The Headlong Translation of

Huangdi Neijing Lingshu

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The Yellow Emperor's Inner Classic: Spirit Pivot

References

Bingyuan: Zhubing Yuanhou Lun "Treatise on the Origins and Symptoms of All Illnesses", author Chao Yuanfang, Sui dynasty, early 7th century.

Dacidian: Modern dictionaries of Chinese fall into two major categories, those that principally or only give definitions of individual characters, known as "zidian" (zi4 "character"), and those typically define a smaller number of individual characters, but add to that a large number of definitions of compound words, words comprising more than one character, known as "cidian" (ci4 "word"). In the later decades of the 20th century, a major government sponsored edition of each of these forms was produced, Hanyu Da Cidian "The Great Word Dictionary of Chinese", and Hanyu Da Zidian "The Great Character Dictionary of Chinese"; they are similar in scope, quality and standing to the Oxford English Dictionary.

Dazidian: Hanyu Da Zidian; see Dacidian.

Erya: A word glossary, the oldest dctionary-like work, c 3rd century BC, author unknown.

Fangyan: A glossary of regional or dialectical character definitions, author Yang Xiong, 1st century AD Eastern Han.

Gao: Gao Shishi (or Shizong), a pupil of Zhicong, author of an annotated edition of Suwen; he also wrote a companion edition of Lingshu, but it has not survived.

Guangya: An expansion of the earlier glossary Erya, author Zhang Yi, 3rd century AD Three Kingdoms period.

Guangyun: A "rhyme" dictionary, 11th century Song.

Hanshu: "History of the Han Dynasty", the history of the earlier or Western Han dynasty 206 BC to 24 AD; the book was written in the 1st century AD.

Houhanshu: "History of the Later Han", the history of the second phase of the Han dynasty, the Eastern Han 25-220 AD; the book was written in the early 5th century AD.

Huainanzi: A compendium of Huanglao philosophy, compiled under the auspices of the king of Huainan, Liu An, c 140 BC Western Han.

Huangfu Mi: Author of Jiayi.

Jiayi: Zhenjiu Jiayi Jing "Systematic Acumoxa Classic", author Huangfu Mi, mid 3rd century AD, Jin dynasty. The author took the text of almost all of Neijing and rearranged it into thematic order. It also contains a very few passages from Nanjing, and a great deal of material from a text that has not survived independently, Mingtang (see that entry).

Jiebin: Zhang Jiebin (or Jingyue), late Ming, early 17th century, one of the most influential physicians of the later imperial period. One of Zhang's major works is a thematically rearranged edition of Neijing, with added commentaries, called Leijing "Categorised Classic" 1624.

Jinkui (or Jingui): Jinkui Yaolve "Golden Cabinet Essential Prescriptions"; see Shanghanlun.

Jiyun: A rhyme dictionary, a revised and expanded version of Guangyun, 11th century Song.

Laozi: One of the major works of philosophical Daoism, pre-Qin/Han text; more commonly known in English as Daodejing, or Tao Te Ching.

Liji: "Record of the Rites", one of the Scholist/Confucian ritual classics, pre-Qin/Han.

Lvshi Chunqiu: A compendium of the philosophies of the period, late Warring States c 239 BC, compiled under the

auspices of the chancellor of the state of Qin, Lu Buwei.

Ma: Ma Shi, Ming, late 16th century; author of the first sequential annotated edition of Lingshu (1586); he wrote a companion Suwen volume as well, so was also the author of the first sequential annotated edition of all of Neijing (Yang had annotated most of Lingshu and Suwen considerably earlier, but in a rearranged thematic order).

Maijing: "Channel/Pulse Classic", author Wang Shuhe, c 280 AD Jin dynasty.

Mawangdui: In 1973, at Mawangdui in Changsha, Hunan province, a 2nd century BC tomb was uncovered that contained a number of books written on silk scrolls, including general works such as Laozi, but also a significant number of medical works, including two different accounts of the pathways of the channels that are clear precursors of those given in Lingshu 10. These are the earliest known works on Chinese medicine.

Mingtang: In full, Mingtang Kongxue Zhenjiu Zhiyao "The Bright Hall Holes Acumoxa Treatment Essentials"; this is the third major text incorporated into Jiayi by Huangfu Mi (along with Lingshu and Suwen), presumably written sometime between the 1st and 3rd centuries AD. Unlike the theoretical discourses in much of Neijing, Mingtang's focus is on acupoint location and direct clinical indications.

Nanjing: The Difficulties Classic, probably written around the same time as or a little after Suwen (c 1st to 2nd centuries AD); the book contains 81 relatively short discourses, supposedly giving explanations of statements made in earlier works (many of which are found in Neijing, some not), but in fact expounding the author's own theories.

Qianjin: In the mid 7th century, Tang dynasty, Sun Simiao wrote two large general medical works, Qianji Yaofang "Thousand Gold-piece Essential Prescriptions", and Qianjin Yifang "Thousand Gold-piece Supplementary Prescriptions"; in this translation, the abbreviation Qianyi is sometimes used to refer to the latter specifically, but "Qianjin" might refer to either work.

Qianyi: See Qianjin.

Quan Yuanqi: From the notes in the Xinjiaozheng edition of Suwen, it's known that there was an earlier edition, attributed to this person, c late 5th to early 6th centuries, Liang dynasty. Quan wrote annotations to Suwen, only a small number of which survive in the Xinjiaozheng notes.

Shanghanlun: "Cold Harm Treatise", author Zhang Zhongjing, early 3rd century AD, Eastern Han; the earliest treatise on herbal or medicinal theory. Originally a single work, later in the same century it was divided into Shanghanlun and Jinkui (see that entry).

Shibue: Shibue Chusai, author of an annotated edition of Lingshu, Japan, mid 19th century.

Shiji: "Historical Records", author Sima Qian, 1st century BC Western Han, the earliest systematic Chinese history, and the model for the unbroken line of dynastic histories that followed, till the end of the imperial period in the 20th century.

Shijing: "Poetry Classic", one of the Scholist/Confucian classics, pre-Qin.

Shujing: "Documents Classic", also known as Shangshu, one of the Scholist/Confucian classics, (mostly) pre-Qin.

Shuowen: The first major systematic dictionary, completed around 100 AD.

Taisu: In full Huangdi Neijing Taisu, author Yang Shangshan, Tang, mid 7th century. In the same manner as Jiayi, Yang rearranged the material of both Lingshu and Suwen according to content. Unlike Jiayi, he also added extensive commentary. Taisu was lost some time around the early 2nd millennium AD;

editions containing about three quarters of the full work were discovered in Japan in the early 19th century; this rediscovery was a major factor in the reassessment of Neijing by the 19th century Japanese commentators, and Taisu remains, with Jiayi, one of the most important points of comparison with the standard editions of Lingshu and Suwen.

Tamba: Tamba Genkan, the first of the great Japanese Neijing commentators of the 19th century, author of Somon Shiki and Reisu Shiki "Suwen Explained" and "Lingshu Explained" c 1806-8.

Tongren: In full Tongren Shuxue Zhenjiu Tujing "Bronze Man Transporter Holes Acumoxa Illustrated Classic", author Wang Weiyi, 1027 Song; one of the earliest and most influential works on the pathways of the channels and the locations of the acupoints; bronze statues were cast on the basis of the text, and stone tablets engraved with the text.

Waitai: Waitai Miyao, a large general medical work with an acumoxa section included, Tang 8th century.

Wang Ang: Wrote annotations to selected parts of Lingshu and Suwen, 1689, Qing (not to be confused with Wang Bing).

Wang: Wang Bing, author of an annotated edition of Suwen, Tang, mid 8th century; this is the earliest continuously surviving annotated edition of any major part of Neijing (Taisu predates it by about a century, but was lost for most of the 2nd millennium AD). Wang's edition was chosen by the 11th century Song dynasty government committee for correcting medical texts as its base edition of Suwen, and all modern versions of the text derive from that; Wang's commentaries are commonly regarded as an essential and integral part of the text.

Wu Kun: Author of an annotated edition of Suwen, Ming, late 16th century.

Xinjiaozheng: "Newly collated and corrected", the abbreviated name of the edition of Wang's version of Suwen produced by the 11th century Song dynasty government committee charged with gathering and correcting classic medical texts. The Xinjiaozheng editors noted differences between Wang's edition and the earlier Quan edition.

Yang: Yang Shangshan, compiler and annotator of Taisu.

Yijing: More commonly known in English by the Wade-Giles transliteration I Ching, an early divination text; also known as Zhouyi. It's generally considered that it contains two basic layers of material, an original core text giving relatively short divinatory readings, which is very early, probably dating to the Spring and Autumn period; and later lengthier commentaries purporting to explain the original material, but in fact representing the theories of the Scholist (Confucian) school of the late Qin to early Han.

Zhicong: Zhang Zhicong, author of annotated editions of Lingshu and Suwen, 1670-72, early Qing dynasty.

