

**ejom**  
Vol.10. No.2. 2023

**europaean journal**  
Volume 1. No. 1. Spring 1993

福寿

O F O R I E N T A L M E D I C I N E

**ejom**  
Vol. 10. No. 2. 2023

**ejom**  
Vol. 10. No. 2. 2023

**Celebrating 30 Years**

# The Pulse of Life

Tony Todd

## ABSTRACT

Pulse is a key aspect of diagnosis in Chinese medicine. Chapter 1 of the *Ling Shu* describes health through the quality of the pulse for a given time of year. Through this lens of phasal congruence we can see health as a greater degree of order and integration of the parts of ourselves within the context of a greater whole. Pulse provides a means to see this and, in exploring its interrelated elements of relative strength and shape, both *Nei Jing* and *Nan Jing* models give us information on the nature of disease, prognosis and channel selection for needling.

## INTRODUCTION

This article seeks to explore aspects of pulse and their relationship to health and disease as described in the *Nei Jing* and *Nan Jing*. Following the Yellow Emperor's description of health as a pulse that is aligned with the seasons, the *Nei Jing* and *Nan Jing* representations are presented through the lens of specific seasonal qualities that give prognostic indications, depending on the time of year of their manifestation. The congruence of different phasal aspects (pulse, complexion, etc.) with each other and with the time of year forms the idea of health, and underlies the principles of order and organisation in the human and in the world. The pulse is further explored in terms of relative strength at different locations as well as the specific quality or shape of the waveform. These two complementary aspects can be seen to give rise to different kinds of diagnosis. The former relates to the geographic distribution of strengths and weaknesses within the channel system, and so is closely aligned with needling protocols. The latter relates more to descriptions of disease and its prognosis, some of these pulse qualities being expressed in terms that lend themselves more to herbal intervention. This presentation of the pulse in terms of a *yin/yang* binary follows a theme outlined in a previous article<sup>1</sup> that explored relationships between organ/channel, channel/point, acupuncture/herbs, external/internal physiology pairs. This article concludes by presenting horizontal and vertical levels of organisation of the body, and their expression in different aspects of the pulse.

### Pulse and the determination of health

At the beginning of the *Ling Shu* the Yellow Emperor speaks of his motivation to help people regain their health with emphasis on the use of needles to regulate channels to restore health:

'I wish that they were not affected by toxic medication and would not have to take recourse to pointed stones. Rather they should make use of fine needles to keep open their conduits and vessels, to harmonise Blood and *qi*, and to keep those locations in good order where they flow contrary to or in accordance with the norms...'

LS 1<sup>2</sup>

'Health' is further defined in terms of balance and harmony in the 'movement of the vessels' i.e. the pulse:

'The so called "normal person" are those without disease. Not to have a disease is [to say: the movements in the vessels palpable] at the vessel opening and the *ren ying* [opening] correspond to the four seasons. Above and below correspond to each other, and come and go together. The vessels of the six conduits are free from knots in their movements.'

LS 9<sup>3</sup>

The first part of the quote refers to health as a state where 'movement in the vessels at the vessel opening and the *ren ying* opening corresponds to the four seasons'. The vessel opening and *ren ying* opening are the locations at the radial and carotid pulses; these are key locations for assessing the pulse within the *Nei Jing*.

### Seasonal correspondence

Health is synonymous with integration, within the body and between the body and the external environment. If we live according to the seasons, a shift in the external environment should be reflected in the interior and manifest in the pulse. The *Jia Yi Jing* presents this in terms of the *yin/yang* dynamic of *ren yin cun kou* pulse:

'The *Cun Kou* pulse reflects the interior while the *Ren Ying* the exterior. The *yang* are in mutual accord, coming and going synchronously, their amplitudes in proportion as if controlled by one thread. In Spring and Summer the *Ren Ying* pulse is slightly larger, while in Autumn and Winter, it is the *Cun Kou* pulse which is slightly larger. This is called normalcy.'

JYJ book 4 chapter 1<sup>4</sup>

The pulse shows a more *yang* nature [i.e. more present at *ren ying*] in the *yang* seasons and a more *yin* nature [i.e. more present at *cun kou*] in the *yin* seasons.

In the *Nan Jing* 'pulse' refers entirely to the radial pulse. Nearly the first quarter of the book is devoted to the pulse and begins by describing the importance of the radial location [NJ 1]<sup>5</sup> then breaks it down into longitudinal *yin/yang* aspects [NJ 2, 3]<sup>6</sup> mirroring the *Nei Jing* model, then *yin/yang* aspects of depth [NJ 4, 5]<sup>7</sup> culminating in the 18th difficulty description of the 12 channel position<sup>8</sup> model in use today. The equivalent seasonal changes in the *Nan Jing* would be a shift in depth of the radial pulse. The pulse becomes more *yang* [superficial] or *yin* [deep] according to season.

