

### What's in a name? - Pericardium, Heart Master, Circulation/Sex

J. R. Worsley spoke of Twelve Officials rather than Five Zang and Six Fu. This is in keeping with Chapter 8 of the Su Wen. Ten of the officials correspond to 'organs' and two he described as 'functions' - in keeping with the traditional statement that these 'have no form' - and in keeping with common English transliteration practice of the time J. R. Worsley referred to one of these functions as 'Circulation/Sex'. In modern TCM this functional entity is referred to as the Pericardium. This function of course is paired with the other function that has no 'form' the Three Heater or Triple Warmer.

The difference between the idea of twelve channels and 5 Zang and 6 Fu was apparent quite early.

Nan Jing difficulty 25 and 39

Nan Jing difficulty 25

There are twelve meridians. 5 Zang and 6 Fu, that makes 11. This additional meridian, what sort of meridian is it?

As to this meridian, the shao yin of the hand and the xin zhu are separated mai. The xin zhu and the three heaters are related internally/externally, biao/li. These have a name but do not have a form. It is because of this that one speaks of the meridians in saying there are 12.

Considering that the sixth zàng is generally not considered as an entity in its own right in modern TCM it is interesting that it has many names in Classic texts each of which is very interesting and has complex ramifications. Only one of these (and perhaps the least of) seems to be the basis for the modern term 'Pericardium'. The following terms appear to be largely synonymous:

心 主 Xin Zhu – Heart Master

心 包 Xin Bao – Heart Wrapping

心 包 絡 Xin Bao Luo – Heart Wrapping Collaterals

膻 中 Dan Zhong - Chest Center

The connection of several of these terms is made explicit.

The Heart Master (xin zhu 心 主) meridian is the decreasing (jue) yin Heart Wrapping Network (xin bao luo 心 包 絡) meridian of the hand.

Ling Shu Chapter 10

The Heart Master (xin zhu 心 主) meridian is externally in tune with the Chang river, and internally it belongs to the Pericardium [xin bao 心 包].

Ling Shu Chapter 12

There are other terms that are closely associated with this entity:

Jue Yin  
Gao Huang  
Ming Men  
Dan Tian

First we look at the translations of these various characters. As Heart is common to three of these terms I will first deal with it first.

xīn	心	Heart, mind, intelligence, soul
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Heart is the radical in many characters, such as pertaining to emotions. It is also the only internal organ that does not have the flesh radical.

### Xin Zhu

zhǔ	主	-Lamp and flame Owner, master (Oxford Chinese Dictionary)
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This term is used in differing ways. It can refer to a particular function of the heart.

The Heart holds the office of Sovereign (君) and Lord (主) [the two terms 君主 together mean monarch]. The radiance of the Spirits [shen] stems from it.

(Larre )

I have slightly changed the translation to more literally match the original so that the following is clearer.

The Sovereign is the prince or king... while the master is in charge of accomplishing things...

(Larre )

What the heart masters is defined.

Xin Zhu Xue, the heart masters the blood...

Xin Zhu Mai, the heart masters the network for animation...

Xin Zhu Xue Mai the heart masters the network for the circulation of the blood...

(Larre 2)

The Yellow Emperor asked: How do you account for the assertion that the little Yin meridian of hand (heart meridian) alone has no acupuncture points below the elbow?

Chi-Po replied: the little Yin meridian of hand is the heart meridian. The heart is the great master of the five viscera and six bowels, it is the residence of the spirits, and it is so tough that no vicious energy is capable of setting foot on it. If when the vicious energy does set foot in the heart, it will cause harm to the heart and when the heart is harmed, the spirits will be gone, and when the spirits are gone the person will be dead. Therefore the vicious energies that attack the heart mostly end up attacking the pericardium [包 絡 bao luo]. The pericardium [包 絡 bao luo] is the meridian controlled by the heart (心 主 xin zhu). For this reason the heart meridian alone has no acupuncture points below the elbow.