Zhouli: "The Rites of Zhou", one of the Scholist/Confucian ritual classics, pre-Qin/Han.

Zhouyi: See Yijing.

Zhuangzi: With Laozi, one of the two major morks of philosophical Daoism, pre-Qin/Han.

Transcriptions of Chinese words in this translation are in pinyin, with the four tones (level, rising, falling-rising, falling) indicated by the numbers 1 to 4 appended to the pinyin syllable, rather than the more normal accent above the vowel. The transcription "v" is sometimes used for u-dieresis, eg Lvshi Chunqiu, more normally Lushi Chunqiu.

Lingshu 1: Nine needles and twelve yuan

Huangdi asked Qibo saying: I care for the ten thousand people, nurture the hundred names and receive their taxes and tithes. I feel sorry when they're not provided for and they often have illness. I wish not to employ virulent medicines, not to use the bian stone; I want to use fine needles to connect their main channels, regulate their qi and blood, manage their meetings of counterflowing and withflowing, exiting and entering. To make this able to be passed on to later ages [we] must clearly make its laws and principles; so that it will finish and not be extinguished, to last a long time and not be cut off, to be easy to use and difficult to forget, [we have to] make its principles, differentiate its regulations, distinguish the outer and inner, make its end and beginning, make it all take a shape, [and] first establish a needle classic. I want to hear about this situation.

I care for the ten thousand people: "The ten thousand people" means people generally, the common people, the masses; wan4 "ten thousand" is frequently used to mean "a great number, as many as can be imagined", notably in the common term "the ten thousand things", everything there is, all of existence. "Care for, cherish" is zi3, which basically means "a child, son, daughter", but can also be used as a verb in some senses extended from this, such as "to strive to fulfil your duties as a son or daughter", or the intended meaning here, "to treat someone like your own child, to love and cherish". The Taisu commentary here points out the similarity between this usage and another term, chi4 zi3, literally "red/naked child", meaning a baby or infant, which by extension is also used to mean "the common people", the "infants" under the care of the ruler. "Nurture" in the next clause is yang3 "to provide sustenance, feed, nourish, nurture", as used in the term "life nourishing".

The hundred names: "Name" here is xing4, which means a family name or surname. In its original use, it was restricted to the aristocracy, so bai3 xing4 "the hundred names" meant the upper classes of society, nobles, officials, landowners. Over the second half of the 1st millennium BC, that restriction was progressively erased, and xing4 eventually came to be used for the family names of commoners, so "the hundred names" meant the common people, the masses (which is the sense in which it's still commonly used in modern Chinese). So technically, either sense could be intended here, "the common people" as a synonym for the previous "ten thousand people", or "nobles and officials" as their opposite and complement; and both these options are adopted in different sources. Neijing is typically considered to have been written somewhere around the 1st century BC to the 1st century AD, by which time the restricted sense had become relatively archaic; for example, the modern dictopedia Ciyuan points out that there are 25 instances of the term in the "Four Books" (four of the major Confucian classics, Lunyu, Mengzi, Zhongyong, and Daxue, all dating roughly from the Warring States to Qin-Han periods), of which only one has the restricted aristocratic meaning. And also, the context here, in which Huangdi expresses an interest in establishing a mild but effective healing system for the people in question, strongly favours the idea of the common people, not the privileged or official classes. On the other hand, it could be argued that it was intended in the archaic "aristocracy" sense, an affected representation or facade of the usage of the supposed date of writing, the ancient time of Huangdi (supposedly the 3rd millennium BC). In any case, the issue doesn't appear to be of any practical consequence.

Taxes and tithes: Taxes or levies existed in different forms, such as payment of a portion of crops, the rendering of military service, or in later times payment in currency. There were also differentiations between taxes that were rendered directly to the ruler for his personal and court expenditures, and those that were directed to state revenue. The two characters used here, zu1 shui4, both originally referred to a land or grain tax or tithe, as the he2 "grain" radical in both suggests. According to the Cambridge History of China (Ch'in Han 595) they also originally designated taxes directed to the ruler, not the state: "The zu was originally tribute which the people offered to the ruler for the rites and festivals of his ancestral shrines. It was also called shui4, implying the separation of a part of the people's produce for the ruler." As Cambridge also points out, the strict distinctions in usage between the names of these and other forms of tax had largely been lost by the Han dynasty, so the combination zu1 shui4 could refer to any form of taxation or levy, taxes generally. However, the appropriateness to this passage of the idea that these taxes are paid directly to the emperor suggests that in this situation they are meant in their original or archaic sense.

I feel sorry when they're not provided for: Ai1 "grief, sorrow; to condole, lament, mourn", here meaning "to pity, sympathize, have compassion for, feel sorry for". In modern Chinese, the character translated here as "sufficient" is commonly pronounced gei3 and means "to give", or is used to introduce a passive construction; but that pronunciation and most of its associated uses are of relatively recent origin. In ancient Chinese, its only pronunciation (which is still in use in some situations) was ji3, and its meaning was "abundant, ample, plentiful; to supply, provide"; receded here by bu4 "no, not", the general reading is that it means the common people don't have plentiful resources, they aren't provided or supplied with an abundance of the basic means of living, food, shelter, fuel, clothing etc. The Taisu version of the text instead has the graphically similar zhong1, which is used elsewhere in Neijing to refer to the end of a person's life, eg Suwen 1 "the people of early ancient [times] ... (could) exhaust [to] the end (zhong1) their heaven's years"; there's another similar use of zhong1 later in the present paragraph, albeit in a different context, talking about passing on the art of acumoxa "so that it will finish (zhong1) and not be extinguished" (that is, reach the end of its allotted time, last a long time); Yang sees this variant version of the text as having that meaning, that the people are beset with illness, so they "don't finish [their] heaven's years", they don't live out their full natural lifespan.

Virulent medicines (1): Yao4 means any form of medicine or medicament, whether plant, animal, or mineral in origin, in keeping with which it's commonly translated as "drug, pharmaceutic, materia medica" or suchlike, all of which are reasonable representations of the intended idea. There's a significant difference between this and the common or folk idea of "herbs" in European culture, in that the Western practice is limited almost entirely to medicines derived from the plant world; in the Chinese practice, plants make up the largest part (as reflected in the use of the "grass" radical in yao4), but they're supplemented by a significant non-plant component; for instance, in Li Shizhen's major 16th century Ming dynasty work on the subject, Bencao Gangmu, plant-based medicines occupy 27 of the 48 volumes, the rest is divided between animal, mineral and some sundry substances.

Virulent medicines (2): The character preceding yao4 is du2 "poisonous, toxic; harmful, destructive, harsh, cruel, intense, violent" etc; the combination du2 yao4 is a still-standard

term, meaning "poison"; however, here, as in other early medical works, that's not its meaning. For instance, in Shennong Bencao Jing, the earliest "bencao" work (a herbal listing or pharmacopoeia), medicines are divided into three classes, upper middle and lower; those medicines that do what we would normally consider the function of a medicine, curing illness in an immediate or direct fashion, are assigned to the lowest of these three levels, the "assistants" or "aides"; they are described as having du2 "virulence", and consequently can't be taken for an extended or indefinite period of time; the medicines assigned to the upper level, the "rulers", have no du2 "virulence", and can safely be taken for a longer period of time, being closer to what we would regard as nutritional or dietary supplements; the middle class, the "ministers", are a mix of having and not having du2. This categorisation shows that du2 means a property in a medicine that is both useful for the immediate and direct healing of illness, and is also harmful to a person if consumed over a long term; it doesn't mean simply "poisonous", something strongly and immediately harmful or even fatal; nor does it mean simply "potent", having a powerful action or ability to heal; it instead involves something of both these ideas, a strong or potent property or action that can be endured only temporarily or in small doses, before its action turns from healing illness to harming or poisoning the body; which is of course a reasonable description of the action of practically everything we now regard as a medicinal substance, or the "active ingredient" of a medicine.

Not to use the bian stone: Bian1 shi2 "bian stone" is a form of stone medical implement; there's considerable debate about whether it was an early form of acupuncture needle, used to pierce specific points on the body to affect the body's health in either a local or distal fashion, or something used in a purely local or direct non-acupuncture manner; the evidence on the matter is somewhat conflicting. In the biography of the Western Han dynasty 2nd century BC physician Chunyu Yi in Shiji "Historical Records", which involves a medical theory system very similar to that of Neijing, the bian stone appears to be used as a virtual equivalent for an acupuncture needle. By contrast, in Neijing itself (and a number of other ancient texts) it is consistently associated with the action or function of releasing pus or lancing purulent sores such as boils, carbuncles or ulcers (and to a lesser degree releasing blood), suggesting strongly that the bian wasn't a true acupuncture implement. Given that Huangdi here presents it as one of the therapeutic methods he wishes to avoid, preferring instead to use "fine needles to connect their main channels, regulate their qi and blood" etc, it seems reasonable to assume that the lancing non-needling sense is intended here, in keeping with the general Neijing usage.

