

Traditional Needling Techniques as Practical Constructions from Reading Historical Descriptions

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In 2009 I published in two parts the first of a series of papers on acupuncture 'Filling the whole in acupuncture' [6]. I am still working on the other papers in that series. The 2009 paper described a traditional supplementation needling technique from the *Toyohari* system of acupuncture and then explored historical and modern ideas about how to model what might be happening with the needling technique.

Since publishing the paper I have had a chance to reflect on the issue that most readers were quite unfamiliar with the needling technique and probably many could barely credit it to being a form of 'traditional acupuncture'. I can sympathise with this since it is a specialised technique from Japan quite different from modern Chinese influenced methods and it involves use of needles that are not inserted. Some might naturally wonder how can that be acupuncture? What happened to the '*de qi*'? In this paper I want to focus on these and related issues and at the same time propose how 'traditional acupuncture' techniques might be constructed in the modern period. The following is a variation of an appendix in a book chapter on how acupuncture has engaged and used the concepts of *qi* and the *jing mai* from an edited book on the theme of *qi* and the *jing mai* [11].

Below, I describe the needle technique from the perspective of the practitioner using the language that describes for him/her what is happening. Other untrained observers watching the needle technique will probably want to describe the technique in different terms. I feel it more suitable to use the more natural language rather than the language of another interpretive model. After describing the needle technique I then cite relevant passages from the historical literature, especially the *Su Wen*, *Ling Shu* and *Nan Jing* upon which the details of the needling technique are based. Others familiar with the same historical passages may have different interpretations or practical applications of the same passages, but that is one of the purposes of this paper – to illustrate how over time and through clinical practice different needling techniques develop based on syntheses of practical interpretations of passages from classical texts.

Take the example of 'needling with the flow of the channel' as an important historical idea about how to apply the '*bu fa*' [補法] or the supplementation method. Many authors mention this idea [27:13; 30:151; 43:164; 58:184; 73:163]. Of this and a number of other historical ideas about needling, Ellis and colleagues wisely state, 'The above methods are not a subject of unanimous agreement. Through the ages different opinions have

been proffered. We present them here as an introduction to the subject, realizing that each practitioner must develop his or her own preferences on the matter' [27:14].

One of, if not the original passage [24], that is interpreted as discussing the idea of needling with the flow is found in *Ling Shu* chapter one which says [追而濟之惡得無實]. The term '*zhui*' [追] is similar in meaning to '*sui*' [隨], to 'follow' and is usually interpreted in this passage as needling along with the flow of (*qi* in) the channel. But many alternate interpretations can be found that appear to depend on the style of needling and the amount of historical literature the translator is familiar with. The following are from modern Chinese translators: 'To tonify means to follow, to assist, to agitate' [69:2]; 'In invigorating, the pricking can be carried out at any time' [70:495] – though the same phrase in *Ling Shu* nine is rendered by the same translators Wu and Wu as 'when one twists the needle along with the running direction of the needle, it is the invigorating therapy' [70:546], and a similar phrase in *Ling Shu* three as "'assisting along with it" means to prick in the direction similar to the channel's circulation' [70:511]; the same passage is rephrased in the *Zhen Jiu Jia Yi Jing* (282 CE) and translated by Yang and Chace 'Supplementation may be defined as tracking. Tracking implies (insertion of the needle) in a seemingly casual way' [72:291].

In addition to finding quite different translations in the modern period of the same passage, different styles of practice interpret historical passages within the context of that practice style. The three cited translations are from people influenced by the modern TCM style of acupuncture where the needling is done more deeply to get '*de qi*'. In the TCM literature, the angle of insertion is less important in relation to *bu fa* [2:306; 25:329; 48:409; 52:192] partly due to the fact that needling tends to be deeper in TCM acupuncture in comparison to historical descriptions [17:53-54; 81] and changes of needle angle from perpendicular needling are considered in TCM related to constitution, age, condition of the disease and location of the acupoints [52:192] not the application of the technique for *bu fa*. On the understanding of the term '*sui*' in relation to needling, differences of opinion can be found in the historical texts as well. *Nan Jing* seventy-two discusses the principle of '*sui*' when needling; *Zhang Shi Xien* (1510 CE) and *Xu Dachun* (1727 CE) interpret this passage as meaning to needle with the flow of the channel [63:602-603], while other commentators of the same passage see other interpretations [63:599-603]. Meanwhile *Nan Jing* seventy-nine offers a completely different explanation of the idea of '*sui*' in

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relation to its theory of systematic correspondence and thus explaining the treatment principle from *Nan Jing* sixty-nine 'In the case of depletion fill the respective mother' [63:583]: it is seen in relation to five phase engendering cycle and acupoint selection rather than the angle of the needle [63:641], see factor one below for discussion.

