant use of a sophisticated system that can only be learned by hands-on instruction over time.

## II. ILLUMINATION

# A. CASE ONE - IMPASSE

H. is a twenty-two year old student who has consistently refused to see a physician and finally acceded to letting me take her pulse in her mother's presence, on the condition that I ask her no questions and receive no history from her mother. Therefore I knew nothing about her when I took her pulse. The following is the pulse form.

Contemporary Chinese Pu		Refer b		1				Date:	6/12/		
Name: #79	Gender: F	Age:	22	<b>Hgt:</b> 5'8"	l.	Wgt:	190	Occup:	Studen		
<b>Rhythm:</b> Rate $\pi$ at rest – es	pecially with move	ement		Rate/Min: E	_			58 <b>W/E</b> x	kert 90	Chng	3
				Other Rate	s Dui	ring F	Exam:				
First Impressions of Uniform				<u>Depths</u>		~					
Muffled (2); Tense; Robust				Above Qi:			on (4+)				
Occasional Bursts of $\eta$ Pour	iding			Qi:			Robust P	ND (2+)			
				Blood:	Hea			· · · · · · · · · · · · · · · · · · ·			
Left Side:	Rigi	nt Side:		Organ:		-	obust PN	. ,			
				O-B:			obust PN				
				0-0:	Ten	-	obust PN	ID (2+)			
DDINGE	AL POCITIONS			Waveform		Hesi		TADVDO	CITION	7	
PRINCIPAL POSITIONS				T	CC			TARY PO			
	al Position	R:		L:			neuro-p	sychologi		R:	
Tense;	Muffled;			Muffled (4)	,				Vibration	(3);	
Robust PND (3+);	Thin;			Doughy;	:	(2)			ty $\pi$ (2+);	1 (1)	
Slippery (3);	Tight; Smooth Vibra	ntion v Dou	ah.	Rough Vibra	ation	(3)		Dougn	y; Muffle	1 (4)	
~ Rough Vibration (3); <b>Inflated</b>	Vibration;	ation y Kouş	311	L:			Snac	ial Lung		R:	
Illiated	Intensity $\pi$ (3	)·		Tense; Robu	ıst PN	JD (3			Rough V		3).
	~ Slippery;			Slippery (3)		10 (5	),		pery (3);	ioration (s	′),
	o Shippery,								ty $\pi$ (3)		
	F/A								-5 (-)		
	1/11							Pleura			
							I	leart			
				Mitral Valv	ve: M	ufflec			Smooth V	/ibration;	
Pericardium				~ Slippery							
L: Middl	e Position	R:						Large Ve	ssel		
Muffled (2);	Muffled (2);			L:			Dia	phragm		R:	
Intensity $\pi$ (2);	Tense;			Inflated (1/2	2)			Inflate	d (1+)		
Wide;	Qi Depth ι;						]	<u>Liver</u>			
Qi Depth ι;	Robust PND			Engorged:							
Rough Vibration (2);	Intensity $\pi$ (3)	)		Distal			Radial		Ulı	nar P	
ι Substance (3);				Gall Bladde							
Diffuse (3)				Thin; Hard -	– Lea	ther;	Intensity	$\pi$ (2+); Sl	ippery; ~	Choppy	
О											
Tense; Robust PND (2)											
				Spleen-Stomach							
				Esophagus				$\mathbf{S}_{1}$	pleen	P	
					Stom-Pyl. Exten: Muffled (3+); Deep; Feeble; Reduced Pounding						
				Muffled (3+	-); De	ep; Fe	eeble; Re	educed Por	unding		
				Peritoneal (	Cavit	y/Par	icreas	P			
L: Proxim	al Position	R:		Duodenum							
Deep;	Deep;			Large	e		Int	estines		Small	

		•					
	Muffled (3); Tense – Feeble o Absent	$\begin{array}{ll} \text{Muffled; Tense;} \\ \text{Intensity } \pi \text{ (3) } \nu \text{ F/A} \\ \sim \text{Rough} \end{array}$					
	Muffled (4+); Tense; Intensity $\pi$ (2);	/Lower Body R:  Deep and Feeble; Rough Vibration;					
Three Burners	Deep  Comments:	Intensity π (2)					
Upper: Middle Lower:		FQ - $\pi$ = Change (1 - 5) = low - high degree					

#### **OBSERVATION**

Restricting ourselves for the moment to our goal of defining the individual, let us examine this pulse form for clues to the uniqueness of this young woman's psychological condition. The qualities particularly important to our discussion are highlighted in bold.