'Those [movements in the vessels that can be felt] at the surface are *yang* [movements; those that can be felt] in the depths are *yin*

1. Todd (2021)

2. Unschuld (2016) p.35

3. Unschuld (2016) p.157

4. Yang and Chace (1994) p.201

5. Unschuld (1986) pp.65-6

6. Unschuld (1986) pp.81, 91

7. Unschuld 1986 pp.101-02, 113

8. Unschuld (1986) pp.243-44

---

[movements]... Heart and Lung [movements] are located near the surface... [The movements associated with] the Liver and with the Kidneys are both located in the depth.’  
NJ 4<sup>9</sup>

Furthermore, the *Nei Jing* describes a specific quality or shape of the pulse which shows independent of location and is representative of a season [externally] and organ [internally]:

‘In Spring the [movement in the] vessels resembles a string...  
In Spring, the [movement in the] vessels is a Liver [movement]...  
In Summer the [movement in the] vessels resembles a hook...  
In Summer the [movement in the] vessels is a Heart [movement]...  
In Autumn the [movement in the] vessels is like [something] floating...  
In Autumn the [movement in the] vessels is a Lung [movement]...  
In Winter the [movement in the] vessels is as if encamped...  
In Winter the [movement in the] vessels is a Kidney [movement]...’  
SW 19<sup>10</sup>

The same descriptions are found in the *Nan Jing*:

‘In the Spring the [movement in the] vessels is stringy; in Summer the [movement in the] vessels is hook-like; in Autumn the [movement in the] vessels is hairy; in the Winter the [movement in the] vessels is stony...’  
NJ 15<sup>11</sup>

The presence of these pulse qualities shows the dominance of a phase within the body at a given time, which with respect to the time of year may or may not be appropriate and thus an indication of health or illness.

‘If the [movement in the] vessels agrees with the four seasons, that is called: “disease without other [damage]” If the [movement in the] vessels contradicts the four seasons... that is called: “difficult to bring to an end”’  
SW 18<sup>12</sup>

The *Nan Jing* further describes an overall under or over manifestation e.g. ‘replete and vigorous’ pointing to a disease of the exterior, ‘depleted and slight’ pointing to a disease of the interior, as a well as commenting on the degree of manifestation of a given seasonal quality, e.g. in the case of the Liver:

‘[If the movement in] the vessels in Spring is slightly stringy, that implies a normal state; if it is mostly stringy, and if few influences of the Stomach are present, that implies illness. But if it is stringy in the absence of influences of the Stomach,<sup>13</sup> that implies death.’  
NJ 15<sup>14</sup>

The remaining Summer/Heart, Autumn/Lung and Winter/

Kidney pulses follow in the same way,<sup>15</sup> and with *Su Wen* 23<sup>16</sup> we return to an organ pulse that is in or out of step with the prevailing season.

‘When in Spring one feels an Autumn [movement in the] vessels, when in Summer one feels a Winter [movement in the] vessels, when in late Summer one feels a Spring [movement in the] vessels, when in Autumn one feels a Summer [movement in the] vessels, when in Winter one feels a late Summer [movement in the] vessels... they all have the same fate, they die and cannot be cured.’

So, for health there must be a congruence between the movement in the vessels and the time of year. The prognostic significance of five phase congruence between part and whole is a recurring theme in both the *Nei Jing* and *Nan Jing*. We see it also in the matching of complexion and pulse, with their relationship deemed as favourable or destructive according to generating or controlling cycles:

‘When one observes a certain complexion but fails to obtain the corresponding [movement in the] vessels, and on the contrary, notices [a movement] that [in the sequence of the 5 phases is able to] overcome [that phase associated with the observed complexion] then this will result in death. If one notices [a movement] that [in the sequence of the 5 phases is the one] generating [the phase associated with the observed complexion] then the disease will heal.’  
LS 4<sup>17</sup>

Then ultimately the degree of health or illness can be seen in the degree of correspondence across the range of phasal characteristics of pulse, forearm, complexion, voice, odour etc as well as the time of year.

‘It is like this. The body’s 5 depots have 5 [corresponding complexions] which can be seen on the face. They must also correspond to the [movement felt at the] inch-opening and through [the condition of the skin of the] foot interior [section]... Each of the body’s 5 depots has its [corresponding] pitch, complexion, odour, and taste; they all should correspond to the [movement felt at the] inch-opening [and the to the condition of the skin of the] foot – interior. No correspondence is a sign of illness.’  
NJ 13<sup>18</sup>

The prognostic conclusions of these phasal relationships form general principles even to the point of predicting the demise of a patient on a given day according to the relationship of the stem of the day and the dominant phase of the pulse:  
‘If a Liver [movement] appears, [the patient will] die at Geng and Xin...’<sup>19</sup>