We often find that passages from historical texts have different layers of meaning [see e.g. 24; 63; 65] that can be picked up on by different practitioners in each modern period. This has been in part responsible for generating the historical variety we find in the field of acupuncture. But, as the passage from the *Ling Shu* and the *Nan Jing* variation of it show, the *Nei Jing* and *Nan Jing* present very different views on acupuncture, their theories seem to be quite different, something discussed by Unschuld [62, 63, 64, 65] and others [10]. So, while I cite various passages from the *Su Wen*, *Ling Shu* and *Nan Jing* to justify the particular influences, applications or techniques within the whole needling technique, I am by no means implying that these are the only valid interpretations. These are reasonable interpretations upon which this particular practical application is based. To help the reader grasp this, in what follows, as I cite each passage, I also include the original Chinese passage along with the most reliable translation I could find. Thus for the *Nan Jing* I use Unschuld's 1986 translation [63], for the *Su Wen* I use the recent translation by Unschuld and colleagues [65]. I could not find any reliable translation of the *Ling Shu*. I cite passages translated by Chace and Bensky [23; 24] and as default I use the translation of Wu and Wu [70] recognising that it is not optimal. Where my teachers have used a particular interpretation that is different than what these sources render, I cite that interpretation in a note. No translation is perfect. With these limitations in mind, I believe the original texts that I cite along with the practical interpretation made from it tell a substantial story.ⁱ If one wishes to deny that the following technique is not 'traditional acupuncture' I believe that one then has to argue that such a thing exists nowhere anymore.ⁱⁱ

The needle technique

In this needle method, the needle does not penetrate into the body, the needle tip is held at the skin surface or perhaps touches the skin but it does not penetrate the skin.² The technique described below cannot be learnt from textbooks but only through highly structured supervised training with regular feedback. In the *Toyohari* Association, one of the founders, Mr Kozato, found in the setting of a study group that it is possible to monitor the radial pulses throughout the needling techniques and that based on the changes that are felt in the pulses, one can give continuous feedback to the technique. This is the '*Kozato hoshiki*' or Kozato method [30]. This is rather natural given the history of acupuncture. The '*mai*' were said to reflect the state of *qi* in the

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body and that to judge the *xu/shi* condition of the *jing mai* we are instructed in the pivotal chapter ten of the *Ling Shu* to feel the *mai* (pulses) [70:570+574, and 43:153] thus it is logical to check the pulses in order to examine the *changing state* of *qi* in the *jing mai*. In the Kozato method, one can give feedback to every stage of the needling as different changes occur at each stage. For the technique described below I assume that it was applied well and that the desired changes in the radial pulses were each step by step achieved and confirmed by other qualified practitioners.³

Bu fa (Japanese hoho) [補法] – the supplementation technique

i. A silver needle (40mm long, 0.18mm gauge) is used for this technique.ⁱⁱⁱ

ii. After selecting the appropriate acupoint to be treated, the practitioner stands in the correct position relative to that acupoint. The acupoint is usually needled only on one side rather than bilaterally following simple clinical rules.

iii. Holding the needle in the right hand (*sashide*), the practitioner places their left hand on the patient in order to find the acupoint.

iv. Touching very lightly the left index finger is softly and slowly stroked along the (flow of) channel (*jing mai*) to be treated, looking for the acupoint to be needled, paying attention to find signs of vacuity to identify the exact location. The vacuous point has certain physical characteristics (is soft, loose, etc) but more subtle feelings are also detected, the (experienced) practitioner becomes aware of something – touching or contacting the *qi* of the patient (at the 'live point').

v. After finding the exact ('live') location to be needled, and still touching very softly, the practitioner places the thumb of the left hand next to the index finger, pressing the pads of finger and thumb gently together directly over the acupoint to be supplemented. This forms the '*oshide*'. In order to stabilise the *oshide*, the other fingers of the left hand are placed lightly on the body to secure it. These movements are done all the while retaining the awareness of *qi* at the point to be treated.

² Non-inserted needling methods are not uncommon in Keiraku Chiryō, Japanese Meridian Therapy. Several authors describe their routine use with specialized terminology for techniques such as '*sesshokushin*' (touch or contact needling) and '*sanshin*' (rapid contact needling over an area) [30; 35; 49; 58; 59]. It is helpful to remember how two of the nine needles from the *Ling Shu* (*shizhen*, *yuazhen*) were also not inserted in order to influence the *qi* [20:45-54]. While non-inserted needling methods are not how 'acu-puncture' is normally thought about today (given the assumption about 'puncturing'), they are a routine part of the larger field of acupuncture practice in paediatric [7] as well as adult acupuncture in both historical and modern contexts.

