

Chinese versus French Perspectives on the Channel System

by John McDonald

The Jing-Luo systems (Channels and collaterals; meridians and secondary vessels) are a network of pathways within the human body which had already been clearly delineated when the Yellow Emperor's Classic of Internal Medicine (Huang Di Nei Jing) was written about 300BC. The Jing-Luo systems are comprised of the following pathways:

- 12 Jing (Principal meridians/ channels)
- 12 Jing bie (Divergent, Distinct or Separate channels)
- 12 Jing jin (Muscle or tendino-muscular channels)
- Luo mai (Luo or Connecting vessels; collaterals) consisting of:
 - 15 Luomai,
 - 365 Bieluo and
 - an unspecified number of Sun-luo (tiny capillaries)
- 12 Pi bu (Skin zones; cutaneous regions)
- Qi jing ba mai (8 Extra/Extraordinary/Curious vessels)

Descriptions of the pathways of most of these channels and vessels were given in the Huang Di Nei Jing and Nan Jing (Classic of Difficulties), the major references being:

12 Jing (Channels) Ling Shu, Chapter 10
15 Luo mai (Luo vessels) Ling Shu, Chapter 10
12 Jing bie (Divergent channels) Ling Shu, Chapter 11
12 Jing jin.(Muscle channels) Ling Shu, Chapter 13
12 Pibu (Skin zones) . Su Wen, Chapter 56
Qi jing ba mai (8 Extra vessels) Nanjing, Chapters 27-29

(The Huang Di Nei Jing is divided into two sections, the Su Wen (Simple Questions) and the Ling Shu (Celestial Pivot) each containing 81 Chapters. The first English translation in paperback by Ilza Veith was an extract only, covering the first 34 chapters of the Su Wen, but none of the Ling Shu. All references to the Yellow Emperor's Classic in this article have been taken from the Henry Lu translation of the complete Su Wen and Ling Shu and also the Nan Jing.)

The majority of English language publications which deal with the Jing-Luo systems have been derived from the works of French authors Dr Nguyen Van Nghi and the late Dr A Chamfrault, who were the first authors to deal with the channel systems in great detail in a European language. British writers Dr Felix Mann and, more recently, Royston-Low ('Secondary Vessels of Acupuncture') relied heavily on these earlier French works. Interestingly, the German scholar Manfred Porkert in "Theoretical Foundations of Chinese Medicine", who used his own translations directly from Chinese sources made some statements on certain aspects of Jing-Luo theory which contrast sharply with the French works.

The most striking discrepancy is that while Drs Chamfrault and Nguyen have dedicated whole chapters to the pathology and treatment of the Jing bie (Divergent channels), Porkert states unequivocally that the Jing bie have no pathology of their own apart from that of their associated Jing mai (Principal meridian):

As their name suggests, the cardinal branch conduits (Jing bie) are integral parts of the cardinal conduits (Jingmai). Hence they have no foramina (acupuncture points) of their own, nor are they associated with symptoms distinct from those of the respective cardinal conduits (Jingmai).

Chamfrault and Nguyen give their source on Jing bie pathology as Chapter 63 of the Su Wen, entitled 'On Reverse Technique of Needling'. The following quote is taken from Henry Lu's translation with the exception that the Pinyin romanizations with modern English equivalents have been transposed into the text for the names of the various channels and vessels. The Chinese characters in the Henry Lu version have been checked to verify the accuracy of the terminology.

The Yellow Emperor: I have heard about reverse technique of needling, but I have failed to understand its meaning. What is reverse technique of needling?

*Chi-Po replied: When the vicious energy (Xie) comes to reside in the human body as guest, it must come to reside in the skin and hair at first; if the vicious energy persists to stay without leaving, it will enter into the body and reside in the Sun luo (capillaries); if the vicious energy persists to stay without leaving, it will enter further into the body and reside in the Luo mai (Luo vessels); if the vicious energy persists to stay without leaving, it will enter further into the body and reside in the Jing mai (Principal meridians /channels), internally affecting the five viscera and spreading in the-stomach and intestines, causing harm to both Yin and Yang as well as the five viscera; such are the sequences of attack by the vicious energy. from the skin and hair toward the five viscera, which should be treated by the Jing (Principal meridians). If, however, the vicious energy resides in the skin and hair as guest and then enters into the Sun luo (capillaries) to stay there without leaving, blocking up the passages of the Luo mai (Luo vessels), unable to flow into the Jing (Principal meridians), it will overflow into the Da luo (large Luo vessels) to cause strange diseases. When the vicious energy resides in the Da luo (large Luo vessels) as guest, it often causes disease on the right side with symptom on the left side or disease on the left side with symptom on the right side . . . Therefore, the diseases of the Luomai (Luo vessels) as distinguished from the diseases of the Jing (Principal meridians) should be treated by the reverse technique of needling. **Su Wen:Chapter 63.***

No mention is made of Jing bie (Divergent channels) anywhere in this quote, or indeed, in the rest of this chapter. The penetration of Perverse Energy (Xieqi) as presented here is quite straightforward:

First skin and hair
then Sun luo (capillaries)
then Luo mai (Luo vessels)
then Jing (Principal meridians)
then Zang fu (organs)

In this chapter of the Su Wen, after the penetration of Xie qi (perverse energy) has been described, there is a discussion of what happens in pathology when Xie qi blocks up the passages of Luo mai (Luo vessels). Specific signs, and symptoms are given for the Luo mai of Kidney, Sanjiao (Three Heater), Liver, Bladder and Colon. There is then a brief digression to discuss Xie qi lodging 'in between the arm and the palm' or in the Yangqiaomai (Yang Heel Vessel, one of the Eight Extra Vessels). A paragraph also deals with internal blood coagulations due to falling from a high place, probably injuring the Liver channel and the Kidney Luo mai. With another small digression on Wandering Bi syndrome, the narrative returns to discussing Xie qi residing in the Stomach channel (Jing not Luomai), and the Luomai of Colon (again), Gall Bladder, Kidney (again), Spleen, Bladder (again), Gall Bladder (again) and finally, in the Five Luo (namely Heart, Kidney, Lung, Spleen and Stomach) causing unconsciousness.