---

9. Unschuld (1986) pp.101-02

10. Unschuld & Tessenow (2011) pp.323-26

11. Unschuld (1986) p.200

12. Unschuld & Tessenow (2011) pp. 311-12

13. ‘Every season should have a hint of the seasonal quality, but should still retain the softness and buoyancy denoting the presence of “Stomach Qi”’ Shudo (1983) p.86

14. Unschuld (1986) pp.201-02

15. Unschuld & Tessenow (2011) pp.304-07; Unschuld (1986) pp.200-04

16. Unschuld & Tessenow (2011) pp. 408-09

17. Unschuld (2016) p.94

18. Unschuld (1986) p.170-71

19. Unschuld & Tessenow (2011) p.314. The stems named *Geng* and *Xin* here can relate to days of the ten-day cycle [they also relate to a given year] they are both of the Metal phase and so prognostically bad for the Liver

### Comparative strengths and channel selection

The next sentence in the definition of health 'Above and below correspond to each other, and come and go together' takes us to the ratio of relative strength of the pulse. *Yin* and *yang* should be relatively even with respect to strength and rhythm, any substantial difference at these positions<sup>20</sup> not only indicates disease, but the degree of imbalance actually gives us the treatment.

The *Nei Jing* looks at the balance between the carotid and radial pulses,<sup>21</sup> illustrated in *Su Wen* and *Ling Shu*:

'When the movement in the vessels at man's facing (*ren ying* St 9) is once over normal fullness the disease is in the minor *yang*. When it is twice over normal fullness, the disease is in the major *yang*. When it is three times over normal fullness, the disease is in the *yang* brilliance.'  
SW 9<sup>22</sup>

'If the *qi* at the *ren ying* opening about once more than normal the disease is located in the foot minor *yang*. If they abound once more than normal and race, the disease is located in the hand minor *yang*...'  
LS 9<sup>23</sup>

This is repeated for the *yin* channels with the radial and carotid pulse balance reversed. The *Ling Shu* also gives instructions for treatment that is channel rather than point focused:

'If they abound at the *ren ying* opening once more than normal, the foot minor *yang* conduit is to be drained and the foot ceasing *yin* conduit is to be supplemented. Two drainages. One supplementation. They are to be removed once per day. It is essential to squeeze the vessels and to check the condition of the *qi*... Once the *qi* is harmonized the needling is stopped.'  
LS 9

The *Nan Jing* utilises the radial pulse,<sup>24</sup> chapter 18 giving a precise description of the 12 positions representing the 6 *yin* and 6 *yang* channels<sup>25</sup> typically used in acupuncture today.

The *Nan Jing* approach is most clearly embodied in Japanese meridian therapy schools, though also a big influence in Western acupuncture through the works of J. D. van Buren and J. R. Worsley<sup>26</sup>. The radial pulse is assessed in terms of comparative strengths at the 12 positions to determine the location of deficiencies and excesses. The corresponding channels are then

supplemented and drained to return the pulse to a balanced state. The first chapter on needling patterns states:

'In the case of depletion, fill the respective conduit's mother. In the case of repletion, drain the respective conduits child. One must fill first and drain after.'  
NJ 69<sup>27</sup>

In Shudo's description:

'When two *yin* meridians in a generating relationship of the five phases are both deficient, the child meridian is regarded as the primary pattern of deficiency. For example, if both Liver and Kidney meridians are deficient, the Liver deficiency takes priority and the Liver meridian is tonified. This is the most effective approach because to tonify the Liver meridian, the Kidney meridian [the mother] must also be tonified.'<sup>28</sup>

So, the practitioner in practice will look for the weakest two consecutive positions to supplement, then look for any positions that feel relatively excess to drain.

In treatment both the *Nei Jing* and *Nan Jing* compare strength of the pulse at specified locations to determine where to needle to restore harmony throughout the body. These patterns show as simple binary states: excess or deficiency,<sup>29</sup> in the *Ling Shu* they are ratios of fullness and emptiness within the six channel pairings, in the case of the *Nan Jing* they are full or empty states within the five-phase cycle.

While there are plentiful examples of specific points for particular symptoms<sup>30</sup> a root treatment as a means of addressing global imbalance is interwoven with pulse, and in particular the comparative strength diagnosis described above. The spatial distribution of strength and weakness in the pulse mirrors the body. In balancing excess and deficiency in the channel system we need to locate excess and deficiency in the pulse, this gives a congruence of conceptual model with practical application [treatment] that minimises translation errors. Though currently organ-centric treatments relying on defined actions/functions of specific points are popular, their formulations are relatively recent, and problematic for reasons discussed elsewhere.<sup>31</sup>

If the primary diagnostic method for treatment is comparing the ratio of quantities, then a secondary aspect of pulse diagnosis is the assessment of pulse quality. We discussed above how seasonal/organ qualities can give prognostic information but