³ This stipulation is intended as a counter-argument to the claims that pulse diagnosis is incorrect or unproven and therefore of doubtful value [61]. If there is at least agreement to the observations then those observations can be considered to be reliable, the first step towards validating the method scientifically [45; 46]. Hence for the sake of argument I assume that two or more observers have agreed upon all observations.

vi. The practitioner relaxes and adjusts their posture so as to relieve any unnecessary tension and then introduces the needle into the space between the index finger and thumb over the acupoint, angled along with the flow of the channel and directed towards the acupoint.

vii. Very carefully and slowly the practitioner advances the needle tip towards the acupoint with their right hand (*sashide*) paying special attention to feeling when the needle tip engages or contacts the *qi*. This can occur with the needle tip a small distance above the actual surface of the skin or at the skin surface. The practitioner feels this contact in their left hand (though other sensations elsewhere in their body may also be detected [5; 14]).

viii. Once the practitioner has ascertained that the needle is at the correct 'depth' (here the language is depth within the flow of *qi*, not within the body), the right hand stops advancing the needle and holds the needle handle very softly while the left hand finger and thumb are pressed slightly more together (this is '*sayuatsu*', 'left-right pressure' [30] to seal the space around the needle tip to prevent *qi* leakage).

ix. Throughout these actions the practitioner remains calm and quietly focused noticing and relieving any tension that develops in their body.

x. With the needle no longer advancing the practitioner seeks a change in the feeling (of *qi*) at the tip of the needle. If this change does not come automatically the practitioner may apply additional subtle manipulations with the right hand very gently or observe his body to identify and release any residual tension until this change of feeling starts.

xi. As the change starts and the feeling of *qi* (usually felt in the left hand) increases, the practitioner monitors it, then at the last moment increases the pressure of the left finger and thumb and as the patient inhales he rapidly removes the needle from the acupoint while simultaneously rolling the index finger or thumb over the acupoint (to close the 'hole' or space where the needle had been).

xii. The timing of this increased 'left-right pressure', needle removal and closure of the 'hole' is very precise and takes time to learn.

xiii. The pressure is maintained on the acupoint for about one breath, then the digit is removed and the technique finished.

HISTORICAL ORIGINS

The following is a list of fourteen historical concepts or descriptions that have been employed in one practical form or another in the above needling technique. For each I cite relevant chapters from the *Su Wen*, *Ling Shu* or *Nan Jing* with sources, further relevant passages are in the footnote.⁴

Mechanical factors

1. Insert the needle at an angle in the direction of flow of the channel treated [e.g. *Ling Shu* 1, 9]⁵
(追而濟之, 惡得無實) 'By pursuing and assisting it, how could one not achieve repletion [of the *qi*]?' (*Ling Shu* 1 – [24]).

This passage is often seen to mean angle the needle with the flow

of the channel for supplementation effects. The *Nan Jing* explains this *Ling Shu* 1 passage about needling '*sui*' (following) in *Nan Jing* 79 as related to use of the *sheng* or creative cycle of the five phases which influences which channels and acupoints to needle: (隨而濟之, 安得無實) 'One provides support (to the *qi*) by following it, how can one not create a repletion?' (*Nan Jing* 79 – [63:641]).^{iv} Hence by choosing a specific acupoint following this theory from the *Nan Jing*, e.g. *Lu* 9 for lung vacuity, the needling technique additionally adds supplementing effects. Related to ii, iv and especially vi above.

2. Insert the needle on the exhalation and remove on the inhalation. [e.g. *Su Wen* 27, 62]

(氣出鍼入 ... 氣入鍼出) 'Wait for an exhalation to insert the needle ... when the *qi* enters (the patient's mouth) remove the needle' (*Su Wen* 62 – [65;2:126]). Related to xi above.

3. Place one's finger over the point immediately upon removal of the needle from the point. [e.g. *Su Wen* 27, 62, *Ling Shu* 1]
(閉塞其門) 'Obstruct its gate' (close the hole) (*Su Wen* 62 – [65;2:126]). Related to xii and xiii above.

4. Advance the needle slowly, withdraw the needle quickly [e.g. *Ling Shu* 1]
(徐而疾則實) 'When one slowly inserts and quickly removes the needle this will make the *qi* replete' (*Ling Shu* 1 – [24]). Related to i, iv, v, vi and especially vii and xi.^v

5. Apply the needling on one side of the body rather than bilaterally (to help address *xieqi* [邪氣] that might be lodged in the body) – needling opposite to the side where the *xieqi* is located.
[e.g. *Su Wen* 63]
(以左取右以右取左奈何) 'Given [a disease is] on the left, one selects the right, while given [a disease is] on the right, one selects the left. Why is that?' (*Su Wen* 63 – [65;2:133]). Related to ii above.