I want to use fine needles: The character used for "fine" here is wei1, which means not only "small, fine", but also "subtle, profound"; that nuance is probably applied intentionally here, highlighting the "marvellous, profound" nature of the acupuncture needle, its mysterious ability to treat illness, and the sophisticated nature of the theory that guides its usage. By contrast, Qibo's reply in the next paragraph uses the more prosaic xiao3, which simply means "small", with no accompanying overtones of the profound, subtle or abstruse.

To connect their main channels: Tong1 refers to things or places connecting to each other, typically through some sort of passage or opening, which itself is open, free-flowing and unobstructed; it can also mean to "connect to" or "penetrate" something in the sense of thoroughly understanding it, having a total mastery of it; in the present context, it presumably carries connotations of the needle physically connecting with, penetrating to,

contacting and interacting with the channels, following which it has the effect of "connecting" the channels, making them open, connected, freely circulating.

The main channels: Jing1 mai4. The original meaning of jing1 is the warp of a loom, the threads that run all the way vertically through a piece of cloth, as opposed to those that run horizontally across the loom (the weft or woof). From that it came to mean something regular, constant, or standard. A specific application of that idea is its use to mean a "classic" book, as seen for example in the title of this combined work, Neijing "Inner Classic", as well as many other texts. In medical usage, jing1 means the main or major channels; the character is appropriate to them both in terms of the fact that they are the "main" or "major" structures in the channel system, and also because they basically run vertically up and down the trunk of the body and the limbs, like the warp of a cloth or loom. Jing1 was also used in classical Chinese to refer to roads that run in a north-south direction. Similarly, in more modern Chinese it was adopted to denote the "meridians", the lines of longitude, abstract markers or locators running north-south across the earth; that sense has been adopted as the standard English translation of the character in relation to the channels in the body. An unfortunate aspect of that usage is that it's come to be routinely applied not only to the main or meridian-like channels, but to any channel, including the smaller ones branching off from the main channels in every direction that carry nourishment to the smallest parts of the body, just like the capillaries branching off from the arteries in the modern medical model; the character used to refer to those channels is luo4, meaning "a net, network, mesh", or also "to connect, join together"; the combination jing1 luo4 is used to refer to the full system, the main and secondary channels combined. As the description just given shows, the word "meridian" is entirely inappropriate for the luo or "network" channels, both in terms of their being the lesser or smaller components of the system, and also the fact that they run in every direction, not in an essentially vertical alignment (Neijing sometimes specifically refers to them running "sideways, transversely"). The character used to refer to channels of any kind, size or location in the body is the second one in the text here, mai4. It's apparently not an ancient character, its usage beginning in the century or two before the time of Neijing, in the Warring States period (5th-3rd centuries BC; the earliest citations given by Dacidian are in fact later, Western Han), very likely as part of the "naturalist" movement that arose in that period, which Neijing is a significant end product of. The left hand side of the character is the radical form of rou4 "flesh", indicating it pertains to the body. One explanation of the right side of the character is that it portrays water, a stream, or specifically an underground stream, artesian water, water flowing under the ground, of which the channels are the equivalent structures in the human body. The combination jing1 mai4 used here really means just the same as jing1 alone, the body's main, "arterial", or "warp" channels.

To connect their main channels, regulate their qi and blood, manage their meetings of counterflowing and withflowing, exiting and entering: This sentence is really a succinct statement of the entire philosophy of acumoxa; fine needles (or moxa) are used at significant or key points on the body to influence the behaviour or flow of qi and blood circulating in the channels. Hui4 "to meet, gather" is typically taken to mean the significant points on the channels where qi and blood "gather" or focus, the acupoints, the points where the small needle is used to influence the counterflow and withflow, emerging and entering (that is, coming and going) of qi and blood.

So that it will finish and not be extinguished: Refer to the note above regarding the use of zhong1 "end, finish" here.

To differentiate its regulations: Zhang1 can mean "decrees, laws, regulations, rules", or also "a section or piece of writing, a passage, chapter" etc; given that this is the introduction to a work in which diverse writings are collected into a compendium, the latter could be intended here, that the various different "writings, essays, chapters" on the subject of acumoxa have to be assembled, differentiated, put in order etc; that idea is adopted in some sources.

Needle classic: Zhen1 jing1; this is one of the early names used for Lingshu, used for example by Huangfu Mi in Jiayi; the name "Lingshu" first appears at a relatively late date, in Wang Bing's 8th century Tang dynasty annotations to Suwen.

Qibo answered saying: Permit [your] subject to examine and put it in order. To make it all have principles, begin with one and end with nine. Let me talk about its way.

Permit [your] subject: Chen2 can refer to people in various levels of subordinate positions, from prisoners of war or slaves, to the people governed by a ruler, subjects, to the ministers or officials who serve a ruler or senior minister; it's also used, as here, as a modest or deprecatory form of self-address, in the same manner as, for example, "your humble servant" in English; there are only five instances of this character in Lingshu, all of them in the construction used here, chen2 qing3. Suwen has eight instances, two using this construction, five in the "Leigong" set of final chapters (Suwen 75-81). Qing3 means "to request permission, ask leave, to ask someone for something, or to ask someone to let or allow you to do something", in modern texts often equated with the English "please".

To examine and put it in order: Tui1 means "to push", with other senses extended from that, such as "to recommend, esteem", or to extend a computation, either logical or mathematical, "to infer, deduce", or simply "to calculate, reckon"; presumably as an extension of the idea of "deducing, inferring", it can also mean "to examine, investigate" (a meaning the dictionaries typically attribute to the post-Han period), which is the generally adopted reading here. Ci4 shares the same dual meanings as the English word "order", "sequence, order, progression", or "to arrange, organise, put in order".

Begin with one [and] end with nine: Given that the chapter goes on to discuss the nine types of needles, the obvious conclusion is that they are the one to nine referred to here; however, as some commentaries point out, there are other passages in Neijing concerning these numbers and the nine needles that contain indications that more than that simple correspondence is involved.

Suwen 20 for example says: "The ultimate numbers of heaven and earth begin with one, [and] end with nine. One, heaven; two, earth; three, man; from this, then tripling it, three threes [are] nine, corresponding to the nine territories"; the chapter then goes on to discuss the "three regions nine signs" diagnosis system. Lingshu 78, likewise devoted to a nine-based system, the nine needles, says: "The nine needles, [like] the great numbers of heaven and earth, begin with one and end with nine. So it's said: The first is patterned after heaven, the second is patterned after earth, the third is patterned after man, the fourth is patterned after the seasons, the fifth is patterned after the notes, the sixth is patterned after the pitchpipes, the seventh is patterned after the stars, the eighth is

patterned after the stars, the ninth is patterned after the territories. Huangdi said: How are the needles used/taken to correspond to the nine numbers? Qibo said: The sage men, giving rise to the numbers of heaven and earth, [take] one and nine it, thereby establishing the nine territories; [take] nine and nine it, nine nines, eighty-one, to give rise to the number of the Yellow Bell; taking/using the needles to correspond to [these] numbers." (The "nine territories" refers to the supposed nine regions or areas that the world was divided into, arranged in a "tic-tac-toe" or "noughts and crosses" arrangement, the four cardinal and four ordinal points of the compass, plus a centre; that arrangement was also [supposedly] applied in local land administration, in the idealised "well" system, so called because the Chinese character for "well, spring" is shaped like a noughts and crosses grid.)

The Yellow Bell referred to in this passage is in fact not a bell or anything of the kind; it's the name of a particular musical note (a more florid equivalent of do, re, mi etc in European musical theory), the base or root note of the scale, the one from which all the other notes are derived. By brief way of explanation, the method of deriving a musical scale, musical notes whose pitches are meaningfully related, was the same in ancient China as that developed in ancient Greece by Pythagoras in the 6th century BC; if, for example, a string of a particular length produces a particular note, then adding or subtracting a third of the length of the string will produce a note that is a close or strong harmony to the original; continuing this process will eventually lead to a scale essentially equivalent to the modern chromatic scale (as represented by all the keys on a piano, black and white). There are two descriptions of the process in early Chinese literature, one in Lushi Chunqiu (239 BC), which gives a procedure for deriving the full twelve-note chromatic scale. The second is in Guanzi, probably from a slightly earlier period; it gives a less developed scale, having only five notes, known as a pentatonic scale (common also in Western music, seen in folk songs such as "Ye banks and braes o' bonnie Doon", or, with a shifted root, in the typical modern rock guitar solo, the supposed "blues scale"). For the process of arriving at this pentatonic scale, the number referred to in Lingshu 78, eighty-one, is significant, because it's the minimum number needed to facilitate the necessary number of additions and subtractions of a third without ever involving a fractional number: 81 plus a third (27) is 108, minus a third (36) is 72, plus a third (24) is 96, minus a third (32) is 64; this fifth number completes the scale, and is the first in the series that's not evenly divisible by 3.