In the various usages of the term Xin Zhu the implication is that it refers to ‘what the heart masters’. This is variously described as blood or vessels or blood vessels. This would appear to be the first indication that ‘Circulation’ is quite an appropriate term for this entity. One interpretation of Xin Bao is that it represents more closely the organic entity of the Heart, whereas the ‘Heart’ as an orb represents the Heart-Mind aspect. From this point of view it is interesting that the term Circulation would thus include the (organic) aspect of the Heart.

### Jue Yin

In TCM the customary arrangement of the Liu Qi is as in the table below. This is based upon the Shang Hun Lun model of the penetration of Wind-Cold diseases. The order is to be seen as a penetration in terms of severity and threat to vital function. Jue Yin represents the extreme or Terminal Yin stage.

Table 2. Six Stages

Tai Yang	Greater Yang	Small Intestine / Bladder
Yang Ming	Sunlight Yang	Stomach / Large Intestine
Shao Yang	Lesser Yang	Gall Bladder / San Jiao
Tai Yin	Greater Yin	Lung / Spleen
Shao Yin	Lesser Yin	Heart / Kidney
Jue Yin	Terminal Yin	Xin Bao / Liver

Many people express surprise that Jue Yin appears below Shao Yin. When looked at from the perspective of Zang Fu theory, Xin Bao is the ‘Heart Protector’ and one would expect that Heart would represent the most interior penetration of the pathogen in terms of vital functions in Zang/Fu theory. However, the symptoms of this most interior penetration to the Jue Yin are ‘separation of yin and yang and near collapse of yin’. Indeed the meaning of the character (厥 Jué) in a modern dictionary is given as: Faint, lose consciousness, fall into a coma. Clearly Jue Yin here refers to a core energy function that ironically does not appear to be congruent with usual TCM theory on the role of the Pericardium.

### **Xin Bao & Xin Bao Luo**

We have already looked at the heart radical (see above). Next we will look at at Bao and Luo.

bāo	包	Wrap, surround, encircle, embryo
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Bao plus the flesh radical more specifically refers to the uterus. We will come back to this later. Bao has this idea of enveloping or enclosing something very precious. It is to surround or envelop, but also to protect and maintain. (Larre 8)

Xin Bao is obviously the name that most supports the transliteration of Pericardium.

luò	絡	Enmesh, wrap around, mesh, net
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Luo is commonly translated as ‘collaterals’ in medicine to refer to the collateral channels in general. The full term Xin Bao Luo, Heart Wrapping Collaterals is suggestive of the circulation in general.

### **Dan Zhong**

Chapter 8 of the Su Wen uses the term Dan Zhong to refer to this entity.

TAN [DAN] ZHONG has the charge of resident as well as envoy. Elation and joy stem from it.

(Larre )

Dan is a highly complex character.

rou		肉	flesh Radical 130
+	+	tóu	一 Lid (Zhong Wen), Head (TCID)

		wú		Radical no: 8
+	huí	回	a double enclosure	
=	lǐn	廩	Granary or storehouse	
+	+	日	Sun	
+	yi	一	One, horizon	
=	dan	旦	Daybreak, Overflowing	
=	dǎn (tan)	壇	Sincere, real, true, truth (Unihan)	
=	dǎn	膻	-Niche or shrine [Lat. Atrium, central court] (Porkert) Technical term from Chinese medicine for the center of the chest (Unihan)	

Because this character does not appear in general dictionaries, in trying to translate this character the following appear to have been used; e.g. Bensky and O'connor's name for CV.17 as 'Platform Middle' is clearly derived from the first character below.

tán	壇	-Earth with phonetic 壴 [?] 1. Platform, altar, the Temple of Heaven (in Beijing). 2. a raised plot of land form planting flowers, 3. Platform forum. (Oxford Chinese Dictionary)
shàn	擅	-Hand overflowing 壴 One's own authority, usurp
dán	檀	-Tree overflowing (i.e. with scent) 壴 Sandalwood [very important in religion and healing]. One room of the Imperial palace is built of sandalwood.