6. Obstruct the 'needle hole' on four sides (so that the essence *qi* cannot leak) [*Su Wen* 62]⁶
(鍼空四塞, 精無從去) 'The needle hole is obstructed on four (sides) and the essence (*qi*) has no (possible exit) from which it could leave' (*Su Wen* 62 – [65;2:126]). Related to v, vi, vii, xi and xii above.

Skill based factors

7. Insert the needle so that it is completely painless, (literally like a mosquito [bite]) [*Ling Shu* 1] ⁷
(如蚊虻止) 'The feeling of the patient is like a mosquito bite on the skin' (*Ling Shu* 1, [70:495]), understood to mean painless insertion since one does not feel the mosquito bite at the time of the bite [30]. The passage more literally says 'like a mosquito and then stop' which both implies painless and shallow insertion.^{vi} Related to vi, vii, viii and ix above.

⁴ For each factor one can see relevant translations: 1 [43:164; 70:546]; 2 [64:278+281+283]; 3 [64:281+283; 70:494]; 4 [24; 70:494]; 5 [68:104]; 6 [64:281]; 7 [70:495]; 8 [63:635+646]; 9 [63:635+646]; 10 [63:635]; 11 [63:646]; 12 [64:281+283; 39:91; 24]; 13 [64:281+283; 39:91; 23; 24; 53:176-177]; 14 [23; 63: 589+595; 70:496].

⁵ Given the recurrent use of hydrological analogies in Chinese thinking [1] which are also found in the theories of the *jing mai* and *qi* flow [26], it is difficult to resist the further application of those to explain the role of angling the needle with the flow of the *jing mai* for *bu fa* and against the flow of the *jing mai* for *xie fa*. Inserting an object like a piece of wood into a flowing stream can be used to encourage that flow when placed along with the flow (*bu fa*), while it can sluice out of the flow when placed against the current of that flow (*xie fa*).

⁶ In the *Toyohari* system, following initial investigations by Mr Kozato and then confirmation by his colleagues, an important part of the supplementation technique is '*sayuatsu*', 'left-right pressure', where the index finger and thumb pads are pressed together so as to close the space around the needle. This concept clearly copies this *Su Wen* passage and the role of the left hand described in *Nan Jing* 78, 80 (see 'skill based factor' 9).

⁷ Although the needle is not per se inserted, it can touch the skin, the important feature being that the needling is painless.

8. Feel the arrival of *qi* before inserting the needle [e.g. *Nan Jing* 78, 80]⁸ (謂左手見氣來至，乃內鍼) ‘As soon as one [notices] with one’s left hand that the influences appear, one inserts the needle’ (*Nan Jing* 80, [63:646]). (其氣之來，如動脈之狀，順鍼而刺之) ‘As soon as the arrival of the influences [felt below one’s left hand] resembles the [pulsation of the influences at the usual locations] where the movement [in the] vessels [can be felt below the skin], one inserts the needle’ (*Nan Jing* 78, [63:635]). Related to iv and v above.

9. Feel the *qi* arrival with the left hand (*Nan Jing* 78, 80) (知為鍼者，信其左) ‘Those who know how to needle rely on their left [hand]’ (*Nan Jing* 78, [63:635]). Related to ii, iii, iv, vi, ix and especially v, vii, viii and xi above.

10. Begin the supplementation needling technique after the arrival of *qi* (has started) (*Nan Jing* 78)⁹ (順鍼而刺之。得氣因推而內之) as soon as the influences arrive ... ‘insert the needle. When the influences have accumulated [around the needle], one pushes them towards the interior’ (*Nan Jing* 78, [63:635]). Related to ix, x, xi and xii above.

11. At the exact moment when the (feeling of) *qi* is at its maximum (feels replete) remove the needle (*Su Wen* 62) (方實而疾出鍼) ‘Right at the moment of repletion, quickly remove the needle’ (*Su Wen* 62, [65:2:126]). Related to xi and xii above.