During discussion of Luo mai blockage by Xie qi, many references are made to blood stagnation and bleeding therapy, as well as examining vessels for visible blood clots. This has two important consequences. Firstly, if the symptoms ascribed to blockage of Luomai in Su Wen, Chapter 63, are caused by Xie qi (Perverse energy), then these symptoms will be

defined as *Shi* (Full, Excessive), and hence can be compared with the Shi symptoms for the Luo mai listed in Ling Shu Chapter 10. Secondly, reading about Luo mai in this and other chapters of the Su Wen and Ling Shu gives an inescapable impression that a lot of the statements being made about Luo mai refer simply to blood vessels.

Regarding the first of these two issues, presented below is a comparative table of Luo mai Shi signs and symptoms from Ling Shu Chapter 10, and signs and symptoms of Luo mai blockage from Su Wen, Chapter 63.

LUOMAI SHI -LING SHU Ch.10	LUOMAI SHI - SU WEN Ch.63
LU: Hot sensations in wrist and palm	LU: Not mentioned
HT: Fullness & Pressure in the chest	HT: Not mentioned
PC: Heart pain	PC: Not mentioned
CO: Dental decay & deafness	CO: Deafness, dental decay; Fullness & hot sensations in the centre of chest with dyspnoea
SI: Looseness in the joints; cannot bend elbow	SI: Not mentioned
SJ: Spasms of the elbow	SJ: Sore throat & retracted tongue; dry mouth with irritability; pain in the lateral aspect of the arm, the hand cannot touch the head
ST: Sudden loss of voice; mania	ST: Not mentioned (ST Jing is listed but NOT ST Luomai)
BL: Runny nose, blocked nose; headache & backache	BL: Pain in head, nape of neck and shoulder; cramps spasms & twitching of back affecting the sides and causing pain
GB: <i>Jue ni</i> : translated as either 'fainting' or 'circulatory collapse in the extremities causing cold feet'	GB: Pain in the sides, cannot breathe, cough with perspiration; pain in greater trochanter with inability to raise leg at hip joint

This is far from a perfect match, nevertheless, there is some consistency. Of the seven comparisons which are available, there are good matches for the Luo mai of Colon, Sanjiao and Liver, a partial match for Bladder, and no match for Gall Bladder, Spleen and Kidney. If this were the only evidence that Chapter 63 of Su Wen was all about Luo mai disorders, it would not be a very strong case. However, since the text of the Su Wen Chapter

63 describes Luo mai blockage causing certain signs and symptoms of various Luo mai, it is on the text itself that this argument rests.

If the text is so clear, how could there be any room for interpreting 'Luo mai' as 'Jing bie' (Divergent channels)? There are two possible explanations. Firstly, there appears to be a tendency in a number of European books to interpret the expression 'Jing-Luo' as the Primary channels (Jing) and the Secondary vessels (Luo). This implies that all pathways other than the 12 Jing (Primary channels) are regarded as Secondary vessels (Luo) including the Jing bie (Divergent channels), Jing jin (Muscle channels), the Qi jing ba mai (Eight Vessels apart from the jing) and the Luo mai themselves. If Luomai is taken as a broadly inclusive term meaning secondary vessels in general, then some confusion may have arisen between Luo mai and Jing bie.

The second possibility lies in the expression 'Bie luo' (Divergent Luo) mentioned in the Huang Di Nei Jing. The Bie luo were described as being 365 in number and their pathways were given as simply 'penetrating all the joints in the body'. However, it is clear that Bie luo are not the same as the 15 Luomai nor are they related to the 12 Jing bie. Very little has ever been written on the Bie luo apart from the abovementioned.

However it has occurred, it does appear that the French version of Jing bie pathology is based on a series of errors. Su Wen Chapter 63 is about Luo mai not Jing bie. Hence our knowledge and understanding of Luo mai can be enriched by study of this chapter.

Information about Luo mai overall falls into the categories of pathways, pathology, aetiology diagnosis and treatment techniques. Pathways of the 15 Luo mai are described in Ling Shu Chapter 10. Pathology is described in Ling Shu Chapter 10 (signs and symptoms of contravention - *ni qi* - as well as Xu and Shi conditions) and in Su Wen Chapter 63 (signs and symptoms of Shi conditions only). As for aetiology, little has been written apart from what we find in Su Wen Chapter 63 which deals only with how blockage of the Luo mai occurs, namely through penetration of Xie qi into the Luo mai, or through trauma such as in the case of falling from a high place. When there is blockage within a Luo mai there are also frequently references to Blood stagnation and, to bleeding treatments. The clear implication is that there is a very close connection between the circulation of Blood and the Luo mai.

The Luo mai are introduced in Ling Shu Chapter 10 with these words:

The Vessels that are floating and that often remain visible to the naked eye are the Luo mai.