Beginning at the top of the form on the right side at the position under Depths we see "Above Qi" as a Cotton [4+]. (The number after the quality ranges from 0 to 5 with the least serious the lower the number).

This is a sign of a person being and feeling and resigned to being "stuck" in life, similar to the intention of Thoreau's statement that "all men lead lives of quiet desperation." I call this the "resignation" pulse. People with this sign are aware of suppressing feelings and actions that leave them without the power and/or courage to move forward in life. (Suppression is distinguished from repression which in the former there is awareness of their dilemma, whereas in the latter, feelings and ideas are out of awareness.) If we ask ourselves why this young lady feels impotent to act, we find a possible answer at the proximal positions whose qualities of Deep And Feeble and Changing Qualities (separation of yin and yang) suggest profound qi-yang-essence deficiency.

Kidney qi-yang-essence is the foundation on which the function of the entire organism rests and from which it derives the will power as well as the courage and faith to move and act in the face of the never ending unknown. The qualities indicating this deficiency could explain the Cotton [4+] indicating her extraordinary immobility, inability to act and feeling of "quiet desperation." [She later revealed being born with a congenital defect (Arnold-Chiarri Syndrome). Congenital defects are associated with kidney essence deficiencies.]

When we ask ourselves does she have a direction for action, we examine the left middle position where we find considerable signs of deficiency, Qi Depth Diminshed [\frac{1}{2}], Reduced [\frac{1}{2}] Substance [3]; Diffuse [3], all signs of liver qi deficiency and changing qualities, a sign of the severe separation of yin and yang. As elucidated in Dragon Rises, Red Bird Flies, the wood phase (liver and GB) involves direction, the ability to advance and retreat appropriately to conditions involving short and long term planning and decisions. Y

And if she had the power to act and the direction, does she have the emotional stability to carry forward her suppressed intentions? Here we turn to the Rhythm<sup>vi</sup> in the upper right hand corner of the chart, to the Left Distal Position<sup>vii</sup> and to the Mitral Valve position<sup>viii</sup>. We find here evidence of instability in the following qualities and the conditions they indicate.

Wide mood swings are indicated by the Rhythm: Rate Changing at Rest and Phlegm Misting the Orifices (Left Distal Position- Slippery [3]). The former and Robust Pounding [3+] at the Left Distal Position are signs of excess heat in the heart and heart qi agitation.

Further indications of a desperate attempt to maintain emotional stability are signs of a obsessive-compulsive thought pattern as evidenced by the Hesitant Wave (that is also a sign of heart yin deficiency.)

In the same venue are indications of excessive worry revealed by an Increase of Rate on Exertion of 32 beats/minute, a sign of heart blood deficiency, the result of and further cause of excessive worry.

We find evidence of difficulty with concentration and memory with the Phlegm Misting the Heart Orifices<sup>ix</sup> and with Slipperiness at the Mitral Valve position.

The possibility of a jealous and vengeful personality is associated with the Inflated quality at the left distal position, a sign of heart qi stagnation from heart shock, probably of recent origin. The Inflated quality is associated with trauma in a person with mature qi or with a breech birth. A Flat quality would appear in the LDP if the shock occurred when she was much younger and her qi more immature, or with the cord around her neck at birth. Earlier or later "insult" is determined by a deficient (earlier) or sufficient (later) proximal positions (kidney jing) and by the history. Revealed later was the death of her beloved brother in a motorcycle accident when she was 15.