Internal factors of the practitioner

12. Focus on the timing of needle removal as the *qi* ‘arrives’ [e.g. *Su Wen* 25, 27, 62, *Ling Shu* 1], also described as related to the mechanism/dynamic ‘*ji*’ [機] associated with the movements of *qi*, (*Ling Shu* 1). (方實而疾出鍼 ... 動氣候時) ‘Right at the moment of repletion, quickly remove the needle’ ... ‘To move the *qi* wait for the (proper) time’ (*Su Wen* 62, [65:2:126]). (其氣以至，適而自護) ‘When the *qi* has arrived, this is exactly the moment for which one has to be on the alert’ (*Su Wen* 27, [65:1:452]). (伏如橫弩，起如發機) ‘[The needle] lies down like a cross-bow; and it rises as if a trigger had been released’ (*Su Wen* 25, [65:1:431]).¹⁰ (刺之微在遲速 ... 知其往來，要與之期) ‘The subtleties of needling lie in its speed ... To understand its goings and comings, emphasize its periodicity’ (*Ling Shu* 1, [24]). (粗守關上守機機之動不離其空 空中之機，清靜而) ‘The crude attend to the junctures and the superior attend to the dynamic. The movement in the dynamic is not separate from its empty spaces. The dynamic within this empty space is clear, still and subtle’ (*Ling Shu* 1, [24]). Related to vii and especially xi and xii above.

⁸ The finding of the ‘live point’ is experienced as contacting and touching the *qi* with one’s fingers, this is necessary before the needle is placed and advanced to the acupoint. Modern Chinese and Japanese clinicians describe this *de qi* before the needle is inserted as a result of palpation of the acupoint to prepare it for needle insertion [58:170-171; 67:523].

⁹ *Nan Jing* seventy-six: ‘when one fills one removes influences from the protective [influences]; when one has to drain, one releases influences from the constructive [influences]’ [63:626] and *Nan Jing* seventy-eight: after palpating the point to get the *qi* to arrive and after it has arrived ‘one inserts the needle. When the influences have accumulated [around the needle], one pushes them towards the interior. That is called “to fill”. To move [the needle] and withdraw it [from the section of the constructive influences into the section of the protective influences] is called “to drain”’ [63:635]. Note also that the arrival of *qi* comes in two stages, first following certain palpation methods of the acupoint to be treated, then again after the insertion of the needle, following which it is either pushed in deeper for supplementation or pulled back more superficially for draining. The *Nan Jing*’s description of *bu* and *xie* are quite different than the *Nei Jing*’s, which I contrast elsewhere [10].

13. The inner state of the practitioner must be quiet, focused, undistracted by sensory input or emotions (*Su Wen* 54, *Ling Shu* 9), the intentions must be stable (*Su Wen* 62), the focus and attention correct (*Ling Shu* 1) since what is observed is very subtle (*Su Wen* 25) and one has to remain very alert and focused (*Su Wen* 27)

(靜以久留，以氣至為故，如待所貴，不知日暮) ‘[Hold the needle] calmly and let it remain [inserted] for a long time to have the *qi* arrive. As if one were waiting for someone of noble rank; one does not know whether [he will come during] daytime or in the evening’ (*Su Wen* 27, [65:1:451-452]). (以定其意) ‘In this way stabilise your intentions’ (*Su Wen* 62, [65:2:126]). (靜意視義，觀適之變，是謂冥冥) ‘The sentiments are calm and [one] concentrates on what is right to do [here]. [This way] one observes the changes as they happen. That is what is called “obscure”’ (*Su Wen* 25, [65:1:430]).

(如臨深淵手如握虎神無營於眾物) ‘[One must be calm] as if one looked down into a deep abyss; the hand [must be strong] as if it held a tiger.’^{vii} The spirit should not be confused by the multitude of things’ (*Su Wen* 25, [65:1:432]). (如臨深淵者不敢墮也。手如握虎者欲其壯也。神無營於眾物者靜志觀病人無左右視也。義無邪下者欲端以正也。必正其神者欲瞻病人目制其神令氣易行也) ‘As for “as if one looked down into a deep abyss”, that is, do not dare to be careless. As for, “the hand [must be strong] as if it held a tiger”, that is, one wishes it to be strong. As for “the spirit should not be confused by the multitude of things”, that is, have a tranquil mind and observe the patients, look neither to the left nor to the right ... As for, “one must rectify his spirit”, that is, one must look into the eyes of the patient and control his spirit, thereby letting the *qi* flow easily’^{viii} (*Su Wen* 54, [65:2:19-20]). (隨氣用巧。針石之間，毫芒即乖。神存於心手之際，可得解而不可得言也) ‘Following the flow of *qi* requires consummate skill. When inserting needles, an error of a hair’s breadth will mean failure.

A kind of spirit connects the physician’s heart with his hand, and that is something I can know but not explain’ (Guoyu, [53:176-177]). (迎之隨之，以意和之) ‘Whether meeting it or following it, by means of one’s attention, one harmonizes it’ (*Ling Shu* 1, [24]).^{ix} (深居靜處，占神往來，閉戶塞牖 ... 專意一神) ‘[The practitioner] must deeply reside in a place of stillness and divine the comings and goings of the spirit 神 with one’s [sensory] doors and windows shut ... his mind must be focused’ (*Ling Shu* 9, [23]). (審視病者，靜志觀病人，無左右視也) ‘Those who would examine disease must calm their minds when gazing upon a patient, looking neither left nor right’ (*Ling Shu* 1, [24]). Related to iii, iv, v, vii, x, xi, xii and especially vi and ix above.