The Luo mai are here said to be visible vessels, that is raised visible blood vessels (such as veins that stand out on the hands and forearms) are identified as Luo mai. The following quotations are also from Chapter 10 of Ling Shu:

Lei-Kong asked: How do we distinguish between the abnormal symptoms of the Jing mai (Principal channels) and those of the Luo mai?

'The Yellow Emperor replied:

The abnormal symptoms of the Jing mai are normally not visible to the naked eye, but their Xu or Shi nature can be detected by taking the pulse at the wrist. All visible symptoms are those of the Luo mai.

'The Luo mai gather together in the skin, and their meeting points are mostly in the external regions of the body. Therefore, in applying needle to the Luo mai, it is necessary to insert the regions where they gather together, the regions where the blood gets coagulated. Even if there is no sign of blood clots, blood letting should be done rapidly for the purpose of reducing the vicious energies as well as for letting blood. If the poisonous blood is allowed to remain in the body, it will develop into Bi syndrome.

The following are the ways in which the abnormal symptoms of the Luo mai may be diagnosed:

The blueness of the vessels is a symptom of cold and painful diseases;

the reddenings of the vessels are the symptoms of Heat;

Direct Attack of Cold on the Stomach (Wei Zhong Han) may, in most cases, be detected by the blueness of the Luo mai in the thenar eminence;

Heat in the Stomach may, in most cases, be detected by the reddenings of the Luo mai at the edge of the thenar eminence;

A sudden blackening of the Luo mai is a symptom of prolonged Bi syndrome;

An alternate appearance of red, black and blue is a symptom of Cold and Heat diseases in succession;

A blue and short Luo mai is a symptom of Qi deficiency.

In treating Cold and Heat diseases of a superficial nature, it is desirable to insert into blood clots once every other day for exhaustive bloodletting to be followed by a set of measures to strike a balance between Xu and Shi.

When the foregoing fifteen Luo mai suffer from a Shi disease, they will become visible; when they suffer from a Xu disease, they will be depressed. Therefore it is necessary to examine closely the neighbouring regions of the Luo mai when they are invisible to see if they are disordered. Just as people are different in body size, so too the locations of their Luo mai and the points at which they separate from their Jing mai (Principal channel) are different also.

It is hard to escape the conclusion that the Ling Shu is talking about visible blood vessels and indeed this is the consensus of opinion in the People's Republic of China today. It is the author's belief that the Chinese have always thought of the Luo mai as blood vessels.

With regard to the above quotations, the final sentence is strikingly reminiscent of modern anatomy texts which comment on individual differences in vasculature. If the Luo mai were some sort of esoteric entity or some abstract pathway for the flow of invisible energies, why should there be any individual differences, and how could this be readily determined. Of course, if the Luo mai are concrete anatomical structures which can be noted by the casual observer, then indeed the Ling Shu was describing individual anatomical differences in the superficial vasculature.

How did the French writers of earlier decades deal with the "visibility" of Luo mai? Dr Nguyen Van Nghi defines the visibility of Luomai as "visibility: swelling, painful to touch at the corresponding Luo point" and "invisibility: the point gives way to the touch". No effort is made to explain what the visibility of the colours red, blue or black may mean. It is a curiously convoluted manner in which to explain something so apparently straightforward - now you see it, now you don't. Why was the obvious overlooked in what must have been a very earnest and energetic search for the truth?

Perhaps (and the author admits to pure speculation here), it arose from the historical background of French acupuncture in the 1930's and beyond. The French Renaissance of acupuncture really got off the ground with the publication of George Soulie de Morant's *Precis de la Vraie Acuponcture Chinoise* (Precis of True Chinese Acupuncture) in 1934. A former diplomat in Nanjing for 20 years, Soulie de Morant had developed an intense interest in acupuncture and dedicated himself on his return to Paris, to stimulating interest in the subject amongst the medical fraternity. A group of doctors gathered around Soulie de Morant and he taught them acupuncture. Regrettably, Soulie de Morant died a broken man after his former students successfully lobbied for legislation which restricted acupuncture practice in France to Western medical practitioners only.

Hence, for a number of decades now, acupuncture in France has been taught to Western doctors by other Western doctors. It is easy to imagine the frustrations encountered by both

teachers and pupils in developing a new viewpoint on the human body. It is particularly easy to imagine how much stress was placed on the differences between Traditional Chinese Medical theory and Western medical theory. In their earnest endeavours to end confusion between the Jing-Luo systems and familiar anatomical systems such as the circulatory system and nervous system, perhaps the separation of the Jing-Luo from the physical human body was altogether too thorough. It is not too uncommon to encounter the view amongst European acupuncturists that the Jing-Luo systems do not belong to the physical body at all, but to the etheric or astral body. That makes acupuncture appear to be much easier to handle conceptually, especially for Western doctors. In one corner we have the etheric body all alight with a multicoloured network of vital energies (Jing- Luo) while in the other corner we have the 'blood and guts' - organs, blood, blood vessels, muscles, bones, nerves, etc. Tempting, is it not?

Alas! The Chinese have never held such a view, and after all, they do have a few millenia more experience in using the Jing-Luo than we westerners. One fundamental problem arises immediately with the model which seeks to separate Qi from the physical body. According to the 'etheric' Jing-Luo model, in one corner is the physical body with red runny stuff (blood with a small 'b') running around in the blood vessels, while in the other corner is Qi and Blood (Blood with a capital 'B' so we don't confuse it with the red runny stuff) circulating around the etheric body in the Jing-Luo systems. A problem arises with translations from the Chinese about which is 'Blood' and which is 'blood' - in Chinese there is only one character for both, because the Chinese have never had two types of Blood/blood. Blood in Chinese is 'xue' in ancient and modern T.C.M. books, and in Western medical books. In T.C.M. theory blood has always circulated in blood vessels which have always been part of the Jing-Luo systems.

