Fantasy Maps and How to Use Them: Rooting Channel Divergence Theory in Palpatory Experience

Abstract

The channel divergences *(jing bie)* are an under-examined aspect of the channel system, and many of the ideas concerning their use are based on creative conjecture. As such the channel divergences provide a model for engaging many of the ambiguities inherent in the literature of Asian medicine. This essay explores the use of palpatory referents in developing theories and treatment methods within all aspects of Traditional East Asian Medicine and for the channel divergences in particular.

By: Charles Chace

Keywords: Traditional East Asian Medicine, channel divergences, jing bie, acupuncture, palpation, Nei jing, Chinese medicine

As a benchmark of ambiguity in the source literature of Traditional East Asian Medicine (TEAM), the channel divergences (*jing bie* 經別) are hard to beat. Chapter 11 of the *Divine Pivot* (*Ling shu* 靈樞) succinctly describes them as six yin-yang pairs that communicate with their associated viscera and receptacles (*zang fu* 臟腑), transit the chest and throat, and terminate somewhere along the trajectory of each yang pair on the head. They are most definitely a component of the channel system to be reckoned with, in that the *Divine Pivot* devotes a chapter specifically to them, yet that chapter and historical commentaries are of little help in telling us precisely how to use them. The past 30 years, however, have seen more innovation in channel divergence therapeutics than in the previous 18 centuries combined, occurring primarily in Japan, France and the United States. Now that we are using these ideas, it is worth considering how we devised them, and more importantly, how we go about determining whether they work. It is precisely because the literature says so little about the channel divergences that they exemplify so many of the issues surrounding the interpretation and application of much of the TEAM literature as a whole.

This essay uses the channel divergences as a lens through which to explore the process by which we develop our relationship to the source literature. We will contrast them with the extraordinary vessels (*qi jing ba mai* 奇經八脈), another facet of the channel system that has also seen considerable development in recent decades but is far better represented in the literature. I will make the case for the use of palpatory referents as a compass that enables us to more effectively assess and utilise whatever maps we devise, even those that are conceptually flawed.

Extrapolation

Let us begin by considering how ideas in TEAM typically develop over the course of time. The foundational principles for the practice of acupuncture, and to a large extent herbal medicine, appear first in the *Inner Classic* (*Nei jing* 內經, Han Dynasty), and the *Classic of Difficult Issues* (*Nan jing* 難經, circa 2nd century). One of the most significant ways in which TEAM has evolved throughout history is through the successive elaboration, extrapolation and outright reinterpretation of those ideas, a process that has been driven by the needs and interests of those doing the innovating. Li Shizhen's (李時珍) *Exposition on the Eight Extraordinary Vessels* (*Qi jing ba mai kao* 奇經八脈考, 1576) distils this kind of progression in a single text. He begins his discussion of each extraordinary vessel by laying out the core pathodynamics as described in Issues 28 and 29 of the *Classic of Difficult Issues,* and then rehearses the subsequent expansions on those ideas up to his own time. For instance, the *Classic of Difficult Issues* identifies the core pathodynamic of the yang wei (陽維) vessel as chills and feverishness. Zhang Jiegu (張潔古,1151-1234) extrapolates this to the chills in feverishness (*han re* 寒熱) of the greater yang (*tai yang* 太陽) presentations described in *Discourse on Cold Damage (Shang han lun* 傷寒論, 2nd century). An enthusiastic advocate of this interpretative methodology, Li takes it a step farther, attributing *yang wei* influences to any presentation involving chills and feverishness. He goes on to identify extraordinary vessel involvement in other texts where they are not explicitly mentioned, based solely on the presence of one or another of the pathodynamics discussed in the 28th and 29th Issues. In so doing Li significantly expands the range of

extraordinary vessel application.

With few exceptions, extraordinary vessel innovators base their ideas on core premises that are defined in the source literature. By contrast, the literature of the channel divergences offers no such basis from which to build. If we are going to do anything at all with the channel divergences, we must either infer those basic principles from Chapter 11 of the *Divine Pivot,* or actively read them into various passages in the *Inner Classic*. For this reason, the linkage between many approaches to the channel divergences and the source literature is tenuous at best.

In a very real sense, such feedback mechanisms are the foundation of an evidence-based approach to practice.

The proof is in the palpatory feedback

Of course, once the efficacy of a concept and its accompanying methodology has been demonstrated, clinicians can happily leave squabbles over its textual pedigree to the sinologists. Yet it will almost certainly be some time before there is a significant body of research defining an authoritative methodology for using the channel divergences. At present, all we really have to work with are the relatively few case records detailing their use. In any case, few clinicians restrict their standards of care to those vetted by large-scale studies.