Needling style

14. Needle shallowly (*Ling Shu* 1, 9, 62, *Nan Jing* 70, 71) or with non-insertion (*Ling Shu* 1, 7, 78) (淺而留之，微而浮之，以移其神) ‘[In this way the practitioner may skillfully practice] shallow insertion while retaining the needle, or gentle superficial insertion so as to successfully transform the patient’s spirit’ (*Ling Shu* 9, [23]). (著鍼勿斥) ‘Apply the needle without pushing (into the depth)’ i.e. perform very shallow needling (*Su Wen* 62, [65:2:106]).^x Related to vii and viii above.

¹⁰ Lu and Needham render this passage differently but in a somewhat clearer way: ‘The physician must be like a crossbowman pressing his trigger at the exact time, not an instant too soon, not an instant too late’ [39:91], i.e. it is about getting the precise timing like a crossbowman firing at a moving target.

DISCUSSION

The needling technique described in the previous publication [6] has been broken down into thirteen components (1-13) some with several things happening within them. I have shown how all can be reasonably traced to historical passages in the *Su Wen*, *Ling Shu* and *Nan Jing* as practical interpretations of those passages. The technique can thus be construed as a practical composite of these historical descriptions or ideas – interpreted and developed in the modern period in light of modern thinking and understanding. The technique has been developed through efforts to reproduce the historical ideas practically guided by feedback from both clinical practice (clinical observations and results) and group studying (the Kozato method feedback approach). It is important to recognise that in this technique, the approach has attempted to establish a practical interpretation and clinical application of the historical sources. It is a kind of practical composite or synthesis of interpretations clinically observed to be relevant or to work. Others may look at the same historical sources and make a different interpretation of the various texts, that is alright, but it in no way demonstrates that what is done above is somehow wrong. Following historical trends in East Asia, knowledge in traditional acupuncture is practice-based¹¹ [15; 16; 21],^{xi} *interpretations of the same passages are correct if they lead to a practical application that can be reasonably related to the original text*, not a scholarly translation of the text.^{xii} This is of fundamental import as this is one of the major reasons why the field of acupuncture has manifest both historically [11; 31:6; 62; 63; 64; 65] and in the modern period [4; 17; 41; 57] with such variety. In this example, the interweaving of techniques from the *Nei Jing* and *Nan Jing* is accomplished despite the fact that the needling techniques of the *Nei Jing* and *Nan Jing* are conceptually quite different [10; 11; 63:639-640].

Implications from the above

Needling is a complex thing: we acupuncturists are not machines whose only job is to stick needles into patients, we have to be skilled, trained, perceptive and continuously adjusting what we do in order for our needling to be maximally effective; as such, acupuncture is a complex intervention. There is by nature a fundamental ‘interaction’ going on between the patient and practitioner that is present above and beyond the physical actions of the needle. For the most part, ‘sham controlled’ trials of acupuncture (often confused as ‘placebo-controlled’ trials of acupuncture [9]) treat the therapist as a machine whose only purpose is to stick and manipulate needles, and the patient as an organism that changes with treatment solely due to placebo response and specific physiological actions of the needle insertion and manipulation. But acupuncture involves much more than this and as a complex intervention it may well be inappropriate to use sham acupuncture as a control treatment in controlled RCTs of traditionally based systems of acupuncture, as they will often or usually treat all the non-needling aspects of treatment (as well as other needling aspects of treatment [19; 40]) as incidental placebo effects [50].