20. i.e. radial/carotid pulses for *Nei Jing*, sections of the radial pulse for *Nan Jing*

21. White (2020) pp.3-8

22. Unschuld & Tessenow (2011) pp.183-84

23. Unschuld (2016) pp.158-61

24. As described above the *Nan Jing* situates the pulse at the radial artery [NJ 1] then locates its *yin/yang* aspects [NJ 2, 4] mirroring the *Nei Jing* model. Then five organs are located at specific depths [NJ 5]. There is differentiation of *zang* or *fu* pathology based on pulse quality [NJ 9, 10, 11], and prognostic aspects of pulse with respect to other five phases correspondences such as signs symptoms and seasons [NJ 13, 15, 16, 17]. Finally the presentation of the 12 channels at the radial pulse commonly used today [NJ 18].

25. Unschuld (1986) pp.243-45

26. Eckman (2007) p.151

27. Unschuld (1986) p.583

28. Shudo (1990) p.140

29. Contrasted to more complex multivariable patterns involving Heat, Cold, Damp, *qi*, Blood etc.

30. See sections on points/channels, root/branch etc. in Todd (2021)

31. Models for acupuncture can be seen as channel or point focused. The former includes *Nei Jing*, *Nan Jing* pulse-based methods that place emphasis on efficacy of treatment through balance of the channels. The latter could apply to a range of systems that base their efficacy on specific point functions and focus more on organ thinking for diagnosis. See Todd (2020) Seem (1993) p.45

---

we can now also look at the relationship of pulse quality to the understanding of disease.

### Pulse quality and disease

When it comes to pulse qualities [slippery, wiry, tight etc.] commonly used today, the descriptions in Li Shi Zheng's *Lakeside Master's* classic<sup>32</sup> describe how the pulse feels across the radial artery. Many of these qualities also appear in the *Mai Jing* and *Shanghan Lun* and are less about distribution of channel *qi* but rather a result of internal pathophysiology [Heat, Cold, Damp, Dry etc.]. The *Su Wen* also discusses pulse qualities as descriptions of disease:

'In general, vessel diagnosis served to identify either a disease or the status of the patient... for them a single movement passed through the vessels and this movement could assume different qualities, which in turn could be felt at the inch opening at the wrists and were interpreted as manifestations of certain rather general health problems... movement qualities such as "in the depth", "at the surface", "weak", "abundant", and "hard", as well as nosological entities such as "diseased in the centre", "accumulation below the flanks", and "Cold and Heat" did not require any understanding of a conceptualised relationship between the status of a conduit or depot and a specific movement in the vessels.'<sup>33</sup>

*Su Wen* 17 presents pulse quality as pathology such as 'yin deficiency and yang surplus' or 'repletion above and depletion below' and again Unschuld comments<sup>34</sup> that there is 'no association between these qualities and the status of individual vessels or depots, (they are) rather general status descriptions added to explain the presence or generation of disease.' We can also refer the *Jia Yi Jing* and its advice on how to interpret the radial pulse:

'If the *cun kou* is long... (this) indicates pain in the shins... deep and hard indicates disease in the centre... floating and exuberant indicates disease in the exterior. If the upper section of the *cun kou* strikes the fingers forcefully and rapidly, this indicates pain in the shoulders and back. If the *cun kou* is tight, firm and hard this indicates painful accumulation across the lateral costal region... superficial and stirring this indicates chills and fever... exuberant slippery and hard this indicates disease of the exterior... small but replete and hard, this indicates disease in the interior... small, weak and choppy, the disease is said to be chronic.'<sup>35</sup>

There is information about location of the disease, nature or chronicity, but no clear channel or organ differentiation, or directions for treatment as compared to *Su Wen* 9 or *Ling Shu* 9. There also are examples of pulse qualities influencing how treatment is carried out 'Tenseness in the pulse requires needling followed by moxibustion... a sinking pulse requires treatment by moxibustion'<sup>36</sup> but no channel or even organ specifics, in other words while for herbs there may be more significance, for acupuncture this alone is insufficient information for a treatment.

### Representing organs in the pulse

It is striking that both the *Nei Jing* and the *Nan Jing* do not associate specific pulse locations of *cun guan chi* to organs as is commonly thought in today's acupuncture community. As described above the pulse positions from *Nan Jing* 18 represent channels; organs however, as we have seen show through [seasonal] qualities or [in the *Nan Jing*] depth:

'A strong but dispersed [movement] at the surface is [associated with] the Heart. A rough but [movement] of short periods at the surface is [associated with] the Lung... a firm and extensive [movement in the depth is [associated with] the Liver... A [movement in the depth that is] soft and appears replete when the finger is [pressed down to the bone first and then] lifted is [associated with] the Kidneys. The Spleen is [associated with] the central region, therefore its [movement in the] vessels is located in the centre.'