In ancient China, music, and its correct regulation, was attributed a practically mystical significance. Shiji for examples says: "Proper teaching all begins with music, [if] music is proper then actions are proper." And also: "Kings govern affairs [and] establish laws, measures [and] standards, [and] all are received from the six pitchpipes. The six pitchpipes are the roots [of] the ten thousand things." ("Six pitchpipes" in practice means pipes tuned to the twelve chromatic notes, since there are six yin and six yang.) In their earliest form the Scholist (Confucian) classics included a "Music Classic" (Yuejing, a lost work, probably not surviving past the Qin dynasty, late 3rd century BC). Hanshu (History of the Han Dynasty) includes a passage in which the cubic volume of the pitchpipe producing the base "yellow bell" note is also used as the base of the system of measurements for quantities of grains etc. That passage is in fact a part of a passage relating to the introduction of a new calendar system in 104 BC, the Taichu calendar, explaining why that calendar was based on a day divided into eighty-one parts (with for example the month being set at 29 and 43/81st days). The Taichu calendar remained in use until 7 BC, when it was superseded by

another based on the same basic principles, the Santong calendar, which was used until 85 AD.

In Neijing, the principal representatives of nine-based numerology are the two chapters previously mentioned, Suwen 20 (three regions and nine signs diagnosis) and Lingshu 78 (the nine needles), and the adjacent chapter to the latter, Lingshu 77 (the nine "palaces"). Qibo's "begin with one and end with nine" statement here is no doubt a pointer to the same numerology, and indicates that the authors of this preamble to Lingshu, which by implication means the compilers of the book, were adherents of this philosophy. As a consequence, the book is arranged into eighty-one chapters in nine volumes (as was Suwen originally); in this way, it's positioned into the perceived framework of the world of that time, aligning with the mystically significant Yellow Bell, as well as the standards that measure out the staple grain of the people, the calendar that marks the passage of the seasons and years, and the geographic division of the land.

This reasoning further suggests that both Lingshu and Suwen were compiled at some time during the period the "eighty-one" based Taichu and Santong calendars were in force, 104 BC to 85 AD (note that this refers to the date of compilation, not authorship; that is, it doesn't preclude the possibility that some of the individual texts or chapters included in these compilations were written prior to 104 BC).

As discussed earlier, the name "Lingshu" wasn't used for this book until the 8th century AD. Huangfu Mi in Jiayi refers to it as Zhenjing "Needle Classic", a name apparently derived from the earlier text of this chapter itself. Two other 3rd century AD medical texts, Shanghanlun "Cold Harm Treatise" and Maijing "Channel/Pulse Classic" instead refer to it as Jiujuan "Nine Volumes". The typical view of this name is that this represents the common ancient practice of giving simple and direct names to books; for instance, the book names Mengzi, Xunzi, Guanzi, Zhuangzi, Laozi etc are all simply the names of the authors (supposed or real) of those texts; likewise, Lingshu originally had nine volumes, so the name "Nine Volumes" was adopted for it. However, I think it's much more likely that the name was in no way as casual or offhand as this explanation suggests; rather, it was highly deliberate and meaningful, a pointed statement of the very purposeful structuring of the work in accordance with the core numerology of its compilers.

The titles of the first nine chapters of Lingshu have a two-character note or comment appended to them, consisting of fa3 "law, principle; to model or pattern on, take principles from", followed by one of the nine entities listed in the Lingshu 78 Yellow Bell passage cited earlier, "heaven" in chapter 1, "earth" in chapter 2, then man, the seasons, the notes, the pitchpipes, the stars, the winds, the regions in chapters 3 through 9 respectively, precisely mirroring Lingshu 78. The earliest commentator on Lingshu in its entirety is Ma Shi (Ming 16th century), who says of this: "The old edition takes the first chapter to be 'modelled after heaven', the second chapter is 'modelled after earth' (etc) ... So, a later person has copied the idea from this classic's chapter 78, 'Nine Needles Treatise', and divided it into [these] commentaries, not at all understanding [that] that [chapter] discusses the needles, [it] doesn't discuss the chapter titles. [It is] most irrational, so I have removed them." However, I'd suggest that the actual situation is precisely the opposite of what Ma contends; that is, the author or inserter of these comments following the titles of the first nine chapters of Lingshu, far from displaying an ignorance of the context or intent of the text, understood very well that the "begin with one and end with nine" comment in the introduction of Lingshu 1 was a direct reference to the numerology

of nine and the nine nines of the Yellow Bell in Lingshu 78, and also understood the implication of that comment, that the nine volume and eighty-one chapter arrangement of the book was directly based on that numerology; these quotations of that text were then added as commentary to the titles of the first nine chapters in order to highlight that connection, to indicate more explicitly that the book was arranged on the principles of the Yellow Bell; on this basis, it's by no means improbable that these annotations are the work of the original compilers themselves, not a later commentator.

The beginning of Qibo's reply is normally regarded as a natural dividing point in the text, but I think that this first section of the reply clearly belongs with Huangdi's question, as part of the introduction written by the book's compilers; and the ensuing "small needle" sentence, which is clearly part of an earlier text (as discussed further below) marks the beginning of the next section.

The essentials of the small needle are easy to lay out and difficult to enter. The coarse guards the shape/body, the superior guards the spirit. Spirit oh spirit, a guest at the gate. If you don't see the illness how can you know its origin? The subtlety of needling is in quick and slow. The coarse guards the passes, the superior guards the mechanism. The movement of the mechanism doesn't leave the holes. The mechanism in the holes is clear, clean and fine/subtle. Its coming can't be met, its going can't be pursued. Know the way of the mechanism, it can't be divided by a hair. If you don't know the way of the mechanism, strike and it doesn't issue. Know its going and coming, [you] must await the moment. The coarse are in the dark; the marvellous, the workman alone has it. Going, do counterflow; coming, do withflow. Clearly know counterflow and withflow and properly perform without question. Meet and contend with it, how can you get not emptiness? Pursue and assist it, how do you get not fullness? Meeting, following, use thought to accord with these. The needle way finishes there.

This begins a singularly interesting passage of Neijing, one that was clearly regarded as of great importance, as demonstrated by the fact that there are three chapters of Neijing that offer extended commentaries on and explanations of it, as well as numerous shorter references in other chapters. The major commentary is Lingshu 3, titled "The Small Needle Explained", which consists entirely of quotations from this and later sections of Lingshu 1 with accompanying explanations or interpretations; the other significant instances are Suwen 27 "Parting [and] Meeting [of] True [and] Evil", and Suwen 54 "The Needle Explained"; unlike Lingshu 3, the bulk of both these chapters is material unrelated to Lingshu 1. The influence of Lingshu 3 in particular on the interpretation of this passage has, obviously enough, been pivotal; Yang for example makes virtually no comment on this entire paragraph; and Ma states directly that "my explanations [of] this section adopt the ideas of 'The Small Needle Explained', [I] don't dare to rashly speculate". By contrast, the 19th century Japanese commentator Sibue Chusai cites his contemporary and countryman Isawa Shinju: "Although 'The Small Needle Explained' is a dedicated explanation of this chapter, at times it has things that can't be relied on. Scholars reading this chapter should be level-hearted (ie even-minded, impartial) and remove any personal views, using the classic to explain the classic. They can't rigidly hold to 'The Small Needle Explained' and take it to be so. Chapters such as this classic's 'The Small Needle Explained' and Suwen's 'The Needle Explained', they are explanations of the classic in which the

masters all have their own particular views, and the theories also follow different lines. The reader should adopt a selecting and rejecting approach, he can't solely depend on one explanation. ... The words of the classic are the root, the explanatory theories are the branches. Nowadays, the general placement of the classic text [of this passage] is fully dependent on the explanatory theories; this then is discarding the root and following the branch, which could be called contrary to the intention of the classic." I fully agree with this point of view, both in general terms, and also specifically in relation to the interpretations offered in Lingshu 3, which I think are at times quite mistaken.

The small needle: Xiao3 "small"; refer to the note in the previous section regarding the use there of wei1. In this instance, Jiayi instead has fu1, an introductory particle with no intrinsic or translateable meaning; given the presence of xiao3 in the title of the explanatory chapter Lingshu 3 (see below), this appears to be an error.

The essentials of the small needle are easy to lay out and difficult to enter: Yao4 "important, essential, necessary, vital"; this character and idea are common in Neijing. "Lay out" is chen2 "to display, show; to state, explain". Ru4 "to enter, go into" can also mean "to receive, accept, adopt", or "to accord with, conform to". The common reading of this sentence is that the principles of needling are easy to state or describe, but their successful implementation in practice is by no means as simple, it's "easier said than done"; Jiebin: "[Its] standards [and] laws [are] easily said ... [but its] subtle essence [is] difficult to attain."