It is not useful to imagine that what any one of us practises or has been taught is THE truth. It is understandable how leading researchers have come to the conclusion that defining ‘acupuncture’ is still not clear [37]. Take for example popular modern arguments about the nature of ‘*de qi*’ [得氣] and the need to get *de qi* for treatment to work. The passages cited above from *Nan Jing* seventy-eight and eighty are the first historical texts to say anything about who feels the *qi* (the practitioner), this occurs before the needle is inserted and manipulated and it is explicitly called ‘*de qi*’ [11; 14]. *Nei Jing* descriptions of needling to make *qi* arrive ‘*qi zhi*’ [氣至] are not clear on who feels what [71], but they imply by virtue of the difficulty of doing this that it must be the practitioner [11; 14]. There is also a passage in *Ling Shu* chapter one that even modern Chinese translators acknowledge which implies that the patient seems not to feel anything or rather what is felt is more a feeling of loss or gain [言實與虛,若有若無 ... 為虛與實,若得若失] translated as ‘In supplementation and draining, the patient seems to feel it yet to feel nothing¹²... whenever the supplementing or draining therapy is used, it must cause the patient to feel something gained when supplementing and to feel something being lost when draining¹³ [70:495]. The modern TCM interpretation of ‘*de qi*’ where the patient must feel sensations such as ‘soreness, numbness, heaviness, distension’ for needling to be effective [25:326] cannot be found in the *Nei Jing* or *Nan Jing* [71], instead we find descriptions of needling that closely match the above Japanese ‘traditional’ needling technique. Does this make the TCM needling technique wrong? Not at all! It is different and probably developed the way that it did for specific reasons unrelated to a universal understanding of *qi* or *de qi* [11].^{xiii} For those that still feel the above needle technique cannot be valid, that it must be nothing more than for example a grand placebo, I am happy to report the following: i) we have data from a controlled study of a clear physiological effect associated with the needling technique [47]; ii) there are clear results from controlled RCTs in Japan that unbelievably shallow needling (0.6mm deep) with no *de qi* can produce clear clinical effects in sham controlled trials [e.g. 34]; iii) there are rather impressive results from a recently published uncontrolled trial in the UK illustrating the effectiveness of Toyohari non-inserted needling treatments [28].

Clearly the physiological models we have of how ‘acupuncture’ works that are almost exclusively associated with modern ‘*de qi*’ descriptions and techniques or electrical stimulation of the needles [51] cannot capture the range of things that acupuncture needling can produce [8]. We can propose many levels of physiological effect depending on what techniques are used and who is using them [8; 17; 42]. Models of how ‘traditionally based systems of acupuncture’ [3] work have yet to be developed and physiological evidence developed [8; 15; 33; 37]. In a very real sense, we need to go back to the drawing board if we want to understand this. This is one of the reasons I have been working on the unfinished papers in the ‘Filling the whole in acupuncture’ series. I feel we need to develop a larger more comprehensive and deeper model if we want to move forwards. It is also one of the reasons I have been

¹¹ Compared to the ‘representational knowledge’ of ‘science’.

¹² Literally ‘may experience something, may experience nothing’.

¹³ I have replaced ‘invigorating and purging’ with ‘supplementation and draining’, ‘whatever’ with ‘whenever’ and ‘obtained’ with ‘gained’.

involved in developing a research agenda for the investigation of traditionally based systems of acupuncture in co-ordination with the ARRC, ETCMA and others.

It is clear from what I have described above that the internal mental state (especially the *yi* [意]) of the practitioner is important for the needling to be effective.^{xiv} In my previous paper [6] I proposed a three-level model to start explaining how the needle technique might work in traditional terms and modern biological terms. I suggested simple ways of how treatment acts at three levels to correct distortions at each level. These are level 1 – functional systems, level 2 – channel regulatory systems, level 3 – overall vitality [6; 7:93-94]. There is a basic rule for these levels, the level above controls the level below it. Thus an action that improves level three also improves the levels (e.g. helps strengthen or balance) below. The model needs to be expanded to incorporate the mental level^{xv} and to explain the role of the practitioner better, I described a preliminary model of this in my paediatric acupuncture book [7:93-94]. The astute reader will have also noticed that I am describing how the mental state of the practitioner can influence the patient or at least how the needling technique affects the patient. To model this is much more complicated! This is one of the themes I have been working on in the next part of the 'Filling the whole in acupuncture' series [12]. I hope one day soon to complete that paper. When complete I hope to have created a model of how healing and disease can be understood both in the natural language of traditionally based systems of acupuncture and modern biological, biophysical models of the body, thus allowing more informed

research questions and approaches to be developed in an 'integral research' model [13]^{xvi} capable of engaging research of 'whole treatment systems' and 'complex interventions' [66].

CONCLUSIONS

I have described a needling technique that on the face of it looks too incredible to be real. Yet, as I have shown, almost every component of the technique from choosing and starting to look for the acupoint to the removal of the needle from the point can be traced to historical passages in the seminal texts of the *Su Wen*, *Ling Shu* and *Nan Jing*. This is possible because the very nature of knowledge in these historical textual traditions is practice based. I have argued that the needling technique is a construct of practical applications and interpretations of passages in these historical texts confirmed through clinical practice and clinical study. I presented the original Chinese passages with scholarly translations of those passages to show how the practical interpretations could have developed. I suggest that other traditional needling methods should likewise be constructs of practical applications and interpretations of historical sources. Acupuncture is an immensely varied clinical practice approach, traditionally based systems being no less so. The kind of practical interpretations I have described here are examples of how a 'traditional' system of practice^{xvii} can be constructed bit-by-bit through the interplay of historical texts, interpretations, practical applications and observed clinical effects.