For most of us, an evidence-based approach to TEAM begins by trying things in our clinics and seeing if they work. The gold standard of efficacy is our patients returning to report a resolution or improvement in their complaints, preferably accompanied by improvement in objective measures such as laboratory values. Yet patient outcomes need not be the starting point of an evidence-based approach to practice. More immediate indicators that we have at least initiated the influence we are looking for are indispensable for both guiding the course of a given treatment and assessing prognosis. For that matter, direct improvements in the pulse, tongue and abdomen are arguably more significant indicators of a positive outcome than an immediate improvement in symptoms. Such changes reflect both a generalised improvement in the functioning of the organism as a whole and an improvement in the specific aspects of the channels, viscera and qi that we are engaging through treatment. In the absence of such changes, it is unlikely that our approach will be of any real benefit. In a very real sense, such feedback mechanisms are the foundation of an evidence-based approach to practice.

As already mentioned, the channel divergences are organised into six yin-yang pairs that communicate with their associated viscera and receptacles, transit the chest and throat, and terminate somewhere along the trajectory of each yang pair on the head. Beyond this, we may have some additional ideas regarding the kinds of pathologies that are associated with the channel divergences. Our goal is to tether whatever ideas we might have regarding the channel divergences to a feedback mechanism that allows us to critically evaluate their effects during the course of treatment.

Palpatory referents, general and specific

The extraordinary vessels are associated with a pulse lore reaching back at least to Wang Shuhe's (王叔和) *Pulse Classic* (*Mai jing* 脈經, 3rd century) and more recently practitioners have added abdominal and channel palpation techniques to the extraordinary vessel diagnostic repertoire. This is not the case with the channel divergences. As with almost everything concerning this layer of the channel system, the literature remains silent on the question of diagnostics, not to mention potential palpatory referents.

If we are trying to decide whether or not to use the channel divergences - as opposed to say, the primary channels (*jing* 經), network vessels (*luo mai* 絡脈) or channel sinews (*jing jin* 經筋) - it seems reasonable to check the front alarm points (*mu xue* 募穴). The connection between the channel divergences and the front alarm points is not stated in the literature but is based on inference. These points are the reflex points of the viscera and receptacles, and the trajectories of the channel divergences suggest a direct connection with their associated viscera and receptacles. However, as they are not specific indicators of channel divergence involvement we cannot make a diagnosis based on them alone. At best, we can use front alarm point reactivity to support a diagnosis based on other more specific palpatory referents.

The lack of specificity of palpatory findings is by no means limited to the channel divergences. In many ways, it is the norm in palpation. Consider a case of vertigo presenting with a hard tapping (*dan* 彈) pulse in the distal positions. This pulse may be a *yang qiao* (陽蹺) vessel finding or it may reflect a severe lung disorder of either excess or deficiency. Our patient may also present with tension, atony or left-right asymmetry in the quadratus lumborum muscles on the back. This may reflect a number of different problems including a *yang qiao* disorder or a simple obstruction in the primary channel, network vessel or channel sinew of the bladder channel. The presence of both these non-specific findings together increases our confidence in the appropriateness of a *yang qiao* approach to treatment. Improvement in both findings subsequent to treatment is a better indicator that we have done something therapeutically significant than improvement in only one (or none) of them. It also increases our confidence that we have actually accessed the *yang qiao* through treatment. More specifically, if we needled Bl-59 (*fu yang*) it would be reasonable to conclude that this choice actually worked through its relationship to the *yang qiao* as opposed to its function as a *xi*-cleft point.

Strength in numbers

Palpatory referents should improve with treatment regardless of whether they are general or specific. In the Engaging Vitality approach to qi palpation, any meaningful therapeutic input is reflected in a significant increase in the amplitude of the 'yang rhythm' or what is called in osteopathic circles the 'cranial rhythmic impulse.' Confidence in our therapeutic input is amplified with concurrent improvement in pulse and abdominal findings, and any other palpatory referent we may be using.

Once a practitioner has gained some competence in extraordinary vessel abdominal diagnosis she can generally discern an extraordinary vessel pattern, however vague, on nearly anyone. The same is true of extraordinary vessel pulse diagnosis, depending on how flexibly one defines the documented patterns. It is well worth the effort of acquiring the skill to make such determinations but it can be a double-edged sword. We can become so adept at discerning a palpatory referent that it becomes just another means of validating our preconceptions about what we want to do. If we have decided ahead of time that an extraordinary vessel treatment is in order, we will almost certainly find an extraordinary vessel to treat. Yet sometimes our patient's qi isn't actually 'speaking' extraordinary vessel, despite how well other criteria may fit our conceptual maps. When palpatory findings are subtle, it is prudent to compare a plurality of referents. The more palpatory findings that point to a particular problem, the more likely it will be that that is indeed the problem. Similarly, the more of those findings that improve with treatment, the more likely it will be that your treatment has been efficacious. It is equally essential that you are willing to have those findings prove you wrong. The channel palpation master Wang Juyi endorses precisely this cross-referencing of palpatory indicators in his own work.