zhōng (chung <sup>1</sup> )	中	Centre, middle, in, among, between two extremes, medium, China,
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## Circulation

The idea of 'Heart Master' can thus be seen as the extension of Heart's mastery to these areas (not mastery over the Heart), in particular the blood and circulatory system, which is the intermediary that extends the hearts mastery. The term Zhu as above refers to the executive function of the monarch. Putting this together with the 'Heart Wrapping Collaterals' the concept of the circulatory system in general rather than the Pericardium in particular would seem a better transliteration of these terms. Again the idea of Dan Zhong as the representative of the Heart (like the Chancellor in English history), who carries out the monarch's orders, reinforces this. Dan Zhong as being like the Emperor's innermost palace further reinforces these ideas. The translation of Dan Zhong as 'center of the chest' clearly does not do justice to the implications of this name nor does Pericardium in its literal anatomical meaning. The Circulation part of

Circulation/Sex is clearly well justified, the ‘Sex’ part of Circulation/Sex requires more explanation.

## Sex

### Ming Men: Fire of the Gate of Life

In traditional Chinese medicine there is a concept of the Ming Men, or Kidney Yang. Some texts place this ‘between the kidneys’ as is the point GV.4 Ming Men is literally between the two Kidney Back-Shu points. Some say it is the right kidney as opposed to the Kidney proper or Kidney Yin that lies on the left. This could also be taken as a reference to the pulse positions in modern TCM.

Nan Jing difficulty 39

The classics say that the fu are 5 and the zang are 6. How is this? 6 fu yes; but there are really only 5 fu. 5 zang but there can also be 6 zang.

This is because one speaks of the kidneys as having a double storage, liang cang: on the left is the kidney and on the right is ming men. Ming men is the place where the essences spirits, jing/shen live; where man stores the essences (sperm) and woman connects with the reproductive organs. Its qi is in free communication with the kidneys. It is because of this that one says the zang are 6.

But how can the fu be 5?

The five zang each have a fu; the three heaters are indeed a fu, but they do not depend on any of the 5 zang. It is because of this that it is said the fu are 5.<sup>1</sup>

## Pulses

That the Pericardium-Circulation/Sex are related is apparent in the pulse positions.

Figures 1a and 1b are a comparison of the pulse position as given in the Mai Jing and the Jing Yue Quan Shu. The major point of departure of the Classical association of the pulses and the later association on which modern TCM is based are with regard to the Kidney Yang and Xin Bao.

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<sup>1</sup> Chinese Medicine from the Classics. Claude Larre and Elizabeth Rohcat de la Vallee. Monkey Press, Ricci Institute.

Fig. 1a Mai Jing (Pulse Classic), Wang She-He (210-285 CE).

		<b>Left</b>	<b>Right</b>
<b>Cun</b>	Superficial	Small Intestine	Large Intestine
	Deep	Heart	Lungs
<b>Guan</b>	Superficial	Gall Bladder	Stomach
	Deep	Liver	Spleen
<b>Chi</b>	Superficial	Bladder	Triple Burner
	Deep	Kidneys	Pericardium

Fig.1b Jing Yue Quan Shu (Jing-yue's complete book) (1624) based upon Bin Hu Mai Xue.

	<b>Left</b>	<b>Right</b>
<b>Cun</b>	Heart & Center of Chest (Dan Zhong)	Lungs and Center of Chest (Xiong Zhong)
<b>Guan</b>	Liver/gallbladder	Spleen/stomach
<b>Chi</b>	Kidney & abdomen (Bladder & S.I.)	Kidney & Abdomen (L.I.)