The coarse ... the superior: Cu1 "coarse, rough; rude, unrefined"; shang4 "up, above" is used here in the same way as the English "superior", that is, "better"; these two characters here refer to poor and good physicians, practitioners of lesser and greater knowledge, quality or ability. Instead of shang4, Taisu has the graphically similar gong1 "worker, workman", likewise in "the coarse guards the passes, the superior guards the mechanism" a little later; that character is used in Neijing as a synonym for shang4 in this sense, a superior workman, a skilled physician, including later in this paragraph itself, "the workman alone has it". Shou3 means "to guard, defend", or "to look after, attend to, manage"; some degree of both ideas is probably intended here.

The shape/body ... the spirit: Xing2 "shape, form; body" is routinely used in Neijing to refer to the human body, as is the more common modern equivalent shen1 (not to be confused with the shen2). Shen2 "spirit" is the standard term used in ancient and modern Chinese to refer to the intangible entity or force that inhabits and animates human life; in the Neijing five goes system it's also used for the specific spirit that resides in the heart. The use of the character typically excites animated comments in modern Chnese texts, refuting, in keeping with the requirements of a communist social system, any suggestion that it refers to a supernatural or superstitious entity. In this they are in fact on solid ground; one of the most striking attributes of Neijing generally is its consistent and relatively stringent adherence to a material view of life and the human body, a surprisingly modern viewpoint. Its authors appear to have cleverly adopted the common metaphysical or superstitious idea of the "spirit", but in a subtly adapted or altered form, referring in fact to something quite physical, the "spirit-like" or marvellous "mechanism" that vivifies the body, the circulatory system, or the substances involved in that "mechanism", qi and blood. The classic and often quoted statement on the issue is from Suwen 26: "Blood and qi [are] a person's spirit, [you] cannot not carefully nourish [it]"; that statement is in fact, in my view, broadly representative of the use of the use of the term "spirit" in Neijing.

Spirit oh spirit, a guest at the gate: There's considerable contention about the precise interpretation of this sentence, principally centred around the question of whether the second "spirit" is the beginning of a new clause, or part of the initial clause; despite the disagreement, and the consequently varying readings of the first clause, there's general agreement that the key point or idea is that evil qi enters the body's "gates", contending with or displacing the shen or spirit, and coming to reside as a "guest", an illness.

The subtlety of needling is in quick and slow: This sentence is generally taken to refer to the principle discussed in the next paragraph, that different speeds of insertion and removal of the needle achieve different effects, either "filling", adding or supplementing qi, or "emptying", removing or draining qi: "Slow and quick then full, quick and slow then empty." "Subtlety" here is again wei1 "fine, small; subtle, profound, abstruse", seen previously in "I want to use fine needles"; it's used again later in this paragraph, in "the mechanism in the holes is clear, clean and fine/subtle".

The coarse guards the passes, the superior guards the mechanism: Ji1 "mechanism, machine" is here generally considered to be virtually synonymous with "spirit" in the sense discussed above, the structures, substances and forces constituting and motivating the circulation of blood and qi in the channels; this term and idea is repeated a few times through the remainder of the paragraph. What's meant by the first clause, "the coarse guards the passes", is more problematic. Guan1 means the bolt of a door, or simply a door, or a pass or key strategic point or juncture; the character is used in Neijing to mean the body's joints, or the elbows and knees in particular, or the limbs beyond those points, the forearms and lower legs, which are the regions where the earliest major acupoints are all located; guan1 is used in this latter sense later in this chapter: "The twelve yuan [acupoints] emerge at the four passes, the four passes govern treating the five zang"; Lingshu 3's interpretation is based on this reading: "'The coarse guard the passes' [means they] guard the four limbs, and don't understand the going [and] coming of blood [and] qi, proper [and] evil"; that is, a good physician understands the principles of the movement of blood and qi and treats on the basis of what is actually happening in the body; the poor physician merely knows the standard location of a number of the major acupoints on the limbs, and applies them mechanically and symptomatically; this reading is followed by virtually all sources, classical and modern. Personally I think there's a significant problem with this idea, which is that the whole nature of the acupoints in the "passes", on the forearms and lower legs, is that their function isn't local and direct, it's abstract and indirect; they influence the flow of qi and blood in the channels in a highly conceptual fashion, not an obvious one; in other words, they work entirely on the principles of the "mechanism", so using them supposedly as an opposition to that concept is obviously questionable. Perhaps motivated by such considerations, Shibue instead contends that guan1 means "shape, the body", forming an opposite to "spirit"; as logical as this is, there is no semantic basis for it; that is, there's no meaning of guan1 "pass" I'm aware of that could be construed to mean "shape, form, substance".

The movement of the mechanism doesn't leave the holes: Kong1 "hollow, empty" is here taken to mean an acupoint, a "hole" through the body's tissues and structures through which a needle can reach or access the channels; that view of the nature and function of acupoints is likewise embodied in two other characters used in Neijing to mean "acupoint", xue2 "hole, cave, den", and kong3 "hole, opening, aperture". Li2 means "to leave, part, depart from; to be separate, away or distant from". The usual interpretation

of this statement is that the acupoints are specific or special places or points on the body's surface that are constantly in contact with the mechanism; that is, "holes" or "tunnels" connecting with the movement of blood and qi in the channels; and this is why they can be used in treatment to influence that movement or circulation, and so affect the health of the body; the intended idea might also be that, as a result of this connection, they can be used as diagnostic points as well as treatment points, an idea that's consistent with the attribution of just such a diagnostic function to the acupoints, or specific sets of them, in other passages in Neijing. Before dong4 "to move, movement", Jiayi adds bu "no, not", giving "the not moving of the mechanism"; this isn't adopted anywhere, and there's nothing to suggest it's other than an error.

Its coming can't be met, its going can't be pursued: See the discussion of this at the end of this set of notes; likewise for "know its going and coming, you must await the moment", "going, do counterflow; coming, do withflow, "meet and contend with it, how can you get not emptiness? pursue and assist it, how do you get not fullness?", and "meeting, following, use thought to accord with these".

Know the way of the mechanism, it can't be suspended by a hair: Gua4 in modern Chinese typically means "to hang, suspend", but its original meaning is "to divide, split, separate". Lingshu 3 comments that "[this] says [that] qi [is] easily lost"; Ma Shi takes this to means that since there's only "one qi" – that is, all the body's qi forms a single connected or united and inseparable whole – then a single slight error can harm and endanger it all; most sources adopt some such idea. Suwen 27 says instead that this means "to wait for the arrival time of evil and issue the needle to drain [it]", apparently meaning that the right time to do this is a fleeting and crucial moment, a brief space in time of only a hairsbreadth; this is consistent with the statement later in the present paragraph that "[you] must await the moment".

Strike and it doesn't issue: The final character in the clause is fa1 "to issue, release, send out, emit, shoot". The first character is kou4, which basically means "to hit, strike", or "to ask, enquire" (it also has a number of other meanings, such as "to hit the head to the floor, bow down, kowtow", that are of later derivation and not relevant here). Lingshu 3 comments: "'Striking it [and] not releasing' means not understanding the idea of filling [and] draining, [so] blood [and] qi [are] already exhausted but the [evil] qi [still] doesn't go down"; that is, needling ("striking") without a proper understanding of the principles only results in unintendedly exhausting proper qi and blood, without achieving the intended result of suppressing or expelling ("releasing") the evil or illness; Ma, Jiebin and Zhicong all adopt this basic idea, with some minor differences. Suwen 27 takes a quite different view: "[If you] know [when] it (the illness or evil) can be treated, [it's] like releasing the mechanism; [if you] don't know [when] to treat it, [it's] like banging a hammer." "Releasing the mechanism" in this is generally taken to mean releasing or firing the trigger of a crossbow, activating the mechanism that connects the trigger to the string and the bolt or arrow ("crossbow trigger" is a standard meaning of ji1 "mechanism"; note that ji1 is Suwen 27's addition, it's not present in the original Lingshu 1 clause); that is, correct needling with a proper knowledge of the "mechanism", the body's circulation of qi and blood in the channels, is as precise, swift and effective as pressing the trigger on a crossbow; needling without having that knowledge is like banging with a hammer, a coarse and blunt process that's completely incapable of producing the required precise and fine action. The use of the crossbow trigger as a metaphor for precise, swift, decisive

action is standard; for example, Sunzi (c 5th century BC): "The swiftness of surging water results in floating rocks, [this is] force. The swiftness of birds of prey results in destroying [and] breaking, [this is] moment. So, those who are good at battle, their force is violent, their moment is brief. Force is like bending a crossbow, moment is like triggering the mechanism/trigger"; Lushi Chunqiu (3rd century BC): "[If] the crossbow mechanism is wrong by a grain then [it] won't shoot", which is highly reminiscent of "can't be divided by a hair" in the present paragraph. Modern texts typically adopt a reading along these lines, although they typically refer to it as "pulling back a bow and not releasing the arrow"; I don't know what the "pulling back" idea is based on, there's no obvious representation of it in the text.