Varieties of Channel Divergence Experience

Pulse

What palpatory referents might we reasonably use to diagnose a channel divergence involvement? In my own practice, I have identified a specific pulse quality - a lack of consolidation or bounded-ness - that I believe reflects channel divergence involvement. Regardless of the symptom presentation, I consider a channel divergence strategy if the pulse lacks that overall quality of consolidation, or if that is what is left after some other level of channel engagement. I have written about this in greater detail elsewhere. It is a useful tool but I rarely rely on it alone. As already mentioned, concurrent reactivity at the associated front alarm points further suggests channel divergence involvement.

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Channel listening

Channel listening is another palpatory technique that can provide specific information regarding the channel divergences. In the Engaging Vitality system of qi palpation we have developed a form of channel listening that is an outgrowth of Jean-Pierre Barral's osteopathic work. A comprehensive discussion of this technique is well beyond the scope of this paper but the rudiments of the technique can be described as follows. The goal of the technique is to determine which channel or channels are the least open to communicate (*tong* 通) with the rest of the channel system. As with any form of palpation, one must first have a clear idea of the information one is filtering for. In this case, that means one must first visualise a particular channel in detail. The practitioner lightly places three finger pads along the trajectory of the channel to be assessed. The contact should last no longer than one or two seconds. Lingering any longer than this only diffuses the signal, though the procedure may be repeated as many times as necessary. The skin is not at all depressed, regardless of whether we are listening to channels that are ostensibly deeper, such as the extraordinary vessels, or more superficial. Once mastered, channel listening is an especially useful tool in helping to determine whether a problem lies in the channel sinews, the primary channels, extraordinary vessels or the channel divergences.

Cranial strain patterns

A careful reading of chapter 11 of the *Divine Pivot* suggests that all of the channel divergence pairs transit the cranial base in their trajectories between the throat and their terminus in the head. Dan Bensky and I have investigated the clinical ramifications of these relationships. Membranous strain patterns in the cranial base are known to have far-reaching and systemic influences consistent with the deep actions attributed to the channel divergences. Figure 1 describes the trajectories of the channel divergences through the cranial base to their terminus on the exterior of the cranium.

The channel divergence of the triple burner (*san jiao* 三焦) is of particular interest in that it traces the pathways of the falx cerebelli and tentorium. Strain patterns in these membranous structures are also well recognised as contributing to a wide variety of disorders, particularly those associated with the fascia. This is especially interesting given the explicit relationship between the triple burner and connective tissue in general. Although not specifically or exclusively a channel divergence diagnostic as such, it makes sense that strain patterns