Many of the functions that TCM describes as the Fire of the Gate of Life or Kidney Yang, would be seen as Fire Phase attributes by a Five Element practitioner. For example Kidney as source of Yin and Yang are the foundations of all Yin and Yang of the body. So Spleen Yang is dependent on Kidney Yang. There is a common combination of syndromes described as 'Kidney and Spleen Yang Xu'. A Five Element practitioner would actually express this as reflecting Fire and Earth Phases. We have to either consider one or other to be wrong, or there has to be a connection of these two ideas at the very least.

## Gao Huang

The Back-Shu point of the Circulation/Sex is idiosyncratically named Jue Yin Shu. The outer bladder line point that is next to the shu point of the Circulation/Sex is also idiosyncratically named Gao Huang Shu. Gao and Huang appear to have distinct meanings as well as a combined meaning.

**Gāo – Ointment**

rou		肉	flesh, Radical 130 When combined can resemble 月
+	tóu wú	头	Head; KangXi radical 8 (Unihan) lid
	jiong1	匚	Outer limits: wide; KangXi radical 13
	wéi	匚	Enclosure: erect, proud; upright; bald (Unihan)
=	gāo	高	high
=	gāo	膏	-Thick/high 高 flesh 肉 Grease, fat, paste, ointment Note: compare with Dan.

Ling Shu Chapter 1 lists 12 Yuan-Source points including:

Gao yuan-source is called Chiu Wei (dove tail CV.15)

**Huāng – Heart pit, Vital nerve**

rou		肉	Flesh, Radical 130 When combined can resemble 月
+	tóu wú	头	Head head; KangXi radical 8 (Unihan)
	yǐn	匱	hidden, mysterious, secret; to conceal; small; minute
	wáng wu2	亡	death, destroyed; lose, perish
=	huāng	肓	“heart pit”, vital nerve, the very heart, marrow, region between heart and diaphragm

In modern texts Gao Huang (膏 肓) is often taken to be one entity namely the region between the heart and diaphragm. However, the occurrence of the term Huang in three back points at level of three back-Shu points (Xin Bao, San Jiao and Bladder) and a Kidney point at the level of umbilicus is suggestive that Huang has a more generic meaning.

Bl 43 gāo huāng shū

Bl. 46 huāng mén

Bl. 48 bāo huāng

Ki. 16 huāng shū

Su Wen Chapter 40 says

Huang yuan-source exists below navel.