Qi leads the blood as it circulates within the vessels. There has never been a separation of the circulation of Qi from the circulation of blood in T.C.M. theory. Another point to note regarding Luo mai pathways is that the Luo points are said to be the points at which the Luo mai "separate from the Jing- mai". if there is Qi leading blood flowing in the Luo mai, and the Luo mai separate from the Jing mai, then what is flowing in the Jing mai? The obvious answer is Qi and blood. Remember that the original meaning of 'jing' is the thread in weaving that runs right through the fabric (the warp), and by extension 'jing' means 'main' or 'Principal', hence 'Jing mai' is literally 'main vessels'. The term which is used in Western medicine in China to describe the major blood vessels (arteries and veins) is often 'jing mai'.

Does this mean that the Jing-Luo systems are nothing more than the vascular system of arteries/veins, arterioles/venules and capillaries? This conclusion would be too extreme to justify, however it is reasonable to state that in some contexts at least, 'jing mai' refers to major arteries and/or veins. There are many channel phenomena cannot be accounted for by identifying Jing mai as blood vessels, such as the mapped pathways of the Jing mai and their points, and the many needle sensation phenomena ('deqi' & 'tiaoqi' or, in modern research parlance, P.S.C.'s - Propagated Sensations along the Channels). Perhaps it could be suggested that some aspects of Jing mai refer to blood vessels, some aspects refer to nerve pathways, and others refer to various other electrical and magnetic phenomena which are not yet well comprehended. The only view that cannot be supported is that Jing mai are completely divorced from blood circulation.

Luo mai, on the other hand, appear to be almost exclusively about blood vessels and blood circulation, especially about blood stagnation and bleeding treatment techniques. Most of the treatments for blood stagnation the Luo mai given in Su Wen Chapter 63 involve bleeding, and Jing-Well points, which among the most commonly points, feature prominently.

The following table sets out the recommended treatments.

TREATMENTS FROM SU WEN CH.63

SIGNS & SYMPTOMS	CAUSE	TREATMENT
Sudden heart pain with fullness in chest & sides	KI Luomai Shi	Bleed Rangu (KI 2)
Sore throat & retracted tongue, dry mouth and irritability, pain in lateral aspect of arm, hand cannot touch head	SJ Luomai Shi	Zhongchong (PC 9) and Guanchong (SJ 1)
Sudden genital pain, associated with hernia	LIV Luomai Shi	Dadun (LIV 1)
Pain in head, nape of neck and shoulder	BL Luomai Shi	Zhiyin (BL 67); if not cured, Jinmen (BL 63)
Fullness & hot sensations in centre of chest with dyspnoea	CO Luomai Shi	Shaoshang (LU 11) and Shangyang (CO 1)
Eye pain radiating from inner canthus	Xie qi in Yangqiaornai	Shenmai (BL 62)
Internal blood coagulations, abdominal fullness, cannot urinate or defaecate	Fall from a high place	Zhongfeng (LIV 4) and Chongyang (ST 42); if not cured, Dadun (LIV 1)
Deafness (intermittent)	CO Luomai Shi	Shaoshang (LU 11) and Shangyang (CO 1); if not cured, needle Zhongchong (PC 9)
Epistaxis, nasal discharge with cold sensations in the upper teeth	Xie qi in ST Channel	Neiting (ST 44) and Lidui (ST 45)
Pain in sides, cannot breathe, cough with perspiration	GB Luomai Shi	Zuqiaoyin (GB 45)
Sore throat, dysphagia, losing temper without reason, Qi rising	KI Luomai Shi	Yongquan (KI 1)
Throat swelling, cannot swallow saliva or spit	KI Luomai Shi	Bleed luomai in front of Rangu (KI 2)
Lumbago, affecting lower abdomen & sides with inability to breathe when lying on back	SP Luomai Shi	Needle Yaoshu (DU 2)
Cramps & spasms, twitching of back affecting the sides and causing pain	BL Luomai Shi	Dazhui (DU 14), spinal points (not named)
Pain in greater trochanter with inability to raise leg at hip joint	GB Luomai Shi	Huantiao (GB 30)
Deafness	CO Luomai Shi	Shangyang (CO 1) and Hegu (CO 4); if not cured, Tinggong (SI 19)
Dental decay	CO Luomai Shi	Colon channel (points not specified); if not

		cured, needle the vessel which enters the teeth
Pain affecting the vessels which occurs on & off with no fixed pattern	Xieqi is between the Five Zang	Needle Jing-Well points and bleed the Luomai
Disease of lower teeth transmitted to upper teeth causing cold pains in lips and teeth		Bleed blood clots in vessel on back of hand & Neiting (ST 44) Shaoshang (LU 11) and Shangyang (CO 1)
Loss of consciousness	Xieqi in Five Luo (HT, KI, LU,	Yinbai (SP 1), Yongquan (KI 1), Lidui (ST 45), Shaoshang (LU 11) and Shenmen (HT 7); if not cured blow into the ears with a hollow bamboo tube; if still not cured cut hair from angle of left hairline (one square cun), burn & mix with wine for patient to drink

Note the heavy emphasis on Jing-Well points and bleeding techniques In Ling Shu Chapter 10, Luo points are recommended for treating Luo mai disorders. The following table shows which of the signs and symptoms of the 15 Luo mai are actually indicated for each of the 15 Luo points.