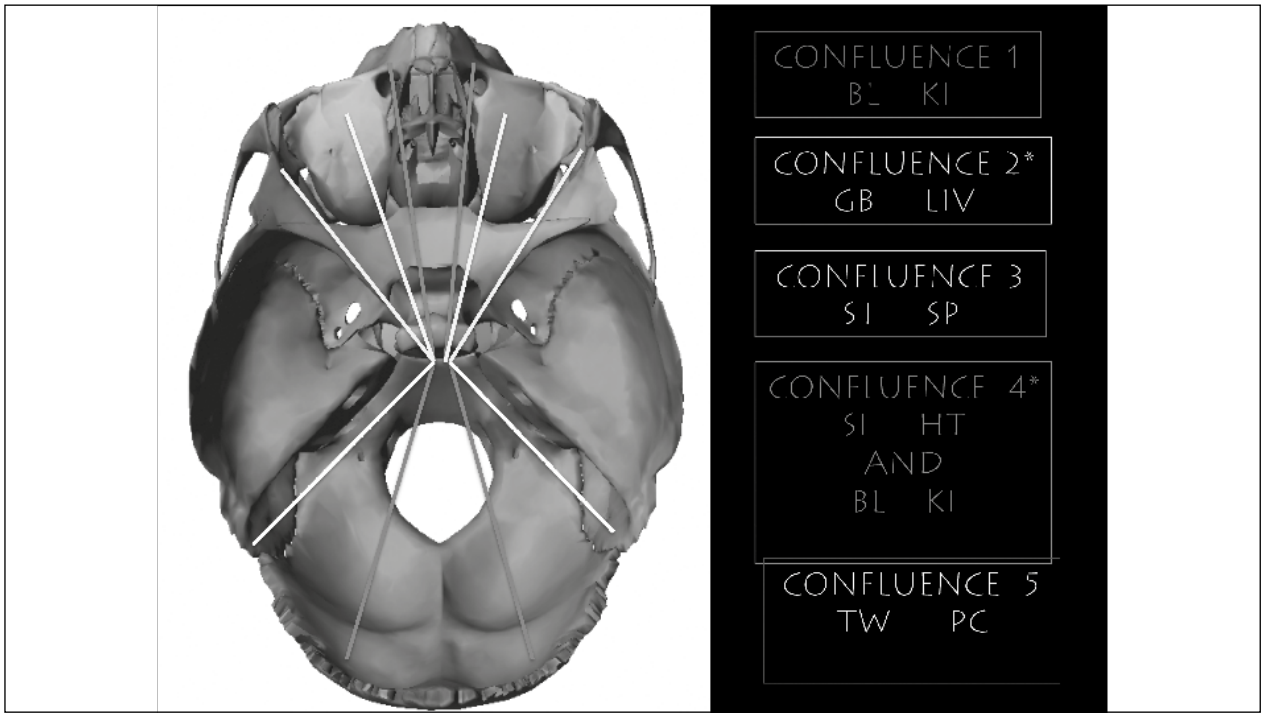

Figure 1: Channel divergences through the cranial base

in the cranial base may indicate channel divergence involvement, particularly when cross-referenced with other palpatory indicators. In such instances, successful channel divergence engagement is indicated by resolution of the strain patterns one has identified.

The palpatory techniques just described can help to clarify whether there really is a channel divergence involvement in a health condition, independent of theoretical ideas we may have as to what *should* be happening. Moreover, these referents provide immediate feedback as to whether one has actually addressed this involvement. They are neither definitive nor exhaustive, but are presented here as an example of a repertoire of palpatory referents for the channel divergences that I have used effectively in my own practice.

It is worth mentioning that some palpatory referents are intrinsic to a particular treatment methodology, having developed in tandem with the method itself. For instance, the various abdominal maps for the extraordinary vessels developed by Yoshio Manaka and Kazuto Miyawaki are the sole palpatory referents required for selecting an extraordinary vessel for treatment in this method, as well as assessing the efficacy of that particular phase of treatment. Nonetheless, proper execution of either the Manaka or the Miyawaki methodology will also produce a threefold increase in the yang rhythm mentioned above, providing another metric for assessing therapeutic change. This demonstrates that if a given palpatory finding really is a reflection of a specific aspect of the channel system such as the extraordinary vessels, then a treatment strategy directed at the extraordinary vessels should show improvement not only in that palpatory referent but in other referents as well.

Loose ends

Of course, in practice we do not always succeed in producing a positive change in all of the palpatory referents to which we are orienting. This may be due to sub-optimal pattern discrimination, imprecise point selection or needling, or some other unknown factor. The most pragmatic way to approach such a situation is to use it as an indicator of what our next step in treatment should be. As a simple example, we may find reactivity slightly lateral to the umbilicus at roughly KID-16 (*huang shu* the Miyawaki abdominal confirmation for the *chong* vessel), and a deep confined (*lao* 牢) pulse (also indicating *chong* vessel involvement) and a lack of openness upon channel palpation in the central trajectory of the *chong* vessel itself. Treatment of the *chong* vessel using the usual master-couple pairing of SP-4 (*gong sun*) and P-6 (*nei guan*) might create positive changes in the abdomen, yang rhythm and channel listening but only a slight change in the pulse. One obvious choice for a next step would be to orient our treatment strategy specifically to the pulse in one way or another. In this example, that might mean finding and treating another reactive point or points on the *chong* vessel such as ST-30 (*qi chong*), REN-17 (*shan zhong*) or BL-11 (*da zhu*). If we select the right points and treat them correctly we would expect the pulse to improve as well.

Not only can palpatory referents be immensely useful at every stage of the clinical encounter, they help us to more critically examine what it is we are doing. Let us now

consider one approach to the channel divergences where palpation can both clarify our thinking about the model itself and enhance our application of it.

Evident doubts about lurking pathogens in the channel divergences

An increasingly common idea concerning the channel divergences is that they are deep repositories of pathogenic factors, making them important vectors in the treatment of a variety of illnesses from autoimmune disease to cancer.

The textual basis for the pathogen repository concept of the channel divergences is remarkably tenuous. David Twicken has laid it out most clearly in print. He traces this idea to the line in Chapter 5 of the *Divine Pivot* that states '*qi xie li jing, bu ke sheng shu* 奇邪離經，不可勝數.' Working from Wu Jingnuan's English language translation of the *Divine Pivot*, he reads this line as 'There are an extraordinary number of diseases in the separate channels.'[7] This reading is problematic on multiple counts. Firstly, it places the topic of the channel divergences incongruously at the head of a five-line verse concerning the topic of the chapter, the roots and ends of the channels (*ben jie* 本節), without connecting the two ideas in any way. The verse in Chapter 5 continues, 'He who fails to know root and connection, will break the locks and destroy the pivots; he will open the door leaves and let [the proper qi] go away … the subtle secret of the nine needles lies in the importance of knowing the beginning and end [of the channels]'. The topic of this passage is clearly not the transmission of pathogenic factors through the separate channels. Rather, the passage addresses the transmission of pathogens from the end of one primary channel to the beginning of another, along with their associated viscera and receptacles. More fundamentally, reading the line as 'there are an extraordinary number of diseases in the separate channels' does not conform to the rules of classical Chinese grammar. In the first clause, *qi xie li jing* 奇邪離經，li must be a verb. Unschuld's reading - 'the extraordinary evil (qi) leave (or enter) the conduits is far more coherent.