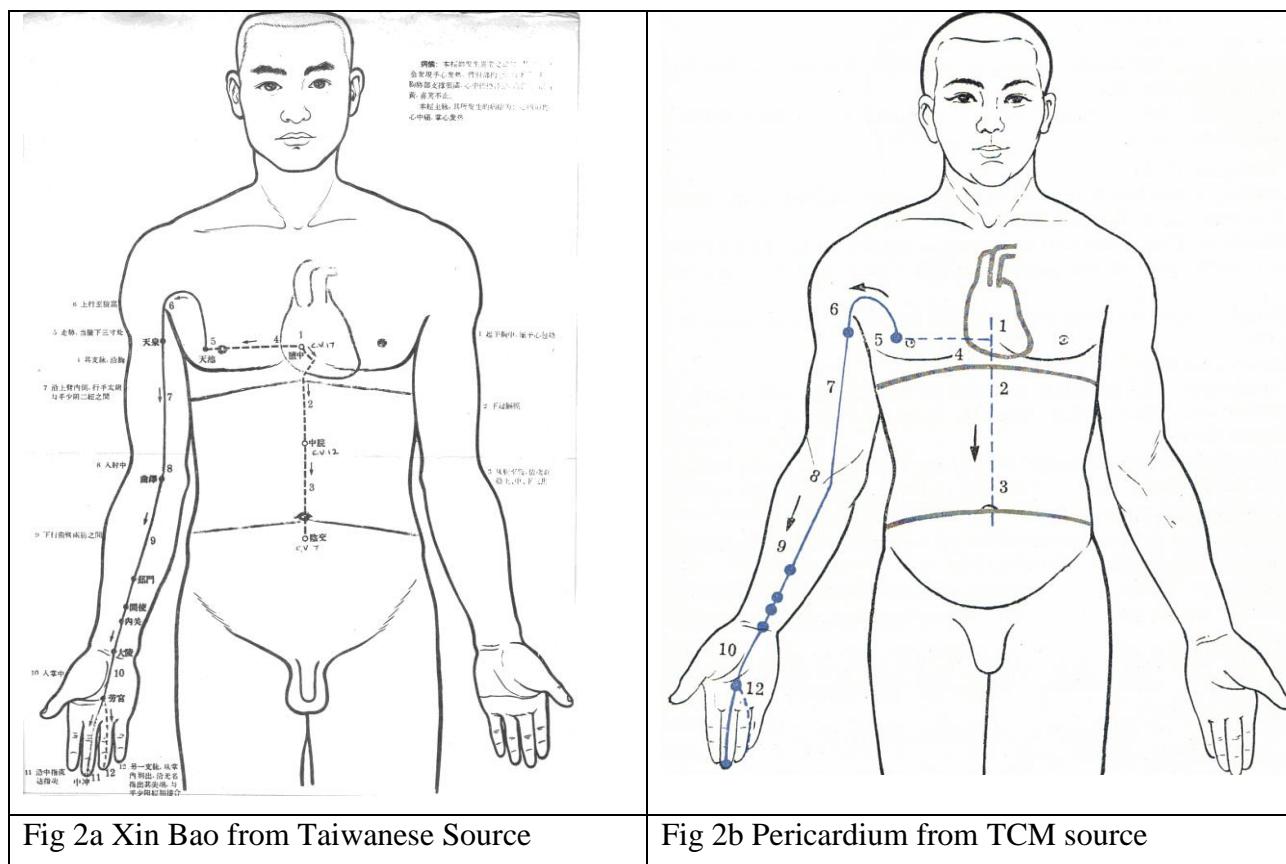
Huang yuan-source is called Po-Young (also called Chi Hai CV.6)