LUO POINT	SIGNS & SYMPTOMS	INDICATED (YES/NO)
LIEQUE (LU 7)	SHI: Hot sensation in wrist and palm	Yes
	XU: Urinary frequency	Yes
	Yawning	No
NEIGUAN (PC 6)	SHI: Heart pain	Yes
	XU: Stiff neck	No
FENGLONG (ST 40)	NIQI: Sudden loss of voice	Yes
	SHI: Mania	Yes
	XU: Footdrop	Yes
GUANGMING (GB 37)	SHI: 'Jueni' - fainting or cold feet	No
	XU: Cannot stand from seated position (weak plantar flexors)	Yes
FEIYANG (BL 58)	SHI: Runny nose, blocked nose Headache, backache	Yes
	XU: Clear nasal discharge, Epistaxis	Yes
JIUWEI (REN 15)	SHI: Pain in skin of abdomen	No
	XU: Itching in skin of abdomen	No
CHANGZIANG (DU 1)	SHI: Stiff spine	Yes
	XU: Heaviness and shaking of head	Yes
DABAO (SP 21)	SHI: Aching throughout whole body	Yes
	XU: Weakness of all the joints	Yes
TONGLI (HT 5)	SHI: Fullness & pressure in chest	No
	XU: Aphasia	Yes
PIANLI (CO 6)	SHI: Dental decay, deafness	No
	XU: Cold sensation in teeth and feeling of fullness in chest	No
WAIGUAN (SJ 5)	SHI: Spasms of elbow	Yes
	XU: Flaccidity of elbow joint	Yes
ZHIZHENG (SI 7)	SHI: Looseness in the joints; Cannot bend elbow	Yes
	XU: Excrescences, scabies	No
GONGSUN (SP 4)	NIQI: Vomiting & diarrhoea	Yes
	SHI: Sharp intestinal pains	Yes
	XU: Abdominal distension	Yes
LIGOU (LIV 5)	NIQI: Scrotal swelling	Yes
	SHI: Genital pain	Yes
	XU: Genital itching	Yes
DAZHONG (KI 4)	NIQI: Irritability, depression	Yes
	SHI: Inability to urinate or defaecate	Yes
	XU: Lumbago	Yes

From the above table it becomes clear that Luo points are fairly reliably indicated for the classical signs and symptoms associated with their various Luo mai. The question then arises as to whether Luo mai disorders are more appropriately treated with Luo points or with Jing-Well points. It seems that both groups of points have a role to play, that of Jing-Well points

being confined to Shi conditions, while Luo points have broader actions on both Shi and Xu conditions of the Luo mai. Sometimes the choice is obvious, such as in the case of the Colon Luo mai Shi symptom of deafness for which the Luo point, Pianli (CO 6) is not useful, but the Jing-Well points Shangyang (CO 1) and Shaoshang (LU 11) are indicated. In other cases, it is necessary to select the most appropriate treatment from among Luo and Jing-Well points according to the individual case.

Yuan-Luo coupling, the concurrent use of the Yuan-Source and Luo-Connecting point on a Yin-Yang pair of channels (eg Lieque (LU 7) and Hequ (CO 4) is another treatment technique related to the Luo mai. The use of Yuan-Luo coupling is described in *Acupuncture: A Comprehensive Text* thus:

The Connecting channels (Luo mai) may therefore be thought of as reflecting in a broad manner the symptoms of their primary channels (Jing mai), as well as those of associated Primary channels in the Yin/Yang and other relationships. Based on this principle, later generations of physicians devised a very useful system of point selection, whereby the Source point (Yuan point) on the Primary channel principally affected by a disease would be chosen in addition to the Connecting point (Luo point) of its associated Primary channel. For example, a disease affecting the Heart channel could be treated by needling HT 7 (Shenmen), the Source point of the Heart channel, together with SI 7 (Zhizheng), the Connecting point of the Small Intestine channel.

Drs Chamfrault and Nguyen Van Nghi offer a somewhat more complex view of Yuan-Luo coupling. Firstly, these authors talk of two types of Luo mai, the Longitudinal Luo vessels and the Transversal Luo vessels. The Longitudinal Luo mai are those whose pathways, and Xu and Shi signs and symptoms, were described in Ling Shu Chapter 10. To the best of this writer's knowledge, the Transversal Luo mai do not appear in any Chinese course, and lecturers at the International Acupuncture Teaching Centre in Nanjing have stated unequivocally that the Transversal Luo mai do not exist.

Dr Nguyen describes the Transversal Luo mai as pathways which link directly from the Luo point on each Primary channel (Jing mai) to the Yuan-Source point of the Yin/Yang associated Primary channel. For example, the Colon Transversal Luo mai is said to link the point Pianli (CO 6), the Colon Luo point directly to the Yuan-Source point of the Lung channel, Taiyuan (LU 9). The therapeutic use of these Transversal Luo mai is based on the uses of Yuan-Luo coupling. Hence, it is possible to look at how the French use Yuan-Luo coupling without becoming entangled in the debate on whether or not the Transversal Luo mai actually exist.