The impulse to attribute the word *li* 離 (separate) to the channel divergences is probably based in its appearance in Chapter 11 of the *Divine Pivot*, where Huangdi asks Qibo about the separation and union, origin and entry□li he chu ru 離合出入） of the twelve channels. This juxtaposition, however, does not mean that any appearance of *li* is a reference to the channel divergences. Moreover, even if *li jing* 離經 did mean 'separate channels,' there is no evidence to suggest that those separate channels are synonymous with the channel divergences, as is evident in the rich commentarial tradition of the *Inner Classic*. For instance, in the 14th Difficulty of the *Classic of Difficult Issues, li jing* is a technical term referring to a cycling of the pulse in relation to the breath that is 'a departure from the norm.' Zhang Jiebin (張介賓, 1563-1642) reads the first two characters in the quote above from Chapter 5 of the *Divine Pivot*, *qi xie* 奇邪, as 'uncommon pathogens' (*fei chang zi xie* 非常之邪) and *li jing* as 'lacking a fixed circulation' (*liu chuan wu ding ye* 流傳無定也). Yet another interpretation is that 離 means to enter (*ru* 入). Taken as a whole, these commentaries suggest that pathogenic factors may circulate abnormally, without a fixed rate or cycle, and/or simply that they may enter the channels.

Advocates of the 'pathogen repository' approach to the channel divergences read these channels into many of the other passages in the *Divine Pivot* using similarly tenuous logic, thereby linking them to the primary channels, networks and extraordinary vessels. I have found no historical commentaries interpreting these passages as a reference to the channel divergences.

Another textual basis for the idea that the channel divergences are buffers or repositories of pathogenic factors is a reading of the tertiary vessels (*sun luo* 孫絡 – mentioned in Chapter 63 of the *Basic Questions*) as a reference to the channel divergences. This would also link the channel divergences directly to the network vessels. The rationale for this is opaque and I have found no corroboration for this idea in the commentarial record. The French acupuncture theorist Jean Mark Kespi actually begins his own discussion of the channel divergences by specifically stating that they are not mentioned in Chapter 63 of the *Basic Questions*. Yet, Kespi goes on to cite Chamfraut and Van Nghi in presenting the channel divergences as a vector for the internalisation of defense qi, which serves to prevent external pathogenic factors from moving inward, specifically to the viscera. According to this line of interpretation, rather than storing pathogenic factors, the channel divergences prevent their penetration into the interior. It is difficult to imagine how the channel divergences could at once be in communication with their associated viscera, providing them with defense qi while simultaneously sequestering pathogenic qi from those same viscera.

This is an excellent example of an inferential interpretation pushed to the point of overt reinterpretation. In searching for clinical applications of the source literature, our goal is not to somehow recreate how the ancients practised. Rather, we take an idea presented in a text and expand upon it to do something new and effective with it. When we reinterpret a text to say something it clearly does not mean, we arguably exceed the spirit of the message. Whether an inadvertent or conscious reinterpretation of

the text, the pathogen repository model just described is an example of a fantasy map. Its inferences are drawn far more from the imagination of its originators than from what the literature itself has to say on the matter. That is not to say it is clinically worthless. To be fair, TEAM abounds in radical readings of its canonical literature. Advocates of the lurking pathogen model of the channel divergences will no doubt be quick to attest to its efficacy, which is all that really matters. As such, the lurking pathogen model is a useful lens through which we can explore the questions that arise from literary interpretation in practice. Such concerns extend to even very mainstream ideas in TEAM.

What's under the hood

The ideas that we should examine most critically are the ones we are most attached to, most fond of. Otherwise we base our practice on nothing more than pretty ideas. This is the foundation of both scientific method and philological inquiry. Just one of the questions that comes to my mind in considering the pathogen repository model is whether pathogens causing chronic disease invariably reside in the channel divergences. The principle that chronic diseases enter the network vessels is far more fully developed in our literature. How might we distinguish between the two theories? This is especially relevant if the channel divergences and the network vessels do indeed intercommunicate. One could of course make a determination based on theory alone, but TEAM is nothing if not a pool brimming with theories. Which theory is most appropriate for a given situation? Here is where one or more palpatory referents would come in handy: when you feel X look to the channel divergences, when you feel Y look to the network vessels.

If our theoretical differentiation of the channel divergences from the network vessels has any real basis in qi and structure, then should they not feel different from one another? That is certainly the case with the extraordinary vessels. For example, notwithstanding the theoretically intimate relationship between the *wei* and *qiao* extraordinary vessels and the network vessels, we attribute a laterally deviated pulse in the distal position to the *yang wei* and not the network vessels. This information helps us know what we are orienting to.