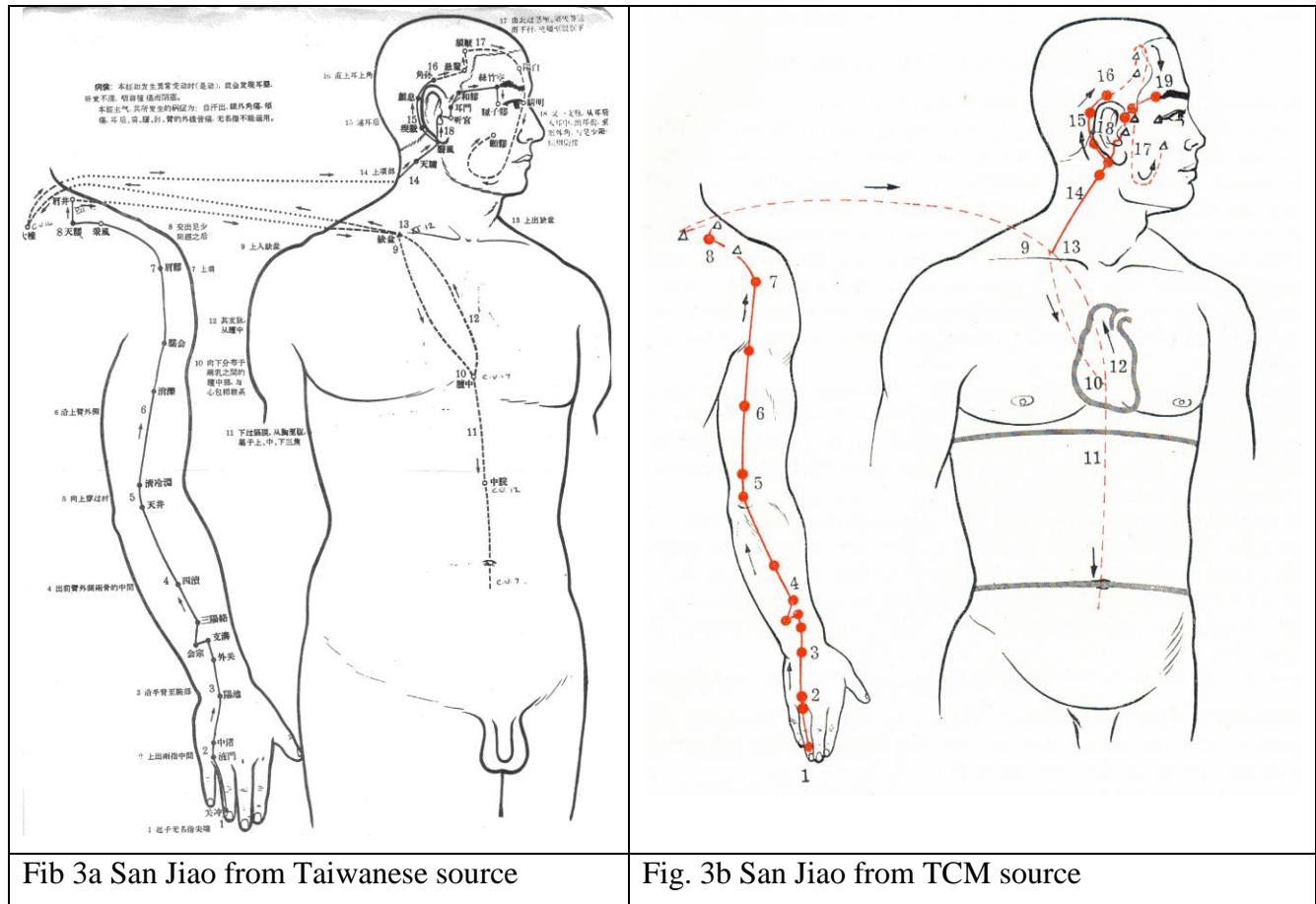
The lower Huang would appear to be more or less synonymous with the Lower Dan Tian. A particular meaning of the term would appear to fit the Solar Plexus region that is also associated with Gao. One interpretation of the term Gao Huang would be ‘high (flesh) huang’.

## Channels

Even within Channel theory we can see a lessening in emphasis on this functional pair. On Taiwanese diagrams the Xin Bao Luo and San Jiao deep channels are shown communicating with points CV.17, CV.12, and CV.7. In terms of TCM the deep pathway makes a connection of the organ/function to its paired organ/function but the Taiwanese channel diagrams suggest a deeper significance. These points are all very significant points.

Figures 2 and 3: Comparison of representations of the Xin Bao Luo and San Jiao from Taiwanese source on left and the 'Essentials' on Right. Note the specific points shown on the deep pathway in the Taiwanese source.





### Ma Shi explains

The Xia Jiao energy gathers 1.0 cun from the sub-umbilical region [CV.7]; the Shang Jiao (upper Jiao) energy gathers at Dan Zhong (CV.17); and the Zhong Jiao (middle Jiao) energy gathers at Zhong Wan (CV.12.).

Commentaries on the Ling Shu by Ma Yuan Tai and Zhang An Yin, physicians of the Tang Dynasty (618-906 AD).

Translations from huang di nei jing ling shu by Nguyen Van Nghi, Tran Viet Dzung and Christine Recours. English version Jung Tao productions.

It is of note that these are the Front Mu assignments given by Worsley in the Little Black Book. These differ from the Front-Mu assignments given by modern TCM. They are more in keeping with the Ling Shu.

CV.17 This point is said to be the Front Mu of the upper Jiao in the Ling Shu, and of Pericardium in modern TCM. It is the point where Zong Qi is focused and so affects Heart and Lung. This of course means in practice that it may be used in a TCM context without a full understanding of its purpose. It is also known as Shang Qi Hai ‘Upper Sea of Qi’, and has two names that have Yuan – meaning ‘primordial (qi)’. In Taoist Yoga it is considered to be the Middle Dan Tian.