The conceptual framework which underpins the French use of Yuan-Luo coupling is one of viewing Xu and Shi conditions as 'Excess' or 'Deficiency' of energy which can readily be remedied by a redistribution of existing resources. In short, it might be called 'Robin Hood acupuncture' - take from the rich (Excess) and give to the poor (Deficient). It is the same sort of thinking that underlies so-called Five Element 'balancing the pulses'. The 'Excess' energy is passed from a Luo point to the Yuan point of the Associated Yin/Yang Primary channel. So, for example, if the Colon Primary channel has an 'Excess' of energy while the Lung Primary channel has a 'Deficiency' of energy, the rich Colon channel can be robbed and the energy given to the poor Lung channel, by needling the Colon Luo point, Pianli (CO 6), and the Lung Yuan point, Taiyuan (LU 9). The Luo point in such cases is reduced, (sedated) while the Yuan point is reinforced (tonified). Dr Nguyen cautions that one must first establish that there is no involvement of Xie qi (Perverse Energy) in the condition before using this Yuan-Luo technique, in order to avoid 'donating contaminated energy', namely assisting the spread of Xie qi from the 'Excess' channel to the 'Deficient' channel. Alas! Robin Hood has no way to launder dirty money.

There are two serious problems with this Robin Hood method of using Yuan-Luo coupling.

The first relates to a fundamental misconception which has penetrated Western acupuncture teachings. The concept of Xu and Shi has been misrepresented when Xu is translated as 'Deficient' or 'Empty' and Shi is translated as 'Excessive' or 'Full', an image immediately springs to mind of a situation where there is a faulty distribution of resources which can easily be redressed by redistribution of those resources. This has never been the meaning of Xu and Shi. In the Qing Dynasty classic, *Principal Memoires of Medicine* by Cheng Zhongling:

Xu means that the body's energy is in a state of weakness.

Shi means that Xie qi in the body is powerful.

It has been necessary to broaden the meaning of Shi to encompass not only diseases caused by External Perverse, Energies (Wai Xie), but also states of hyperactivity or hyperfunction in the body, as well as accumulations and blockages. This threefold definition of Shi appears to be the working definition used in most modern T.C.M. writings from China. If Shi does not mean 'having more energy than is necessary' then Shi conditions cannot act as some sort of reservoir of energy for redistribution to elsewhere in the body. To take a concrete clinical example, a patient may suffer from dizziness and blurred vision due to Blood Xu and also severe stabbing pain in the calf due to local Blood Stagnation (thrombosis in Western medicine). The condition of Blood in the calf is Blood Stagnation, a Shi condition, while in the head it is Blood Xu, a Xu condition. To move the Blood Stagnation to the head would cause a cerebrovascular accident (Wind-stroke), not a state of health. Similarly, Qi Stagnation cannot be used to treat Qi Xu. Shi conditions must be treated by reducing methods, such as Clearing Heat, Resolving Phlegm, Spreading Stagnant Qi, Diuresis to Dispel Dampness or Relieving Food Stasis.

None of these methods magically yields energy which can be transferred to a part of the body which is weak (Xu). Xu conditions must be treated by Nourishing Yin, Invigorating or Consolidating Yang, Nourishing Blood, Benefitting Qi, reinforcing or nourishing the Zang fu. There is no way in which these reinforcing actions could be assisted by the patient also having a Shi condition.

Xu and Shi conditions do not somehow cancel each other out. In fact clinically, the most commonly encountered conditions are acute Shi conditions with underlying weakness (Xu). Australian acupuncturists and acupuncture/T.C.M. students who have worked in Chinese hospitals frequently report that as many as 80% of the patients presenting to their clinics were diagnosed as having a mixture of Xu and Shi conditions. This figure has also been corroborated by various Chinese researchers such as Dr Ruan Shaonan from the Zhejiang Provincial T.C.M. Research Institute.

The consequences of this early misunderstanding of Xu and Shi in Western acupuncture are considerable. Fundamentally, it means that all treatments which are based on Robin Hood thinking are conceptually unsound. This includes Five Element pulse balancing theory which purports to 'shift energy around the Five Elements', robbing the rich and giving to the poor until a perfect state of energetic balance is achieved. This does not challenge the Wu Xing (Five Phases or Elements) theory itself, merely the European systems of applying Wu Xing to 'pulse balancing'.

The second difficulty which arises from the French interpretation of Yuan-Luo coupling is that although there is a specific prohibition against using Yuan-Luo coupling when Xie Qi has invaded the body, the most commonly used Yuan-Luo coupling, in fact, is used to treat Wind-Cold invasion. Lieque (LU 7) and Hegu (CO 4) are the basis of treating Wind-Cold common cold. According to the French view this would constitute spreading Xie qi from the Lung channel to the already Xu Colon channel. Since this treatment makes patients better instead of worse, it seems reasonable to conclude that the French view is not supported by the clinical evidence.

In theory there are twelve possible Yuan-Luo couplings, one for each of the twelve Jing mai (Primary channels), since Renmai and Dumai have only Luo points, but not Yuan points. Although some Chinese books list up to a dozen indications for each of these twelve couplings, in the author's experience only three are commonly used in China today, namely:

Lieque (LU 7) - Hegu (CO 4) for Wind-Cold attacks

Guangming (GB 37) - Taichong (LIV 3) for eye disorders

Fenglong (ST 40) - Taibai (SP 3) for dampness and phlegm

For the record, the other nine couplings are:

Neiguan (PC 6) - Yangchi (SJ 4)

Tongli (HT 5) - Hand-Wangu (SI 4)

Pianli (CO 6) - Taiyuan (LU 9)

Waiguan (SJ 5) - Daling (PC 7)

Zhizheng (SI 7) - Shenmen (HT 7)

Gongsun (SP 4) - Chongyang (ST 42)

Ligou (LIV 5) - Qiuxu (GB 40)

Dazhong (KI 4) - Jinggu (BL 64)

Feiyang (BL 58) - Taixi (KI 3)

To summarize, the available treatments of Luo mai disorders are the following:

- 1) Bleeding blood vessels where there is visible congestion
- 2) Bleeding Jing-Well points (see Su Wen Ch 63)
- 3) Reverse needling technique (Su Wen Ch 63)
- 4) Reinforcing or reducing Luo points for Xu or Shi signs & symptoms (Ling Shu Ch 10)
- 5) Yuan-Luo coupling
- 6) Cupping (to treat Blood Stagnation)

Reverse needling technique deserves a few further comments. Professor Wang Dai, Vice-Principal of the Beijing Acupuncture College made some interesting comments on reverse needling technique during his visit to Australia early in 1987. At the early stages of onset of acute pain, Professor Wang Dai recommended a form of reverse needling, namely needling a point on the opposite side of the body which corresponds exactly to the ashi (tender on pressing) point. The rationale was that in the early stages, the Xie qi was still lodged in the Luo mai and had not yet penetrated into the Jingmai (Primary channels) so reverse needling was appropriate. Professor Wang Dai emphasised firstly that the point on the opposite side must correspond very accurately to the location of the ashi point on the affected side, and secondly, that since the condition is still quite superficial that a superficial needling technique should be used.

Although cupping has not been previously mentioned, it is legitimately a Luo mai treatment as it is used to treat Blood Stagnation, especially Blood Stagnation in the limbs after incomplete healing of an old bruise. Dermal hammer may also be considered to be a Luo mai treatment when it is used to cause bleeding.

Having established that Chapter 63 of the Su Wen refers to Luo mai rather than to Jing bie (Divergent channels), a few words on Jing bie (Divergent channels) is in order. Since the Jing bie have no points of their own, any treatment information which is derived from the study of Jing bie must simply add to our existing knowledge of how the points of the Jing mai (Primary channels) may be used. Or, to put it another way, the Jing bie help us to explain what we already know. For example, knowing that the Bladder Jing bie encircles the anus helps us to explain why the point Chengshan (BL 57) is useful for treating haemorrhoids, however it is possible to know that Chengshan (BL 57) is good for haemorrhoids and get good results by needling it, without ever having even heard of the Jing bie.

The Muscle channels are not viewed as distinct anatomical entities, but rather represent an early description of the structure and function of the body's musculature within the larger framework of the traditional channel system. The pathology of the Muscle channels likewise reflects those symptoms which affect corresponding groups of muscles and other connective tissues as they are presently understood. (from Acupuncture: A Comprehensive Text)

What you see is what you get - the Muscle channels are about muscles and muscular function and dysfunction. The French view on the other hand, is quite complex and relates Muscle channels to the superficial circulation of Wei Qi just below the skin, and the superficial penetration of Xie qi (Perverse Energy).

The first point upon which this view lies open to challenge is the idea that the Muscle channels, despite fervent protestations by a certain European acupuncture teacher to the contrary, there is no difference between Distinct, Divergent and Separate channels - all are translated from the same Chinese term, Jing bie, - 'bie' meaning to separate, to diverge; being separate, distinct.

The explanation of Jing bie (Divergent channels) given in *Acupuncture: A Comprehensive Text*

Is recommended to those who wish to pursue Jing bie further, however the essential functions of the Jing bie are expressed succinctly in the headings of the relevant chapter:

Strengthening the Yin/Yang Relationship Among the Primary Channels

Distributing Qi to the Face and Head

Integrating Otherwise Neglected Areas of the Body into the Channel systems

Another Chinese book adds:

Strengthening the Relationship Between the Six Foot Channels and the Heart Organ

This last observation has recently come to have new significance with research discoveries of the usefulness of such Foot channel points as Zusanli (ST 36) for a range of cardiac treatments including arrhythmias and blood pressure regulation, functions which were previously unknown, and which were not predicted by a traditional understanding of the channels.

Another area of Jing-Luo theory where there is a considerable gap between the writings of Drs Chamfrault and Nguyen and the Chinese viewpoint, is the Jing jin (Muscle or Tendinomuscular channels). The Chinese view is very straightforward:

channels are very superficial, just below the skin. The French version has the Sun luo (capillaries) attached to the Jing jin (Muscle channels) instead of to the Luo mai, as outlined above by the Su Wen. A table may clarify the differences.

BODY LEVELS ACCORDING TO CHAMFRAULT/NGUYEN VAN NGHI	BODY LEVELS ACCORDING TO SU WEN CHAPTER 63
Skin	Skin & hair
Capillaries	Sunluo (capillaries)
Muscle Channels	Luo mai
Primary channels	Primary channels

In a discussion of Bi syndrome (loosely translated as 'rheumatism/arthritis') in Chapter 43 of the Su Wen, the five levels of tissue and the Bi syndrome which affect them are given, namely:

Skin (*pi*)
Flesh (*rou*)
Blood vessels (*mai*)
Tendons/sinews (*jin*)
Bones (*gu*)

According to this scheme, 'jin' (tendons or sinews) from which the Jing jin take their name, is the second deepest tissue level, not 'just below the skin' as in the French version. Since tendons attach to bone, their relative depth in the scheme of things is hardly surprising. It would appear that much of the complex structure of Tendinomuscular channel pathology and treatment advanced by Chamfrault et al is without a sound classical basis. Chamfrault includes a broad range of clinical phenomena in Jing jin pathology, including oedema, local redness or pallor, hypersensitivity of the skin, numbness of the skin, itching and pain on light touch, as well as muscular disorders such as spasms, paresis and atrophy. Many of these signs and symptoms belong to the Pi bu (Skin zones/Cutaneous regions), the most superficial aspect of the Jing-Luo systems, not to the Jing jin which is one of the deepest levels of Jing-Luo. According to Chinese sources Jing jin pathology is only related to muscular problems such as spasms, contractures, paresis, paralysis and muscular atrophy.