#### DISCUSSION

When presented with these findings the patient expressed surprise and relief that someone could describe exactly how she felt even more precisely

than she could without knowing anything about her life history. Indeed, students of CCPD have observed that "interpretation of the pulse, when discussed with the patient, is a vehicle for communication and for therapy, and can in and of itself help succor and transform a patient's problem and contribute immensely to his or her progress."

Otherwise she expressed relief that we could arrive at a plan to address the above that included the practice of qi gong for her kidney yang-essence deficiency, and herbs and acupuncture for the instability in her heart and the qi-yang deficiency in her liver.

That her <u>chief complaint was depression</u> was predictable. Her symptoms included overwhelming sadness, inadequacy, feeling "too fat," internalized anger at self, "all her fault," and procrastination when depressed.

The frustration accompanying an inability to act on one's own behalf is usually accompanied by depression. If one cannot move forward, one retreats or is frozen. If she had consulted an allopathic physician she would have been referred to a psychiatrist who would have prescribed medication for that condition and perhaps psychotherapy. However valuable the latter, psychotherapy is unable to address the energetic aspects of her condition without which, in my experience, recovery is much more difficult.

The <u>pulse delineated many other conditions</u>, the combination of which are likewise unique to her, but outside the scope of this article and would require space irrelevant to the focus of this article. Excluding already discussed findings, they are listed here for completeness without discussion.

<u>General</u>: heat in blood; qi and blood stagnation in Pelvis/Lower Body [LPP Choppy 3](severe). <u>Neoplastic Process</u>: [FI-Muffled 2]-mild.

<u>Lung</u>: separation of yin and yang [Changing quality], damp heat,SLP [Robust Pounding 3, Slippery 3] blood deficiency RDP-Thin], yin deficiency[RDP-Tight], qi stagnationRDP-Muffled] and parenchymal damage [RDP-Rough Vibration].

Liver: engorged 1/3 (mild), gi stagnation [Muffled 2].

<u>Gallbladder:</u> damp [Slippery], micro-bleeding [Choppy], hardening of the walls (leather quality) and diminished function [Intensity Changing 2+].

<u>Spleen-Stomach-Intestines:</u> spleen qi deficiency [SPEP-Deep, Feeble], stagnation in small and large intestine [Muffled 3]. LI-SI: impaired function [Changin Quality to Absent].

<u>Pelvic Lower Burner:</u> blood [LPP- Choppy 3+], and qi stagnation[Muffled [4+] and qi deficiency [Deep, Feeble].

Other complaints\_later revealed but not immediately relevant to the purpose of this paper were:

Skin: dry itchy skin (pressure feels better so mostly at night); dry skin on face; acne with pus especially before period.

<u>Nutrition:</u> low blood sugar (light headed, cannot think clearly, chest constricts if does not eat, feel these symptoms after two hours, the more she eats the longer she goes without the symptoms, the more healthfully she eats the longer she goes); if she eats too much she feels nauseated.

<u>Energy:</u> constantly tired, sleeps at any time, no combination of hours helps, tired when awake, hard to get out of bed, always cold.

<u>Weight</u>: loses weight when studying, stress sometimes causes weight gain, is mostly on a plateau but gains when dieting and loses when not.

Nails: soft, peel easily.

Immune System: is sick often—about every 3-4 weeks, coughing, constricted chest, runny nose, sore throat went away, glands swell closed but no mucous, no defense against whatever illness is around and has harder time getting rid of it.

<u>Lockjaw</u>: TMJ for four months since wisdom teeth removed two months ago, grinds teeth.

<u>Urination</u>: frequent (ten to fifteen times a day), nocturia two times a night.

Bruising: bruises easily and always takes a long time to clear up on arms and legs.

<u>Musculo-Skeletal</u>: sore muscles and joints, neck and back are in knots, cramps in leg and feet, periodically her hands swell and palm of hand and between thumb and forefinger and joints ache, ankles, knees and wrists pop; all worse in morning or evening when not active.

<u>GI system</u>: sensitive stomach, moody eater—what she likes one day she might not eat the next day—nauseated with low blood sugar, eats too much, dislikes just the idea or odors of certain foods or "heavy foods" such as apple juice or orange juice, even water, has BM one to two times per day.