NJ 4<sup>37</sup>

Continuing with the theme of depth:

'It is like this. First one touches the vessel [at the inch opening by exerting a pressure] as heavy as 3 beans and one will reach the Lung section as on the [level of the] skin [and its] hair. If [one exerts a pressure] as heavy as 6 beans, one will reach the Heart section on the [level of] the blood vessels. If [one exerts a pressure] as heavy as 9 beans, one will reach the Spleen section on the level of the flesh. If [one exerts a pressure] as heavy as 12 beans, one will reach the Liver section of the level of the muscles. If one presses down to the bone and then lifts the fingers until a swift [movement of influences] arrives, [the level reached] is the Kidneys [section].'

NJ 5<sup>38</sup>

The instances in which a pulse quality appears to be labelled by an organ such as Heart pulse or Liver pulse<sup>39</sup> may bring to mind locations at the radial pulse but as we have seen this does not fit the textual descriptions described above. In fact, the pulse chapters of the *Jia Yi Jing* can clarify this; beginning with *ren ying/cun kou* differentiation, then discussing speed and regularity, then describing other pulse qualities and finally organ pulses defined in terms of seasonal qualities – 'the Liver pulse is bow-string, the Heart pulse is hook-like etc.'<sup>40</sup>

None of this is framed in terms of *cun guan chi* of today's pulse taking, so what do we make of descriptions of qualities in specific positions such as a slippery right *guan*? We see for example in the *Shanghan Lun*:

'When there is a glomus under the Heart that is soft when pressure is applied, and the pulse is floating on the bar Rhubarb and Coptis Heart draining decoration governs.' Line 154<sup>41</sup>

'When in Cold damage, there is abdominal fullness, delirious speech, and the inch opening is floating and tight, this means

---

32. Li (1985)

33. Unschuld (2003) p.261

34. Unschuld (2003) p.262

35. Yang & Chace (1994) p.213-14

36. Yang & Chace (1994) p.202

37. Unschuld (1986) p.101-2

38. Unschuld (1986) p.113

39. Yang & Chace (1994) p.206

40. Yang & Chace (1994) p.205

41. Mitchell et al. (1999) p.230

Liver is exploiting the Spleen and it is called restraint. One should needle Cycle Gate [Liv 14]. Line 108<sup>42</sup>

Here at least they are in floating [*yang*] positions but in contemporary practice we often hear reference to such qualities at both depths and related to the organs<sup>43</sup> but this explanation is problematic for the following reasons:

- As described above the organs are described as general qualities or depths across the whole of the pulse. The 12 positions specify channels.
- We cannot simply extrapolate a channel location into an organ as organs and channels do not show excess and deficiency in the same way.<sup>44</sup>

And yet the association of the organs with these sections of the radial pulse is an alluring idea which even the historical commentator Kato Bankei flagged as problematic:

‘Each of the three sections is matched with one of the depots and palaces respectively. But in their discussions of this matching, all authors of the past have been utterly confused... I have nowhere a word on the matching of the depots and palaces with the foot and inch sections of the left and right hand... Wang Ch’eng-shu of the Sung said that the only thing he considered to be correct was that [movements corresponding to] the Heart and Lung are at the surface, that [those corresponding to] the Kidneys and Liver are in the depth, while the [movement associated with the] Spleen is in the central region.’<sup>45</sup>

A way to overcome this problem is to consider the three sections as mirrors of regions rather than organs. We have already seen the *Jia Yi Jing* describe the upper *cun* as corresponding to the shoulders and back, *Su Wen* 17 also describes these positions with respect to geography of the body:

‘The inside of the foot section on both sides, this is the region of the free ribs. The exterior of the foot section serves to examine the Kidney, the interior serves to examine the abdomen. On the central instep, on the left, the exterior serves to examine the Liver; the interior serves to examine the diaphragm. On the right, the exterior serves to examine the Stomach, the interior serves to examine the Spleen. On the upper instep on the right, the exterior serves to examine the Lung, the interior serves to examine the chest centre. On the left, the exterior serves to examine the Heart, the interior serves to examine the *dan zhong*... The upper end refers to the chest and the throat and the lower end to the lower abdomen, lower back, thighs, shins and feet.’<sup>46</sup>

A depiction of regions and structures such as the throat, lower back, abdomen, legs etc. which of course include major organs in those localities. If this is the case then a congested middle can show as a wiry pulse in either or both *guan* positions. Does that mean an excess pattern in the organ itself? No, the pulse location refers to the region where the organ is located, remembering that *Su Wen* 28 extends the hollow spaces beyond the *fu* to include the ‘body of man’<sup>47</sup>, anywhere in fact that is not the Blood or the *zang* themselves. So, a section of the radial pulse can show congestion in that region of the torso, including the space around [but not in] the *zang*, and so not break the principle of *Su Wen* 11. This does not mean the solid organs are unaffected, merely that their revival can be achieved by removing the congestion in their immediate environment.