[You] must await the moment: The final character is qi1 "time, period, moment". "Await" is yu3, a very common character in both ancient and modern Chinese, most typically meaning "and, with", but with a large range of other meanings, "to await, wait for; to permit, allow, let; to use, employ; to, at; to match, equal", any of which could be construed as a plausible interpretation here, with (as far as I can see) no material change in the basic meaning of the sentence.

This paragraph has five statements involving the opposing or complementary ideas of "coming" and "meeting" on the one hand, and "going" and either "pursuing" or "following" on the other. Those statements are: (1) "Its coming can't be met, its going can't be pursued." (2) "Know its going and coming, [you] must await the moment." (3) "Going, do counterflow; coming, do withflow." (4) "Meet and contend with it, how can you get not emptiness? Pursue and assist it, how do you get not fullness?" (5) "Meeting, following, use thought to accord with these." There's considerable divergence of opinion regarding the meaning of these different statements; notably, none of the interpretations I've seen are based on a single basic idea that explains all the different statements.

Lingshu 3 says that "its coming can't be met, its going can't be pursued" means that "[when] qi is flourishing [you] can't fill ... [when] qi is empty [you] can't drain"; it subsequently says that "'meet and contend with it' [means] draining [needling]"; so in the first instance "meeting" is defined as "filling", in the second as "draining". Also: "'Going is counterflow' means qi is empty and small; 'small' [is what] 'counterflow' [means]; 'coming is withflow' means balanced body qi; 'balanced' [is what] 'withflow' means." Yang, Ma and Jiebin either make no comment on the issue, or accept and reiterate the opinions of Lingshu 3.

Zhicong offers a different set of views. He says, firstly that "its coming can't be met" means that "when qi is just arriving, evil qi is then flourishing ... [and] proper qi is greatly empty ... [so you] can't meet and fill it"; likewise, "its going can't be pursued" means that "[when] qi is already departing, then evil qi has already declined, and proper qi is going to return ... [so you] can't ... pursue and drain it, for fear of harming proper qi". After this initial equivalence of "coming/meeting" and "filling", and "going/pursuing" and "draining", he then says that "meet and contend with it [means] draining", and "pursue and assist it [means] filling".

Suwen 27 says that "its coming can't be met" means that you can't immediately confront and drain an evil in the channels, you first have to "press and stop it", using a procedure of pushing at the channel with the fingers. "Its going can't be pursued" means that once you start draining, if you don't stop at the right time, but "[continue] to drain it, then true qi is cast off ... evil qi [instead] arrives again and the illness increases [and] builds up".

Wang says that qi concentrates in different channels in a regular progression according to the time of day; "its coming can't be met" means that if you see a normal or proper concentration or fullness of qi in a channel that's in accordance with this cycle, but mistakenly "take [it] to be evil [and] ... drain it, then [it's] a deep error"; likewise, "its going can't be pursued" means that once a normal or proper concentration or fullness of qi has passed through a channel and gone on to the ensuing channels, you can't "pursue [and] summon [it and] make [it] turn round". Wang relates this to a six channels cycle; Gao Wu, the author of Zhenjiu Juying "Acumoxa Gathering [of] Eminents" (Ming 1529) adapts the same idea to the later-developed twelve-step dizhi or "earthly branches" based "ziwu liuzhu" system ("midnight noon flow", often referred to in English as the "Chinese clock").

Nanjing has two chapter devoted to this issue. Nanjing 72 gives a fairly neutral or ambiguous interpretation (cited later in this article). Nanjing 79 gives a much more specific interpretation, saying that "meet and contend" means "to drain its son", meaning, for example, to apply draining needling to the earth acupoint on a fire channel; and "pursue/follow and assist" means "to fill its mother", meaning, for example, to apply filling needling to the wood acupoint on a fire channel.

None of these interpretations apply a consistent reading of "meeting", "coming", "going", "following/pursuing" throughout. Also, some of them involve intepreting "withflow" and "counterflow" in a quantitative sense, "much, balanced" or "small, deficient", instead of their more typical directional or qualitative sense (this isn't entirely implausible; there are other Neijing passages where similarly atypical readings of these terms are adopted).

In "going is counterflow, coming is withflow", the verb in both cases is wei2, which is everywhere interpreted in perhaps its most common sense, "is, to be", so going is equated with or likened to counterflow, coming is equated with withflow. If it's instead read in another of its most common senses, "to do, act, perform", a quite different reading results. That is, if there's an evil present in the channels, then a needle should be inserted at a point where the evil is expected to pass, and while waiting for it to arrive, the direction of the needle must be in the direction of the channel flow, not against it; that is, "its coming can't be met", otherwise the proper qi preceding the evil will be drained instead; that is, "[if you] meet and contend with it, how can you not get emptiness?". As well as which, the evil won't be allowed to reach the needle, and so won't be removed or drained. So, "[for] coming, do withflow".

When the evil does arrive, the direction of the needle has to be changed, to confront and contend with the evil, in order to remove or drain it; continuing to needle in a withflowing direction will instead assist the evil to continue its flow through the channels, and also augment its strength, creating a condition of perverse fullness; that is, "its going can't be pursued"; and if you do "pursue and assist it, how do you get not fullness?". So, "[for] going do counterflow", turn the needle to the opposing direction.

So, in "meet and contend with it, how can you get not emptiness? pursue and assist it, how do you get not fullness?", the emptiness and fullness referred to are both negative or pathological outcomes, emptiness resulting from draining proper qi, and fullness resulting from assisting evil qi.

This reading provides a plausible, coherent, straightforward and consistent reading of all the "coming, going, meeting, pursuing" statements in the paragraph, without need for any deviation or variation, or any degree of evasive or strained reasoning; it also employs the entirely standard directional meanings of "withflow" and "counterfow".

The passage also has some statements emphasising the timing of the procedure: "know the way of the mechanism, it can't be divided by a hair"; and "know its going and coming, [you] must await the moment". The proposed reading of the passage explains what those statements mean and why they're there, because timing is central and vital to the procedure.

There is also this statement regarding speed, "the subtlety of needling is in quick and slow". The next paragraph says more specifically "slow and quick then full, quick and slow then empty"; the usual reading of this is that inserting the needle slowly and removing it quickly is a filling action, inserting quickly and removing slowly is draining. The proposed procedure is in accordance with these principles; before the evil arrives, the needle is inserted slowly to feed or assist proper qi in a withflowing direction, and to draw or induce the evil towards the needle; when the evil does arrive, the physician has to act swiftly to catch the precise moment, so the needle is withdrawn quickly, completing the filling action, then reinserted quickly in the opposite or counterflow direction, beginning the draining action, which is then completed by slowly withdrawing the needle, drawing or releasing the evil with it.

Neijing contains some other passages that corroborate or are consistent with these ideas. Suwen 27: "Evil newly guesting, strong-flowing, not yet having a fixed place; push it then [it] advances, draw it then [it] stops; go counterflow and needle the warm blood; needle to bring out blood, the illness straightaway stops." Lingshu 9: "Draining, meet it; supplementing, follow it; understand meeting, understand following, and qi can be made harmonious."

Some light on how the moment of arrival of the evil is to be discerned might be provided by the sentences immediately preceding the first instances of "coming and going": "The movement of the mechanism doesn't leave the holes; the mechanism in the holes is clear, clean and fine/subtle." That is, with a needle inserted into an acupoint, as long as the physician can feel a clear, quiet and subtle flow, he/she is feeling the presence of proper qi, and should continue withflowing needling; once the nature of the flow changes, becoming muddy, disturbed and agitated, that then signals that the evil has arrived, and needling should immediately be changed from withflowing to counterflow in order to drain it.

None of the major Neijing commentators proposes this "needling direction" view of this passage, but a Yuan dynasty acumoxa work does; the book is called Jiegu Yunqi Zhenfa "Jiegu [and] Yunqi's Needle Methods", and forms a part of a larger compilation titled Jisheng Bacui "Saving Life [and] Promoting Purity", by Du Sijing (1308 Yuan); the relevant chapter is titled Yunqizi Lun Jingluo Yingsui Buxie Fa "Yunqizi's treatise [on] the main [and] network channels meeting [and] following filling [and] draining Method". It's a quite short chapter, with some quotes related to "meeting and following" from Lingshu 1 and 9 and Nanjing 72, in the middle of which it says: "Whenever using the needle, flowing with the main channel and needling it is filling, meeting the main channel and contending with it is draining. ... This is called 'the meeting and following filling and draining method'." This method was adopted and repeated in a number of later acumoxa works, including Dou Hanqing's Biaoyou Fu "Dark Streamer Ode" (Jin 13th century), Wang Guorui's Yulong Jing "Jade Dragon Classic" (Yuan c 1300), Yang Jizhou's Zhenjiu Dacheng "Acumoxa Great Completion" (Ming 1601) etc, thereby becoming a standard needling technique. The idea was also adopted by Zhang Shixian, the author of the earliest commentary on Nanjing to

include explanatory illustrations or diagrams, Tuzhu Nanjing "Illustrated Annotated Difficulties Classic" (Ming 1510), who used it as his explanation of Nanjing 72; the Nanjing text says: "What's meant by 'coming' [and] 'following' is knowing the flowing and moving of rong (nutritive) and wei (defensive) qi, the going and coming of the main channels, following the counterflow and withflow, and treating it." Zhang says that this means, for example "the hand three yang [go] from the hand to the head; the needle spike [going] from outside upwards is 'following'; the needle spike [going] from inside downwards is 'meeting'"; "inside" and "outside" in this mean proximal and distal respectively, as shown unambiguously by the different wording used on the subsequent diagram; that is, "outside upwards" means from the limbs towards the trunk and head; "inside downwards" means from the trunk and head towards the limbs; the captions on the diagram say, eg for the hand yang channels: "The needle head upwards withflow needling is called 'following'; the needle head downwards counterflow needling is called 'meeting'." Some later commentators followed this line of thought; for example, Xu Dachun in Nanjing Jingshi "The Difficulties Classic Explained" (Qing 1727) says: "[In] meeting, the needle point meets its arriving place and contends with it, so [it's] called 'draining'; [in] following, the needle point follows its departing place and assists it, so [it's] called 'filling'."