<u>Menstrual cycle</u>: regular, sensitive to other women around, short with excessive bleeding throughout, clots and dark, cramps are sometimes very severe before and one to two days during menstruation.

### **CONCLUSION**

A twenty-two year old woman presented herself refusing to discuss her problems with a doctor but was willing to have her pulse taken with the encouragement of her mother who was present throughout the session but would give no history.

Qualities on her pulse revealed her to be and to feel exceedingly resigned to being stuck in life, Cotton [4+], without the strength or will (kidney yangessence), direction (liver yang deficiency) or emotional stability (heart qi agitation, blood deficiency and phlegm misting the orifices) to move through this impasse.

Her reaction to this reading was a great sense of amazement and relief that she was known and understood in a way that she felt she could not communicate in words, that she was no longer alone with her inner torture and paralysis and could hope for a solution in a working relationship.

### B. CASE TWO - OBFUSCATION

This 55 year old woman presented herself with a chief complaint of chronic hepatitis, hip pain, and hypertension with the admonition that she would do nothing to change her lifestyle that included a fast-food diet high in trans-fats and being very overworked.

A short, unrevealing history from her primary therapist accompanied the patient. However, it is of no relevance to this presentation since the only reason for her referral was to treat the chronic hepatitis.

I took her pulse noted below with the issues important to our discussion again highlighted in bold.

### **OBSERVATION**

With little history and some blood chemistries, I studied the pulse for some clues about this woman. I was immediately puzzled by two findings.

The first was the constant change of all the qualities as I accessed them. As an example, Tight became Feeble and then Slippery became suddenly Choppy all within a few seconds, and this took place randomly in all positions. How was I to interpret a pulse with this degree of constant instability of qualities? I pondered this for a long time.

The second finding involved the left middle position where the one thing that remained stable was that the pulse was divided into a very Thin and Tight vessel laterally and a Tense, Robust Pounding vessel medially.

This is known as the Split Pulse,<sup>x</sup> first reported by Efrem Korngold, LAc, about twelve years ago and since confirmed at least fifty times by a variety of practitioners. It is associated with a preoccupation with death—either one's own or of someone important. Though the presence of a life threatening

disease can be the issue, more often we have found a preoccupation with suicide to be the source.

The third finding is the Cotton [4], a sign of resignation discussed in the context of the first case.

Other aspects of the pulse not relevant to this paper are:

- A. Qi-Yang deficiency: Heart qi [Absent], Lung qi [Absent]; Liver [Qi Depth Diminished 3], + Reduced Pounding]-Spleen-Stomach [SPEP Absent; Intestines Feeble], Kidneys [Absent & Feeble], Pelvis Lower Body [Feeble]
- <u>B. Blood Stagnation:</u> Choppy in tissues (lower burner [3]; in blood: damp heat [Heat and Slippery]
- C. Blood Deficiency: Kidneys [Thin]
- <u>D. Elevated Blood Sugar:</u> (Qi Depth Slippery and Rate Normal initially before entire left side became Slippery);
- E. Excess damp heat: (Slippery in the Blood, Left Side, Special Lung Position, Spleen, Gall Bladder, Pelvis Lower Body positions
- <u>F. Yin Deficiency:</u> Tight- every principle position [4] except Spleen position;
- <u>G. Damp heat</u>- tissues from excess (first impression of uniform qualities [Robust Pounding [3], Special Lung Position [3+]), O-B &O-O= slippery;
- H. Neoplastic Activity: Muffled quality overall (First Impression Of Uniform Qualities -3);
- I. Toxicity: First Impression Of Uniform Qualities, Right Side- Choppy.