### Summarising the radial pulse

The radial pulse as a microcosm of the body offers us two complementary views, these are drawn from [1] the surfaces of the vessel, and [2] from the space between. The first is the comparative strength of the beat at different sections of the inner and outer surfaces of the vessel.<sup>48</sup> The relative strengths of these positions [mirroring the ratios of the carotid and radial in the *Nei Jing*] give the channel selections for acupuncture treatment.

The other relates to the space between [up to and including] the surfaces; when felt on its own terms shows a shape or quality [including depth] that describes the conditions of the interior. This could express the dominance of an organ/season or of pathological conditions such as Heat, Cold, congestion of fluids, etc.

These shapes (tight, wiry, slippery etc) may be felt relatively deeper or superficially but cannot be ascribed to a channel. A quality like ‘slippery’ indicates a pathological state such as Blood vacuity or tapeworms<sup>49</sup> or Heat, phlegm or food stagnation<sup>50</sup> etc. This speaks to conditions of the interior that occupy more space than a single channel. These climatic and material changes map more closely to the thermal and flavour model of herbs which can directly warm, cool, decongest etc. Using a needle to replicate the effect of a herb requires a translation from one [temperature/flavour/substance based] system to another [location based]. There are methodological risks<sup>51</sup> with this and while this approach does have its successes, this could be attributed simply to the presence of a needle at the physical location to be treated<sup>52</sup> (or its holographic representation).

### Physiology as union of *yin* and *yang*, disease as their separation

The 7th day of the 7th month marks the Chinese festival of Qixi, the tradition dates to the Han times and the day marks the

42. Mitchell et al. (1999) p.275

43. Hicks et al. (2004) p.220, Ross (1994) p.215-16

44. Organs can only show excess in the *fu* and deficiency in the *zang* [*Su Wen* 11] while channels can show either in *yin* or *yang* channels. It is tempting to extrapolate from channel to organ, and often there is indeed an overlap with e.g. Liver symptoms and a left deep *guan* that shows imbalance. But this relationship is not a one to one fit, and though symptomatically it may bring results it can also result in a mistreatment of the root. For a fuller discussion see Todd (2021)

45. Unschuld (1986) p.250-51

46. Unschuld & Tessenow (2011) p.295-97

47. Unschuld & Tessenow (2011) p.459

48. We feel the ‘inner’ surface by occluding the vessel and gently lifting till we feel the beat, we can feel the outer surface when we gently press from the exterior till we feel a beat.

49. Yang (1997) p.100

50. Li (1985) p.69

51. Seem (1993) p.39

52. Todd (2021) p.55



---

meeting of the oxherd and the weaver girl, separated by the Milky Way by her father the Heavenly Thearch. On this one night they are able to meet and procreate and from their union the year is born. They are one of several male-female divine pairs including the moon goddess Chang O and the sun god Hou I. These embodiments of *yin yang* principles travel from their respective realms to unite and breathe life into the cosmos.

Human physiology depends on this union of *yin* and *yang* principles whether *shen/jing*, *qi*/Blood, function/structure, etc. Just as the sun and the oceans cause evaporation and condensation:

'The clear *yang* is heaven; the turbid *yin* is earth. The *qi* of the earth rises and turns to clouds, the *qi* of heaven descends and becomes rain. Rain originates in the *qi* of the earth; cloud originates in the *qi* of heaven' SW 5<sup>53</sup>. So inside us the Fire of the Heart descends to the Kidneys to warm and steam fluids up to the canopy of the Lungs.<sup>54</sup>

#### Vertical and Horizontal organization

'The universe is unified in both its substance, Breath and its structure into 3 (vertically) and 5 (horizontally).'<sup>55</sup>

Vertical integration is the alignment of human life with Heaven and Earth, the containment of *yang* within *yin* that drives function and creates order for a limited time through the ingestion of fuel [food and air]. As health declines whether through illness or age the body becomes more disordered. Often this shows as vertical separation; the upper [*yang*] body becomes more yang: experiences Heat, overactivity, rigidity from heating/drying of tissue, palpitations, dizziness etc. The lower [*yin*] becoming more *yin*: colder, under active, loss of fluids from bowel, bladder, oedema, loss of function, etc. Ultimately, they break apart as we also suffer 'heat death'.