Other commentators specifically repudiated this view. In Zhenjiu Wendui "Acumoxa Questions [and] Answers" (Ming 1530), Wang Ji cites an earlier work, Hua Shou's Nanjing Benyi "Root Meaning of the Difficulties Classic" (Yuan 1361), which in turn cites an earlier Yuan dynasty work, Chen Ruisun's Nanjing Bianyi "Differentiating Uncertainties [in] the Difficulties Classic"; Chen's comment cited in relation to Nanjing 72 is: "'Meeting' [means] meeting the qi [when it has] just arrived, but is not yet flourishing, in order to drain it. 'Following' [means] following the qi [when it has] just gone, but is not yet empty, in order to fill it"; that is, "meeting" means meeting evil qi when it has just arisen, and draining it before it can become strong; "following" means that proper qi should be treated when it has just begun to "go" or diminish, filling it before it can become empty. In a reasonably extended examination of different theories of meeting and following, Wang Ji's comment on this is: "The [text] says [that] 'meeting' [means] meeting the qi [when it has] just arrived, but is not yet flourishing, draining it in order to hold back its rushing. How could it be that going counterflow to the main channel is 'meeting'? 'Following' [means] following the qi [when it has] just gone, and is about to become empty, [and] filling it in order to assist its moving. How could it be that going with the flow of the main channel is 'following'? Those who say this, their unfounded absurdities are evident. How could [they] show the [proper] method to people?"

This ambivalence towards the idea appears to have continued into modern times; it seems that, on the one hand, the needling-direction theory of meeting-following filling-draining is well known and adopted in practice by many practitioners; it's reflected, for example, in Henry Lu's translation of this passage: "When vicious energies are coming on too strongly, insertion of needle in the reverse direction as they are travelling should be avoided; and when vicious energies are already leaving, insertion in the same direction as they are travelling should be avoided." But more educated or well-read practitioners take it to be a partial and inadequate view on the matter, and are inclined to a more complex and nuanced view, often rejecting the needling-direction theory entirely. None of the modern Chinese editions of Lingshu I refer to even mention the idea in relation to Lingshu 1, much less adopt it. The opening paragraphs of the needling and moxa techniques volume of the

modern encyclopedic collection of acumoxa knowledge Zhongguo Zhenjiu Tongjian "Acupuncture Treatment Categorized Collection of Literatures" (Huang Longxiang et al, Qingdao 1993-6) strongly reject it: "The filling and draining content of this passage (referring to this and the next paragraph of Lingshu 1) encompasses all of what modern people consider to be Neijing filling and draining factors, such as 'slow and fast', 'opening and closing', 'outbreath and inbreath'. On the basis of a mistaken understanding of the original Neijing 'meeting and following' text, people later proposed all sorts of different 'meeting and following' filling and draining methods. Of those, the one with the greatest influence on modern practice is the 'needle head meeting and following filling and draining method'; that is, needling in the same direction as the channel flow is following, filling; needling against the channel flow direction is meeting, draining. The clinical worth of this theory has already been repudiated by clinical observations. From a purely textual point of view, it's also difficult to justify, since there are differences regarding the direction of flow of the main channels and the du and ren channels in the different chapters in Neijing, so in a clinical situation, which should be regarded as correct?" It should be noted that, whatever difficulties this last mentioned point may raise (and they are indeed significant), they are entirely immaterial in relation to a consideration of the intent of the original author of the passage.

I am strongly of the opposite opinion to that stated in this quote; in my view, the "needle-direction" reading is the only interpretation offered that gives a direct and consistent explanation of this passage; no matter how valid or clinically effective the various other ideas regarding filling and draining may be, they do not represent the intent of this section of Lingshu text.

[For] all use of the needle, [if it's] empty then fill it, full then drain it, stagnant and stale then remove it, [if] evil overcomes then empty it. The Great Essentials says: Slow and quick then full, quick and slow then empty. What's meant by full and empty [is] either there is, or there's not. Examine after and before, either retained or lost. Doing emptying [or] doing filling, either getting or losing. The essentials of empty and full, the nine needles are the most marvellous; when filling and draining use the needles to do it. Draining means you must hold and insert it, release and emerge it, discharge the yang and get the needle; evil qi is then drained. Press and draw out the needle, this is called internal warmth, blood doesn't get to scatter, qi doesn't get to emerge. Filling means following it; the idea of following is as though careless, sometimes moving, sometimes pressing, like a mosquito stopping, as though staying, as though returning. Depart like cutting a string. Make the left connect to the right, its qi then stops; once the outside gates are shut, qi in the middle is then full. You must not leave blood; quickly take and eliminate it. The way of holding the needle, firmness is precious, the fingers correct/straight and the needle perpendicular; don't needle left or right. The spirit is on the autumn hairs; focus thought/attention on the ill person, carefully look at the blood channels, needle without danger. When [you've] just needled, [you] must be on the hanging yang and at the two guards, the spirit focused without departing, to know the existence or the perishing of the illness. The blood channels are located transverse to the transporters; to look at they're particularly clear, to feel they're particularly firm.

Stagnant and stale then remove it: The first character in the clause has a number of pronunciations and meanings, most commonly wan3 "crooked, winding; like, as if"; in that

pronunciation it can also mean "withered, dead"; pronounced yu4 it can be a substitute or equivalent for yu4 "flourishing, numerous; to accumulate, coalesce"; stagnant, blocked, obstructed", the latter being the reading proposed by Jiebin. The second character, chen2, typically means "to display, array, line up" (seen in an extension of this sense earlier in "the essentials of the small needle are easy to lay out"), but can also mean "old, stale". Wang comments that "[for] long-accumulated blood in the network (luo) channels, needle and remove it", which is the generally adopted idea, although in other sources it's not necessarily limited to the network channels.

[If] evil overcomes then empty it: "Overcomes" is sheng4 "to win, defeat, overcome", used in Neijing as the name of the "overcoming, controlling" cycle of the five goes (rather than the more common modern equivalent ke4). Lingshu 3 here says: "[If] all the main channels have fullness, [then for] all [of them] drain their evil", apparently taking "flourishing, full" in "all the main channels" to be the outcome or natural result of evil "overcoming"; this idea is commonly adopted, although it prompts the question of just how this differs to the previous "full then drain it".

The Great Essentials says: "Great Essentials" is presumed to be the name of an older piece of writing; Lingshu 76 quotes from a text of the same name, in relation to a quite different matter; there is no known text or chapter of this name.

Slow and quick then full, quick and slow then empty: Lingshu 3's reading of this is that using a slow action or movement when inserting the needle and a swift action when removing it produces a filling effect or constitutes a filling procedure; the opposite, quick entry and slow removal, is an emptying or draining procedure; as mentioned, that reading is consistent with the procedure I suggested as the intent of the previous paragraph. Suwen 54 gives a significantly different reading; removing the needle slowly then pressing the skin quickly is filling, removing it quickly then slowly pressing, or delaying pressing the skin is emptying or draining. Both ideas are plausible, and both are adopted in the various sources. Note that the text doesn't unequivocally indicate that needle insertion or removal or any sort of needling consideration is what's referred to; it could, for example, be taken to mean that if the pulse has a slow then quick pattern to it, that's a sign of fullness, and vice-versa; however, given the context of the larger passage, with the later specific discussions of needling method, the needling action idea seems the most likely interpretation, and is everywhere adopted.

What's meant by full and empty: See the discussion following this set of notes.