Zong Qi is called Chest or Gathering Qi in TCM. It is said to be a product of Ta Qi and Gu Qi transformed by Yuan Qi into Zong Qi. The name Zong means ancestral, however this name is avoided in TCM texts as causing confusion with ‘Before Heaven Qi’. However, Manfred Porkert give two definitions of Zong Qi. Zong does indeed refer to the ancestor. Ancestor in this case means the immediate ancestor of the living individuals, not the distant dynastic founder. Clearly the second definition is appropriate. The two definitions are reconcilable as referring to the process catalyzed by yuan Qi, and the end result of the process.

CV.12 is said to be the Front Mu of the middle Jiao in the Ling Shu, and of the Stomach in modern TCM.

CV.7 Yin Jiao is known as Yin Crossing because the Kidney and Chong Mai channels form a connection to this point. In the Ling Shu it is a front-mu point for the lower jiao. It is not given a specific Front-Mu attribute in Modern TCM. It is one of a group of points that are understood as pertaining to the Dan Tian. CV.5, 6, 7 (i.e. they all have Dan Tian in their names). We can also make a connection that the coupled point of Chong Mai is XB.5 (the master point of Yin Wei Mai).

It is of note that in Taoist Yoga the Chong Mai is pictured as the central channel lying between the Ren Mai and Du Mai. In other words in the Taiwanese charts the Xin Bao Luo and San Jiao are seen as directly tied to this core energy.

## Bāo –Uterus

Although the meanings of the two characters bāo 包 & bāo 胞 are fairly distinct in their usage there does seem to be some suggestion of an overlap.

bāo	胞	Uterus, afterbirth
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Although the uterus is considered to be a curious or extra-ordinary bowel it is closely connected with Ming Men and with Heart. The Bao-Uterus is connected to the Kidney – and the Ming Men.

### Thirty-six

Difficulty Thirty Six says: Each viscera is just one entity. Only the kidneys are plural. Why is this?

Answer: The two kidneys are not both kidneys. The left one makes up the kidneys, while the right one makes up the life-gate (ming men 命門). The life-gate is the abode of all the spirit essence. It is the place to which is tied the original qi. In males, it stores the essence [ jīng]. In females, it ties to the uterus [bao 胞]. Hence know there is [really only] one kidney.

Nan Jing

But the Bao-Uterus seems to share various aspects in common with the Bao-Pericardium. It is said to have two specific channels and vessels connected with it called bao-mai (胞脈) and bao-luo (胞絡). But these two are not necessarily distinct from each other as the second quote below illustrates.

Amenorrhea is due to blockage of the vessels of the uterus (bao mai 胞 脉), uterus vessels are under the jurisdiction of the heart, and resemble a network (luo) within the uterus (bao), when the energy oppresses the lungs, the energy of the heart is unable to communicate with lower (jiao) and thus the menses do not arrive.

Su Wen Chapter 33

Huang Di asked: In the 9th month of pregnancy some women display hoarseness (loss of voice), why is this?

Qi Bo replied: The uterus network vessels (bao zi luo mai) 胞之絡脈 have been cut off.

Huang Di asked: How do you explain this.

Chi-Po replied: The uterus network vessel (胞之絡脈) is connected to the kidneys, and the little yin meridian cuts across the kidneys and is connected with the root of the tongue, which explains why the person cannot talk.

Su Wen Chapter 47

It is made clear that the bao zi luo mai (胞之絡脈) are closely connected with the Heart, at the very least perhaps because the circulation in general is mastered by the heart. Clearly there are complicated issues here that modern TCM appears to have simplified by assigning the main role of the Pericardium and separating the Ministerial Fire role to an aspect of the Kidneys; the European term ‘circulation/sex as used by J. R. Worsley would seem to encompass a fuller understanding of the canonical understanding of this function.

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