Maintaining vertical integration is through the horizontal. The organisation of the the five phases is the body's ability to maintain the homeostatic sweet spot that allows us to self-organise and repair. Of principle importance are the five *zang* and their generating and controlling relationships. Horizontal imbalance can show as symptoms of one [or more] of the five, but their regulation and organisation is through the channel system. Furthermore, if we consider channels, organs, substances and climates as the key descriptors for the body and

its pattern differentiation and treatment, we can see a chain of organisational relationships: channels organise and regulate organs,<sup>57</sup> organs create substances,<sup>58</sup> substances give rise to climates.<sup>59</sup> If the channel system is balanced it optimises the functions of the organs, these in turn efficiently oversee the production and physiology of *qi*, Blood and Fluids, the balanced distribution of which leads to optimal warming, cooling, moistening, etc. Each of these layers can be represented in the pulse [and/or symptoms] and each may play a greater or lesser role in treatment depending on whether driven by herbs or [various styles of] acupuncture.

#### Concluding remarks

We began with the *Ling Shu's* view of health as a harmonious pulse in which the the dominance of phase and *yin/yang* balance accords with the time of year. In essence we can see health as the integration of part and whole. Horizontal imbalances are the uneven distribution of resources in the organ/channel matrix. Correcting this through appropriate needling returns the body to a greater degree of self-integration and so maintains better vertical cohesion.

Successful treatments should see a shift to a more integrated pulse. In contrast to the extreme presentations of 'death pulses'<sup>60</sup> it is a pulse that is 'neither too soft nor too hard with a steady rhythm'<sup>61</sup>; in both its quantitative and qualitative aspects it will move away from its initial presentation to a more balanced state:

'It is common to see the pulse sink, soften and slow [if] people have pulses that are a bit floating, rapid and hard. But if the pulse had been weak, deep and slow the pulse would become stronger, less deep and perhaps a little less slow. These changes do not relate only to an improved channel system; they indicate a shift in the whole body: a change in the vitality of the patient.'<sup>62</sup>

The reintegration of the parts into the whole is a common theme describing healthy change. Here it represents the medical expression of a broader project of self-cultivation summed up in the reversal of the sequence of creation in *Dao de Jing* 42. So it is in the pulse, and so it is in our lives.

'Multiplicity gives rise to plurality, Plurality to difference, Difference to continuity, And continuity to *dao*.'<sup>63</sup>

---

53. Unschuld and Tessenow (2011) p.97. The *Mai Jing* gives an identical description of the radial pulse: '*Yang* is engendered in the *chi* but presents itself in the *cun*, while *yin* is engendered in the *cun* but presents itself in the *chi*' *Yang* (1997) p.7-8

54. Maciocia (1989) p.61, Versluys (2012)

55. Robinet (1997) p.13

56. The second law of thermodynamics states that isolated systems move towards increasing disorder as well as from warmer to cooler states. A system may maintain a degree of order if there is an external source of energy. On Earth this is the Sun which is the ultimate source of energy for human life. See Bueche (1982) p.321-22

57. 'the function of the jingmai is to promote a normal passage of the Blood and the qi, so that the vital essentials derived from man's food can nourish the yin and yang... the 12 channels are responsible for life in humans and

the development of illness. ...the jingmai and all their extensions [have] the ability to target internal organs... [and] the ability to import order into the otherwise disordered body and thus regulate the qi' Birch et al. (2014) p.124, p.188

58. The substances of the body have a complex relationship with multiple organs interacting to generate move and store though typical associations include: 'the Heart generates Blood; Liver stores the Blood' Unschuld (2003) p.147; 'the Lung stores the qi' Yang & Chace (1994) p.5; 'the Kidneys are the depot of Water' Unschuld (2003) p.215