Name: #18	Gender: F	<b>Age:</b> 55	<b>Wgt:</b> 198	Occup: Executive			
Rhythm: Normal	Rate/Min: Begin: 70 End: 72 W/Exertion: Other Rates During Exam: 84						
First Impressions of Uniform Tense; Rob. PND (3); See "Comments" below	Qualities Muffled (3); Intensity Changing (2);	Qi: Tense	Depth: Cotton ( -Tight; Slippery	(4)			
Left Side:	Blood: Heat; ~Slippery Organ: Tense-Rob. PND (4); Slippery						
Slippery	O-B; O-O - Slippery						
		Wave: Hesit					
Principal Positions	ID W D	•	tary Positions	11 ' I D			
L: Dista	l Position R:	L:	Neuro-ps	ychological R:			
Absent w/rare episodes of Thin; Tight qualities	Absent w/rare episodes of Thin; Tight qualities	R. Vibration		Doughy; Intensity Changing Slowly			
		L:		ing Position R:			
		R. Y	nse; Slippery; Vib.; Intensity anging (2+)	Tense; Rob. PND (3+); ~Slippery; Rough  Pleura:			
			Не	eart			
	Mitral Valve: Smooth Vibration; Slippery						
L: Midd	lle Position R:	Enlarged: -	Τ.	arge Vessel:			
SPLIT		L:		nphragm R:			
Qi Depth Diminished Muffled (2+)	Qi Depth Diminished Muffled (2+) Fense	Flat, Muffled	d; Inflated (1)	Inflated (2+); Intensity Changing slowly (3)			
Rob. PND changing to	-Slippery ntensity Changing (3) Reduced PND	Engorged:: Distal: Gall Bladde	Radial:	ver  - Ulnar: Tense; Slippery; Inflated			
Feeble	Feeble Tense; Rob PND w/movement			Spleen-Stomach Esophagus: Spleen: P Peritoneal Cavity/Pancreas: Stom-Pyl. Exten: Muffled (2+); Thin; Tense; Choppy			
L: Proxima	al Position R:		`	<b>\$</b>			
Thin. Tight	Danni Fashla	Duodenum:		Absent			
	Deep; Feeble Muffled (3)	Large:	Intestines	Small:			
<b>↑</b>	(3)		PND; R. Vib.	Feeble			
Tangai Rah, BND		Intensity Cha					
Tense; Rob. PND	Γhin; Tight	L:	Pelvis/	/Lower Body R:			
<b>1</b>		Muffled (3);	Tense↔Tight;	Deep; Muffled; Slippery;			
Feeble	•	~Choppy; In	•	Tense ↔ Tight; Choppy;			
Intensity _ Slowly	Absent	Cha	anging (3)	Feeble			
Three B Upper: Middle: Lower:		Cha 2. <b>QUALIT</b>					
		▲ = Change	e (1	5) = low high degree			

### **DISCUSSION**

Upon some considerable puzzled reflection into the wee hours of the night, it suddenly occurred to me that perhaps this person did not want me to "read" her (the ever changing qualities) and possibly that what she did not want me to know was that she was contemplating suicide (Split Pulse). One has to entertain the idea that this person is undergoing an emotional crisis that she not willing to share or resolve, experiencing herself at an impasse Cotton [4].

In the subsequent meeting she was curious about my findings, and I told her that "the pulse tells me" that she is concealing something and that perhaps it has something to do with contemplating taking her life.

She then revealed to me that her disabled elderly parents had come to live with her, and seeing them so infirm in their old age made her realize that she did not want to grow old that way. Reviewing this and the emptiness of her current life, she was thinking that perhaps she should end it before old age began. She did not want anyone close to her to know these thoughts, and as part of a close-knit group of well-meaning women, she was afraid they would actively intervene with her still vague plans to end her life—an interference with which she was not ready to cope.

With further discussion she agreed to speak with some of these women, and though at this point she still seems to be trying to die young through her life-threatening lifestyle, she has abandoned her suicidal ruminations and has found, in various ways, some joy in life.

### **SUMMARY**

The patients presented in this paper, two of hundreds like them, represent the capacity of CCPD to reveal the individual in great detail as distinct from their condition or disease and in these instances make available life-giving and life-saving intervention. In serving the "individual" in this manner we are realizing Chinese medicine in its most profound and sophisticated role, touching the essence of people and protecting that essence from self-destruction.