Far more significant than the tenuousness of its ties to textual legitimacy is the clinical reality that lurking pathogens of any sort are never an easy thing to track or evaluate. Any attempt to do so in acupuncture practice demands both specific and systemic palpatory referents as a basis for therapeutic engagement. Let us examine one last idea about the channel divergences, again evaluating its textual basis and then considering how the application of a repertoire of palpatory referents might inform its use.

The thing about jing

Some thinkers believe that the channel divergence are especially resonant with essence (*jing* 精). For that matter, it is essence that is thought of as the motive force for the expulsion of the pathogenic factor in the pathogen repository model. One practitioner specialises in channel divergence treatments that are meant to purge deep lying pathogens. Her treatments can last up to three hours due to the languid response time of essence.

The idea that essence moves slowly is another excellent example of interpretive inference. The literature is clear that essence is at work in many if not all long-term cycles of life. It is the flourishing of essence that makes us fertile and its decline that makes us old. This certainly suggests that essence works slowly but this is not invariably the case. Sex hormones are as good a physical substrate for essence as one is likely to find in modern physiology. Although they act over decades and in monthly cycles, their influence may become immediately apparent when just the right person enters the room. Adrenaline, another hormone arguably associated with essence is known for its instantaneous effects. This is evident in the delightful passage in Chapter 62 of *Basic Questions* instructing us to show our patients the needle in order to frighten their essence into hiding, thus preventing it from leaking out in the course of treatment. These examples certainly call into question the notion that essence moves very slowly when addressed through acupuncture. Nevertheless, I am happy to entertain the idea that essence may indeed have a very slow motion. The question then becomes one of how we effectively track that activity. The salient point for the present discussion is that any interpretation of essence that is not tethered to a palpatory referent is necessarily supposition.

One's understanding of essence may be informed by cultivation traditions such as the inner elixir (*nei* dan 内丹) current where essence is mobilised in one manner or another. Such traditions are a rich source of inspiration for medical practice and deserve the attention they are increasingly receiving. Here too, however, the literature is equivocal on the speed of essence, and the abundance of contradictory oral traditions associated with them makes already murky waters even muddier. How we go about actually importing the principles of internal cultivation into medical practice is a question that is itself worthy of consideration. For instance, granting that one subjectively experiences one's own essence as moving at a particular pace still begs the question of how one might track that same movement in a patient. A well-defined palpatory referent for essence would help to bridge this gap. As we have already seen, pulse diagnosis is always a good place to start.

If some more profound shift in the pulse than the lack of consolidation I earlier attributed to the channel divergences is the necessary metric of essence activation,

what might that be? Many common pulses are general indicators of essence insufficiency, particularly the choppy (se 澀), drumskin (ge 革) and soggy (ru 濡) pulses. The 'tapping stone' (dan shi 彈石) pulse, one of the 'strange pulses' (guai mai 怪脈), and the 'rolling pill' (wan wan 丸丸) pulse are both linked to deep debilitation of essence at the level of some of the extraordinary vessels. Such pulses are a potentially useful palpatory referent for the status of essence in the deeper strata of the channel system, though they are most explicitly associated with the extraordinary vessels and not the channel divergences. The resolution of a prison pulse (*lao mai*牢脈), known to reflect deep-lying stagnations and linked to the *chong* vessel in the extraordinary vessel literature, might be a plausible referent denoting the resolution of a pathogen lurking deep within the channel system. Jeffrey Yuen has similarly suggested that a hidden (*fu* 伏) pulse might be a palpatory referent for the channel divergences and indeed it covers much the same pathological territory as a prison pulse. Neither of these pulses, however, can plausibly be considered as pathognomonic for channel divergence involvement.

Whatever its value for tracking essence in the system as a whole, pulse diagnosis alone is unlikely to provide a satisfactory palpatory referent of the essence operating specifically in the channel divergences. At very least the pulse must be collated with other palpatory metrics.

Fluids and tides

The phenomena known in Engaging Vitality work as the yin rhythm and in cranial osteopathy as the fluid tide are a fluidic movement that ebbs and flows longitudinally between the head and feet at a rate of approximately two to three cycles per minute. It is palpable virtually everywhere in the body. The degree of fluidity, smoothness and overall integration of this movement reflects the effectiveness with which essence informs the qi and blood. As the functioning of qi and essence improve over the course of treatment so does the fluidity, smoothness and integration of the fluid tide, which tends to optimise over time frames between 10 to 60 minutes. Although it too, is a generalised referent, it is nevertheless invaluable for those working on the deeper pathways of the channel system, such as the extraordinary vessels and the channel divergences. Osteopathic descriptions of these tides are remarkably resonant with similar descriptions of tidal movements in the literature of internal cultivation. This suggests that the capacity to experience such phenomena is not limited to a particular culture or those with one particular kind of training. It is there for anyone who makes the effort to really listen.