59. Maciocia (1989) pp.47-52

60. Yang (1997) p.141, Li (1985) pp.58-60, Shudo (1983) p.62

61. Shudo (1983) p.86

62. Birch (2009) p.28

63. Hall & Ames (2003) p.144

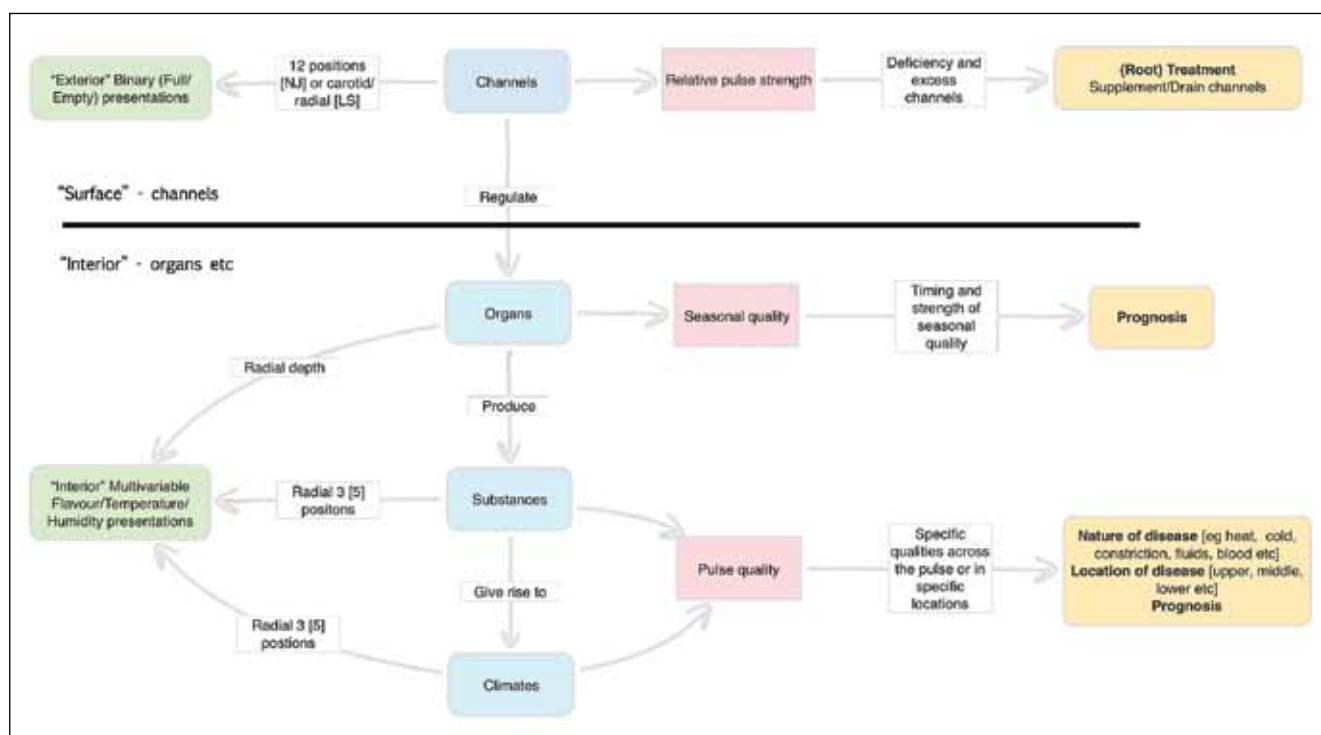


Diagram showing how pulse reflects different aspects of the organisation of the body from the relatively external 'binary' presentation of channel excess and deficiencies to the multivariable internal world of climates and organs. The strength ratios of the former leading to acupuncture root treatments and the specific qualities of the latter giving prognostic and pathophysiological information.

## REFERENCES

- Birch, S.** (2009). Filling the Whole in Acupuncture. *EJOM*, **6**(2)
- Birch, S. et al.** (2014). *Restoring Order in Health and Chinese Medicine*. La Liebre de Marzo S.L.
- Bueche, F.** (1982). *Principles of Physics*. McGraw-Hill International Book Company.
- Eckman, Peter.** (2007). *In the Footsteps of the Yellow Emperor*. Long River Press.
- Ames, R. & Hall, D.** (2003). *Dao De Jing*. Ballantine Books.
- Hicks, A., Hicks, J., Mole, P.** (2006). *Five Element Constitutional Acupuncture*. Churchill Livingstone.
- Li Shi Zhen (trans. Hoc Ku Huynh).** (1985). *Pulse Diagnosis*. Paradigm Publications.
- Maciocia, G.** (1989). *The Foundations of Chinese Medicine*. Churchill Livingstone.
- Mitchell, C. et al.** (1999). *Shang Han Lun*. Paradigm Press.
- Robinet, I.** (1997). *Taoism Growth of a Religion*. Stamford University Press.
- Ross, J.** (1994). *Zang Fu The Organ System of Chinese Medicine*. Churchill Livingstone.
- Seem, M.** (1993). *A New American Acupuncture*. Blue Poppy Press.
- Shudo Denmei.** (trans. Brown, S.) (1983). *Introduction to Meridian Therapy*. Eastland Press.
- Todd, T.** (2021). Separations of Breaths. *EJOM*, **9**(6)
- Unschuld, P.** (1986). *The Nan Jing: Classic of Difficulties*. University of California Press.
- Unschuld, P.** (2003). *Huang Di Nei Jing Su Wen. Nature, knowledge, imagery in ancient Chinese medical text*. University of California Press.
- Unschuld, P. & Tessenow, H.** (2011). *Huang Di Nei Jing Su Wen*. University of California Press.
- Unschuld, P.** (2016). *Huang Di Nei Jing Ling Shu*. University of California Press.
- Versluys, A.** (2012). *Lectures: Herb archetypes*. London 2012.
- White, D.** (2020). Jingmai diagnostics of the Huangdi Neijing Lingshu. *JCM*, **124**.
- Yang Shou-zhong.** (1997). *The Pulse Classic*. Blue Poppy Press.
- Yang Shou-zhong, Chace, C.** (1994). *The Systematic Classic of Acupuncture and Moxibustion*. Blue Poppy Press.