Treatment of Jing jin pathology is largely based around ashi points (local tender points), and local, adjacent and distant points on the affected channels. Apart from ashi points, the Jing jin have no points of their own. Since the Jing jin were mapped in order to relate major muscles to the Primary channels, it is the points of the Primary channels which are used to treat Jing jin pathology. Many techniques are used including massage, warm needle, cone or stick moxibustion, moxa box, cupping, herbal plasters and liniments, electroacupuncture and a variety of specialised needling techniques.

The twelve Cutaneous Regions (or Skin zones – Pi bu) are a system of dividing the entire skin surface of the human body into twelve areas, roughly related to the twelve Jing mai (Primary channels). As already mentioned in previous discussion on the penetration of Xie qi into the body, the skin and hair is the first level to be attacked by Xie qi. At this very early stage of the disease fairly superficial styles of intervention such as the dermal hammer (plum blossom or seven star needle) are sufficient. Other related treatment methods include spooning, scraping with a bronze coin and other very superficial techniques. Pathology of the Cutaneous Regions is indicated by changes in local skin colour, temperature or electrical conductivity or skin sensitivity, or pimples, or perhaps hard lumps or nodules under the skin. Rashes are usually regarded as being disorders of the Blood rather than the skin and are described as Heat in the Blood, perhaps with Wind (urticaria) or Damp (eczema) or Toxin (boils/furuncles or erysipelas).

It is not within the scope of this article to explore those most controversial of all vessels the Qi jing ba mai (Eight Extraordinary Vessels). Not only are the Qi jing ba mai considerably more complex than the Jing bie, Jing jin, Luo mai and Pi bu, but also there is much less consistency between Chinese writers regarding the functions, pathology and treatments of the Qi jing ba mai. Hence the task of comparing various European viewpoints with a Chinese viewpoint would be much more difficult.

CONCLUSION:

To summarise the major points of difference between the writings of Drs Charnfrault and Nguyen Van Nghi and major Chinese sources on Jing-Luo:

- 1) The French interpret Su Wen Chapter 63 as being about Jing bie (Divergent channels) pathology, rather than about Luo mai.

2) The Chinese refer to Luo mai as blood vessels which are often visibly congested and are frequently bled in therapy. The French completely divorce Luo mai from blood vessels and interpret the “visibility” of the Luo mai as a metaphor.

3) The French map and discuss Transversal Luo mai (as well as Longitudinal Luo mai) linking Luo and Yuan points on paired Primary channels. Yuan-Luo coupling is hence explained in terms of Robin Hood acupuncture to balance out Excess and Deficient states of body energy. The Chinese have never mentioned Transversal Luo mai, and some Chinese teachers insist that they do not exist. Robin Hood style redistribution of resources, while it may be socialism in a very pure form, is not an acceptable interpretation of the Chinese concept of Xu and Shi.

4) The French present Muscle channels (Jing jin) as very superficial pathways just below the skin which are hence intimately involved in superficial penetration of Xie qi, and are closely connected with the Sun luo (capillaries) and the Cutaneous Regions.

The Chinese describe Jing jin as being deep structures, next to the bone, which are related exclusively to muscular function and dysfunction, and have no special connection to the Sun luo (capillaries) or Cutaneous Regions (and hence are not involved in superficial penetration of Xie qi).

5) The Chinese describe a branching system where the Luo mai branch off the Jing mai (Primary channels), the Sun luo (capillaries) branch off the Luo mai and the Sun luo (capillaries) then service an overlying Cutaneous Region. The French show the Sun luo (capillaries) branching off the Jing jin (Muscle channels) rather than off the Luo mai, and do not show any direct connection between the Luo mai and the Sun luo (capillaries).

Without the monumental pioneering works of such French authors as Dr Albert Chamfrault and Dr Nguyen Van Nghi, Australian acupuncture might never have happened. A great debt of gratitude is due to them both. However, in order for acupuncture to develop in the West on sound conceptual foundations, it is vitally important that the interpretations of Traditional Chinese Medicine theory which were offered in the 1950's and 1960's are thoroughly re-examined. With the vastly increased access to Chinese teachers, to English translations of Chinese textbooks and to Chinese texts directly, which is now available to Australian acupuncturists the time is ripe for some critical reassessments of our thinking about T.C.M.

I would most heartily welcome any feedback from colleagues on any of the issues raised in this article. Please write to John McDonald, C/- this journal.

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**APPENDIX: A feedback letter to this article received from Dr Jean-Marc Kespi
(translation from French to English by John McDonald)**

**FRENCH ACUPUNCTURE ASSOCIATION
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Ref 6847 - EL

Paris, 4th January, 1988

Dear Sir

It was actually some years ago that we, like you, rectified a certain number of ideas expressed by Mr Nguyen Van Nghi. He has, besides, done so himself. It is indeed the Luo and not the Jing Bie which are involved in Chapter 63 of Su Wen.

It is true that no Luo-Yuan meridian system exists, hence no transversal Luo exist; only a therapeutic technique is involved. In fact, the deep nature of the tendino-muscular meridians (Jing jin) has now been demonstrated.

The work supervised by Dr Jean Shatz in the European school, which has reworked numerous translations, has obliged us to make some important revisions, without detracting in any way from the considerable contribution of Drs Chamfrault and Nguyen Van Nghi.

It is with considerable pleasure that I (and thus all the members of the Association) would collaborate with you, and please accept my cordial regards.

Jean-Marc KESPI
President

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