Conclusion

I have presented here some of the palpatory referents I have found useful in navigating the channel divergences. Moreover, I have tried to sketch out a way of thinking that others might adopt in developing their own approach to this and other aspects of the channel and network system. More work in this area is clearly needed. Even the best maps are still only maps, regardless of whether they are the product of authoritative scripture, time honoured oral tradition or clinical trials. As anyone who has spent any time in the wilderness knows, when all you have is a map, it is deceptively easy to convince yourself that you are in one place when you are actually in another. Regardless of the kind of qi or aspect of the channel system we hope to engage, orienting to a well-defined set of palpatory referents provides a compass that helps to situate ourselves more clearly in the clinical landscape.

References

1 Special thanks to Dan Bensky, Elmar Santoor de Rootas and Steve Clavey for their insightful comments and corrections. All errors are my own.

2 Only two of the fu are bowels in any technical or even vernacular sense of the word. All of the fu are receptacles in that they receive things, such as digestate, bile and urine. A receptacle may store things indefinitely but most typically only temporarily. Hence receptacle is an apt translation for fu 腑.

3 See Unschuld (2016), pp.175-178

4 Development of channel divergence theory has been facilitated not only by new and creative interpretations of the source literature, but also by the use of relatively new tools, including magnets and the combination of needles composed of different metals and electrical stimulation. For an overview of the various currents of channel divergence developments from Japan, France and the United states, see Shima and Chace (2001). For more another recent current of channel divergence thinking from the U.S. see Twicken (2014).

5 Chace and Shima (2011), p. 101.

6 Jeffrey Yuen has advanced some interesting inferential premises concerning the extraordinary vessels that, at least in the way they have made their way into print, do not appear to have a basis in the source literature. For instance, he posits that by virtue of the starting and ending points of their trajectories, the qiao vessels are about 'stance and perspective,' and can therefore help to clarify one's place in the world - see Twicken (2013), pp. 119-20.

7 See for instance, Chace and Shima (2011), pp. 325-64.

8 Strong pulses do not invariably reflect excesses and are in fact very common in cases of deep debilitation. For a discussion of this pulse quality see Chace and Shima (2011), pp.301-327.

9 Miyawaki incomplete reference

10 Engaging Vitality is an approach to qi palpation that adapts osteopathic palpatory techniques into a TEAM model. Developed by Dan Bensky, Chip Chace and Marguerite Dinkins, it is now taught and practised in North America, Europe, and Australia. For more on Engaging Vitality see Bensky & Chace (2018). or see <engagingvitality.com> or <engagingvitality-europe.com>.

11 See for instance, how broadly Li Shizhen defines a *chong* and *ren* pulse in the appendix of his *Pulse Studies of the Lakeside Master (Bin hu mai xue* 濱湖脈學, 1576) as compared to his recapitulation of the pulse qualities from the *Pulse Classic;* see Chace and Shima (2011), p.401.

12 Wang Ju-Yi & Robertson (2008), p.45

13 Chace (2009), pp.14-21.

14 Channel listening is a central tool in the Engaging Vitality system of qi palpation. Janice Walton Hadlock has developed another similar approach - see Walton-Hadlock (2010).. What may be the best known form of channel listening, that developed by Wang Juyi, does

not at present work with the channel divergences.

15 For more on the clinical applications and historical context *tong* open-communication in TEAM see Bensky & Chace(2018) and Scheid, (2018).

16 The founder of cranial sacral therapy, William Garner Sutherland, began his work by identifying and treating strain patterns in the cranial base. See Lee (2005), p.142.

17 See Liem (2009) pp.129, 236, 242, 261-264, and Sills (2001), p.343. For an excellent discussion of the fascial basis of the triple burner in the classical literature, see.

18 Zhang Jiebin's essay 'Discerning the Triple Burner, Enveloping Networks and the Life Gate *(san jiao bao luo ming men bian*三焦包絡命門辨*)*' in his *Appendices to the Categorized Classic (Lei jing fu yi* 類經附翼, 1624; Zhang Jiebin, p, 795).

19 For more on strain patterns in the cranial base see Gehin (1985), pp.18-36. For images of the channel divergence trajectories through the cranial base see www.Engagingvitality.com.

20 See Manaka, Kazuko, & Birch (1995), pp.161-162, and Miyawaki & Kuwahara (2012).

21 Citing Wang Shuhe, Li Shizhen associates a confined pulse with the *chong* in the appendix of his *Pulse Studies of the Lakeside Master.* Chace and Shima (2011), pp.135, 401.

22 Twicken (2014), chapter 2, paragraph 2.

23 Ibid. p.21.

24 Jeffrey Yuen himself does not publish, but is most often cited through his lecture notes. For instance he recently presented the pathogen repository model at the conference of the American Association of Medical Acupuncture (April, 2018).

25 Wu's translation of the *Divine Pivot* does not identify the structure of this passage as verse prose. Wu, p. 27.

26 '不知根結五臟六腑折關敗樞，開合而走… 九針之玄，要在終始，故能知終始.'