# Some Notes on the Development of CCPD

There are many models of pulse diagnosis practiced within East Asian medicine. CCPD employs a 3-depth model; as such, it incorporates earlier models from the Nei Jing, Li Shi Zhen (1564), and Zhang Jie Bing (1624).

Like the Nei Jing Su Wen model, Yin organ energetics are emphasised. Therefore the Yin organs (Heart, Liver, Lung, Kidney yin and Kidney yang) and the Stomach are seen as the significant energetic factors and are assigned the 6 pulse positions.<sup>xi</sup> Incorporating the three depths, the Qi

depth represents the contribution of each yin organ to the total qi of the organism; the Blood depth, the blood; and the Organ depth relays information of the organ itself.

Perhaps the most intriguing aspect of this pulse system lies in the story of the two men associated with its development in modern times. Dr. John HF Shen and Dr. Leon Hammer, M.D. are listed in Volume I of the AAAOM's "Pioneers and Teachers AAAOM Historical Project." Their association lasted for over 27 fruitful years until Dr. Shen died in 2000.

Dr. Shen trained in the lineage of the Ding tradition, both as a formal student in the Shanghai College of Chinese Medicine and as an apprentice in this important current of medical scholarship.xii Afterwards, he joined the intellectual exodus from China prompted by the Communist revolution and continued to practice in Taiwan and Southeast Asia. Whilst in Vietnam, he is believed to have encountered a pulse tradition passed down from father to son in the Mekong delta. The model documented in Fourth Uncle in the Moutain: A Memoir of a Barefoot Doctor in Vietnam is strikingly similar to that of Dr. Shen. The pulse positions described in this text are nearly identical to that in CCPD.xiii

Contemporary Chinese Pulse Diagnosis is the result of Dr. Hammer's refinement of the pulse system he inherited through the tutelage of Dr John Shen. With 80 qualities, 6 Principal positions, 22 Complementary positions, and 8 Depths it offers an extraordinary amount of information about a person's past, present and future health. The capacity to realise Chinese medicine in such depth and breadth has inspired many practitioners who seek this realisation to master its complexity.xiv

### BIO

Dr. Leon Hammer is a medical doctor, psychiatrist, and psychoanalyst who has studied, practiced, and taught Oriental medicine for 35 years. He is currently chairman ofthe Governing Board of Dragon Rises College of Oriental Medicine where he teaches and writes. He is the author of many articles to be found at: www.dragonrises.edu, and of *Dragon Rises Red Bird Flies* and *Chinese Pulse Diagnosis*: *A Contemporary Approach* (Eastland Press). For further information please contact www.leonhammer.com

ii Stern, Elaine, Lac. Personnel communication. 2008.

iii Hammer, Leon I. MD. *Chinese pulse diagnosis: a contemporary approach (revised)*. Seattle: Eastland Press, 2005. 236-238, 470.

<sup>&</sup>lt;sup>iv</sup> Hammer, Leon I. MD. *Dragon rises red bird flies (revised)*. Seattle: Eastland Press, 2005. chapter 8 <sup>v</sup> Ibid., chapter 9.

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vi Hammer, Leon I. MD. *Chinese pulse diagnosis: a contemporary approach (revised)*. Seattle: Eastland Press, 2005. 6:113-124 (especially p. 115).

vii Ibid., 12: 393-419.

viii Ibid, 12:.401.

ix Hammer, Leon I.. MD "Awareness in Chinese medicine." *The American Acupuncturist* 41 (fall, 2007):10.

ix Stern, Elaine, Lac. Personnel communication. 2008.

<sup>&</sup>lt;sup>x</sup> Hammer, Leon I. MD. *Chinese pulse diagnosis: a contemporary approach (revised)*. Seattle: Eastland Press, 2005. 380.

xi The Yellow Emperor's Classic of Medicine. A New Translation of the Neijing Suwen with Commentary, Trans. Ni, Maoshing. Boston: Shambala, 1995. 47.

xii Scheid, V. Currents of Tradition in Chinese Medicine; Seattle:Eastland Press, 2007. 394.

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