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Endnotes

- i Please note that I am not attempting to explain the historical texts (that is a task considerably above my skill levels), I am however trying to show how understanding of historical ideas in the modern period can, through practical applications, try to reproduce and reasonably cite historical texts as the source of the described technique.
- ii Which is not to say that this may not be valid. The evidence that Volker Scheid has been developing around the concept of 'traditional' medicines from Asia [54; 55] is hard to refute.
- iii Modern experience has shown that the technique is easier with a silver needle rather than a stainless steel needle, but this depends on preference and experience. Denmei Shudo, for example accomplishes all his needling techniques using very thin stainless steel needles [58; 59], while many in Japan follow the notion of influences due to the EM nature of the metal, specifically that metals with a positive electrovalence appear to have a more supplementing type influence compared to needles made of metal of a negative electrovalence [20:42-45; 44:143-144].
- iv For a discussion of this contrast of intended meanings see Birch [10].
- v The astute reader may wonder why choice of needle type is related to this factor. Thin silver needles are very soft and flexible, they are thus advanced more slowly and carefully since trying to push or rush with them simply bends the needle. Stainless steel on the other hand is much harder and does not bend so easily. The same force applied to the same length and gauge of stainless needle as a silver needle will cause the stainless needle to much more readily advance, hence it is less useful than a silver needle if the needle should be slowly advanced. This issue is explicitly discussed within Meridian Therapy [20:42-43], while Shudo's description is a little different; it describes properties of the different metal needles that take advantage of the relative tensile properties to achieve supplementation [58:181-182].
- vi Thanks to Chip Chace for pointing this out.
- vii Another interpretation of the image of 'holding the tiger's tail' is that it should be done most delicately and gently, rather than being about strength. Often the interpretation is holding or grasping a 'sleeping' tiger's tail [30:151], which you would not want to wake up!
- viii The same passage can be interpreted differently placing the emphasis completely on the internal state of the practitioner: 'Be as if looking into the abyss: take care not to fall. Make your hand like one that would seize a tiger: do not lack strength. Do not allow your spirits to be disconcerted by anything: with a quiet will consider your patient without shifting your gaze to the left or right ... First of all, rectify your spirits, since your regard to the patient will call for the regulation of his spirits. Hence the *qi* circulates with ease' [38:52-53], see also a similar rendition by Yang [71].
- ix Here Chace and Bensky translate the term *yi* [意] as 'attention'. Many different translations can be found for this term. In our *qi-jing mai* edited book project we have developed an argument about translation of *yi* as intention, attention or awareness according to the experience based skill level and stage of development of the person working [16] rather than using a single term to translate it.
- x For discussions of non-insertion needling in the classics see discussions of the use of the *yuanzhen* and *shizhen* (round and blunt needles) in the *Ling Shu* [20:45-54].
- xi Arguments about this can be found in many scholarly sources: [32; 36; 56; 60].
- xii Of course as I have argued elsewhere, any interpretation of an historical text must be reasonably traceable to the original text [3].
- xiii It has been suggested that the shift from practitioner centred to patient centred (*de qi*) sensations when needling may have occurred to help relative beginners learn how to have some treatment effect or at least to help them develop the confidence to try to treat the physiological concept of *qi* [14; 22].
- xiv This is a more general feature of traditional needling rather than being a feature of only the needling technique described above. Evidence and arguments about this can be found in several places [11; 14; 23].
- xv We describe this in much more detail in the *qi-jing mai* book currently in preparation [11; 16].
- xvi I have also been working on developing models using mathematical and computer tools to develop an approximate model of how healing might occur [18; 29]. Such models allow for refinement and greater understanding of the dynamics of healing in the terms of TEAM so that more precise questions and methods can be used to investigate TEAM based treatment systems. The mathematical tools are also able to expose mechanisms that are not readily obvious without their use.
- xvii The term 'traditional acupuncture' is a misleading term as, based on the assumptions of English grammar, it appears to refer to 'a' thing which by our habit of naive ontological assumptions implies a continuity of existence, which no practice system today can justifiably claim. I think it fair to say instead that no system is older than its oldest living proponent, 'traditional' systems are continuously reinvented. The fundamentals of the needling technique I have described in this paper began emerging as attempted reproductions through practical interpretations of classical ideas in the 1930s with the original Keiraku Chiryō – Meridian Therapy study group of Yanagiya, Inoue and Okabe [17:56-58; 58]. It then evolved further and continues to evolve through additional practical interpretations in the continuous study-practice dynamic of a number of blind practitioners from the Toyohari Association such as the late Messrs Fukushima, Kozato, Yanagishita and in an ongoing manner with senior teachers such as Messrs Shinoda, Taniuchi and Nakada.