27 Unschuld (2016), pp. 97-98.

28 Ibid., p.177.

29 Zhang Jiebin entitles his own discussion of the channel divergences 'On the Separation and Unions of the Twelve Channels Divine Pivot, The Folio on the Channel Divergences' *(shi er jing li he, ling shu, jing bie pian* 十二經離合經別篇); see Zhang Jiebin 張介賓. *Complete Writings of Jingyue (Jing Yue Quan Shu* 景岳全書) in Li Zhiyong (李志庸) ed. *The Complete Writings of the Medical Studies of Zhang Jing Yue*, pp. 130-131.

30 Twicken (2014), chapter 2.

31 *Nan jing zhong yi xue yuan zhong yi xi:* p.51.

32 For instance, Twicken claims that the divergent channels treat 'conditions found in the Chapter 14 of the *Divine Pivot* (Measurements in Reference to the Bones). He states 'Bones are connected to muscles, tendons the eight extraordinary vessels and *jing*. The Divergent channels can treat conditions of the eight Extraordinary Vessels and jing.'; see Twicken (2014), chapter 2, paragraph 11. Once again, this reads a great deal into what the text actually says. Chapter14 of the *Divine Pivot* is a merely a recitation the size of anatomical landmarks and the distance between them. It makes no allusion to the channel divergences, extraordinary vessels or the essence *(jing)*; see Unschuld (2016), pp.197-199.

33 Yuen, 2018, lecture notes AAMA conference, Portland Oregon, p. 1.

34 'Ils sont etudies au chapitre XI du *Ling Shu* et non au chapitre 63 de *Su Wen* qui concerne les transversaux.' Kespi, p. 358.

35 'Les meridiens distincts sont charges sont d'amener l'energie Wei dans la profondeuer du corps humaine et d'assurer ainsi ses possibilities de lute au-dela surface cutanee. Is ont donc empecher ces agressions exterieures d'evoluer vers la profonduer en particulier jusqu'aux visceres.' Kespi, p. 359.

36 The various applications of the six-warp *(liu jing* 六經) or six division (*liu bu* 六部) model and its associated patterns described in *On Cold Damage* provide an apt example of a progressive reinterpretation of a source text over the course of many centuries. The evolution of this thinking culiminates in Yoshimasu Tōdō's (吉益東洞, 1702-1773) radical dissociation of cold damage patterns from the lines of transmission linked to the *Inner Canon*. In this approach one simply identifies the pattern (*sho* 證 jap.) and prescribes the herbal formula associated with it. It is difficult to imagine that this is what *Zhangji* 張機 the author of *On Cold Damage* had in mind, yet the *sho*-based approaches to herbal therapy that developed from this perspective are manifestly useful in clinical practice; see Scheid (2014).

37 Chace & Shima (2011), p. 165.

38 For discussions on the treatment of lurking pathogens in both modern and premodern contexts and the see Chace, , Blalack & Schaefer (2007), and Chace, & Blalack (2006).

39 Twicken (2014), Chapter 1.

40 See the interview with Josephine Spilka on the Qiological Podcast at <https://qiological.podbean.com/e/accessing-and-treating-the-divergent-channels-•-qi002/>, accessed 30/01/2018.

41 See for instance, Chapter 1 of the *Basic Questions* where the qi of the kidneys (essence) matures and declines; Unschuld (2016), pp 36-38.

42 To be sure, these endrocrinological examples are open to alternative interpretation. One might, for instance, argue that a sudden fright produces an immediately change in the activity of the essence by simply locking up the qi dynamic, which is indeed responsive to rapid change. This reading, while plausible, does not negate the need to link whatever interpretation we impose to a palpatory finding.

43 Flaws (1995), pp. 57, 66, 69.

44 For a discussion of this pulse see Chace and Shima (2011), pp.301-307.

45 Chace and Shima (2011), p.246.

46 Jeffrey Yuen Seminar Lecture Notes, Bakua, December 15-16th, Amsterdam, Holland, 2017. Thanks to Elmar Santoor de Rootas for bringing this to my attention.

47 For more on the fluids and the fluid tide see Sills (2001), pp.14, 118, 129, 289-90. For a discussion of possible physiological mechanism for these tides see, Lee (2005), pp. 197-266.

48 Take, for instance, Hun Ranzi's 混然子 commentary on the *Mirror for Compounding Medicine* (*Ru yao jing* 入藥鏡, 10th century): 'At the time when the fire arises one will perceive the genuine qi soaring and rising like the beginning of a tide, directly ascending and contrary to its [normal] flow and therefore it said that Heaven is in resonance with the stars and earth is in resonance with the tides.' (起火之時，覺真氣騰騰上昇，如潮水之初起，直上逆流，故曰天應星、地應潮也。); in Pregadio (trans.) (2013). pp. 17-18.

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