The essentials of empty and full, the nine needles are the most marvellous: Miao4 "marvellous, wonderful, ingenious, clever, subtle, mysterious" etc, seen previously in "the marvellous, the workman alone has it". Lingshu 3 doesn't comment on this; Suwen 54 says it means "the nine needles ... each have their appropriate [use]"; in the ensuing "when filling and draining use the needles to do it", it takes zhi2 shi2 "the time of/when" to mean "according with the opening [and] closing [times of] qi", that is, needling according to the progress of qi through the different channels in the course of a day, season, year. Modern sources don't agree with this last view; they instead invariably contend that "when filling [or] draining, use the needle to do it" means that the outcome or result of needling, whether it produces a filling effect, or instead a draining effect, is determined by the type of action applied to the needle, that is, the needle manipulation or method used; this idea is entirely plausible in itself, and a plausible reading of the text, and is corroborated by the fact that the passage immediately continues on to discuss the specifics of exactly that

aspect of needling. Despite that, I prefer a different view of these two sentences, more like the idea proposed by Yang and Ma Shi, that needling is the therapy or form of treatment best suited to performing filling and draining; in my view, the point being made, one that I feel is easily overlooked and whose importance is readily underestimated, is that concepts such as filling and draining are intrinsically linked to the practice of needling. To clarify: One of the most distinctive aspects of acumoxa is its abstract nature, an abstractness seen both in its underlying theories and in the essentially immaterial nature of its application; in relation to its theory system, the current evidence suggests that, despite statements to the contrary that are seen not uncommonly, the use of needles isn't an originally empirical practice to which a theoretical explanation or validation was added at a later date; rather, it appears that the idea of the use of needles (or in fact, moxa originally) came into existence at the same time as, and as part of the same body of thought as the basic elements of its associated theory, the channel system, its role in the circulation of qi and blood, the disturbance of that circulation leading to various kinds of disorders (fullness, emptiness, stagnation etc) and consequent illness, and the correction of such disturbances through the use of either moxa or needles at key points on the body surface along the course of the channels, thereby dispelling the associated illness. This interlinking of theory and practice from the inception is in marked contrast to forms of treatment such as oral medicines or bencao, in which the opposite appears to have happened; that is, in its original or early form this was a therapy which for the most part was genuinely empirical, based essentially on the accretion of a body of knowledge about the effect of the application of certain substances in certain situations; only at a later stage were efforts made to overlay a theoretical structure or rationale on the practice. I think this is the point being made here, that if the idea of the role of fullness and emptiness in illness is accepted, then the logical method to address the problem and remedy the illness is acumoxa, since it's a practice entirely built around and into a theory that includes these concepts, whereas bencao or oral medications don't natively include a theory of fullness and emptiness and ways to address such conditions.

Draining means [you] must hold [and] insert it: "Means" here is yue1 "to say, call, name", used in a rather unusual way; the next sentence, which is the equivalent description of the "filling" procedure, begins in a more extended manner saying "filling is called (yue1) 'following'; the meaning of 'following' [is] ..."; this suggests that the first sentence should be structured like the second, and that conjecture is corroborated by Jiayi, and also Wang's citation of the passage in Suwen 27, which both say "draining is called 'meeting'; the meaning of 'meeting' [is you] must hold and insert it ..." etc. In this form, this set of sentences equates what are referred to in the previous paragraph as "meeting" and "following" with the standard names by which those procedures or actions later came to be and are still known, "filling" and "draining", as well as giving more specific definitions or descriptions of just what is involved in those procedures.

Release and emerge it, push aside the yang and get the needle: "Release" is fang4 "to send out, expel, discharge; to release, set free; to put, place"; "push aside" is pai2, which in modern Chinese typically means "align, line up, arrange", a sense not used in ancient times, when the standard meaning was instead "to push, push aside, repel, dispel". These two clauses are typically interpreted as meaning that the needle should be shaken or rocked from side to side in order to enlarge the needlehole and thus provide a way for qi to escape or drain from the body; the needle is then removed; "yang" is considered to

refer to a "yang evil", or the outer superficial region of the flesh and skin, or the qi of the body in that region, the body's surface or external yang qi, which has to be "pushed aside", dispelled, to allow deeper qi to escape. Sun Dingyi alternatively contends that yang is a substitute for that character with the "hand" instead of the "mound" radical, yang2 "to raise, lift up, spread", and that, combined with the preceding pai2, means "to turn the needle" (that isn't a standard meaning of that combination of characters); that is, a turning or twisting rather than rocking or shaking action is indicated.

This is called internal warmth: Wen1 "warm, warmth" here is generally agreed to be a substitute for that character with the "water" radical replaced by the "grass" and "silk" radicals, yun4 "to hold, contain; accumulate, gather"; that equivalence is a standard one. The sentence is taken by most sources to mean that if the skin is "pressed" at some point in the needling procedure, then qi and blood are kept inside, not allowed to drain, scatter or release to the outside; opinions differ as to whether this is the wrong thing to do when draining, or the right thing to do when filling.

As though careless: Wang4 typically has a pejorative or negative meaning, "rash, reckless, careless, neglectful"; it can less negatively mean "random, casual", and all sources consider that's how it's intended here, indicating that the needling action is a loose, light and easy one, performed casually as if nothing was happening or was being done, not with the intensity and concentration implied by the "grasp the needle" indication in the draining procedure. The Jiayi version of the passage, and also a citation in Wang's Suwen annotations instead have that character with the "heart" instead of the "woman" radical, wang4, which has a similar range of meanings, "forgetful, careless, neglectful, casual"; whichever version of the character is preferred, the meaning isn't substantially changed.

Sometimes moving, sometimes pressing: Opinions differ on whether an4 "to press, push" refers to pushing the needle, or to pushing or pressing the skin with the fingers; instead of an4, Taisu and Wang have hui3 "to regret, repent", or also "to end, finish, stop", which forms a more obvious counterpart to xing2 "to go, move, travel", that is, "sometimes moving, sometimes stopping".

Depart like cutting a string: Jue2 "exhausted, finished; extreme, most", or also "to cut, sever"; xian2 means a string of a musical instrument; this is generally taken to mean that the removal of the needle should be sharp and sudden.

Make the left connect to the right: Generally taken to mean that the left and right hands should coordinate in the removal action, the right hand taking out the needle, the left hand immediately pressing the needlehole to close it, "shutting the outside gates", not allowing the introduced or "filled" qi to escape, so "qi in the middle is then full".

You must not leave blood: One interpetation of this is that if blood emerges when the needle is removed, it should be quickly wiped or cleaned away, not allowed to stay on the skin; some instead consider that the "blood staying" is an internal situation, blood clotting, bruising or stagnant blood.

The fingers correct/straight and the needle perpendicular: Zheng4 "proper, correct, straight', followed by zhi2 "straight, upright, vertical, direct". Given the ensuing "don't needle left or right", the latter appears to mean that the needle should be inserted straight in, perpendicularly. The intention of "the fingers correct/straight" is less clear, perhaps meaning that a technique using straightened fingers is indicated (modern Chinese practitioners can be seen using just such a technique, with the needle held between a

completely straightened thumb and index finger); or perhaps just "correctly, properly, in good order, controlled".

The spirit is on the autumn hairs: Hao2 means the fine hairs or fur on an animal's body; qiu1 hao2 "autumn hairs" is a standard metaphor for something very small and fine, referring to small fine hairs or furs just starting to grow, not having reached the full length of a winter coat. The typical reading of this is that the physician's thoughts have to be tightly focused on the fine subtleties of the situation, on the patient and his condition; that idea is obviously consistent with the ensuing "focus attention on the ill person" etc. "Focus" in that clause is shu3/zhu3 "to belong to, be of the type or category of; to join; to gather, assemble, accumulate" etc (seen just previously in the "join, link" sense in "make the left connect to the right"); in this instance it's interpreted in another of its standard senses, "to fix attention on, be absorbed with"; it's seen again in this sense a little later, in "the spirit focused without departing".

Needle without danger: Dai4 "danger, peril"; Shibue cites a Qing dynasty commentary to Lunyu that reads dai4 as "to doubt, suspect, be uncertain"; that reading, while not standard, is plausible, and parallels the text towards the end of the previous paragraph, "properly perform without question"; the practical implications of the "danger" and "doubt" readings are in any case much the same.

When [you've] just needled: Although I haven't seen it directly commented on, the first character in this clause, fang1 "square, direction; art, skill; prescription" etc, appears to be read in another of its standard senses, "when, just when"; more loosely, this could be read as simply "when/whenever needling".

On the hanging yang and at the two guards: See the discussion of this at the end of this set of notes.

The blood channels are located transverse to the transporters: The standard basic reading of this, as expressed by Yang, is that it refers to fine luo or network channels branching off perpendicularly from the main channels. Zhicong corroborates this idea by pointing to the following passage in Lingshu 75, which involves the same idea of a "transverse" or "horizontal" channel: "[If] one main channel [is] full above [and] empty below and not connecting, this must be [that] there is a flourishing transverse network (luo) [channel] attached to the great channel, causing it not to connect; inspect and drain it; this is what's called 'untying knots'"; that is, a network/luo channel branching off a main channel can act as a diversion, with the flow of the main channel going into the network channel, so that the main channel itself from that point becomes deficient, empty; when this happens, the network channel should be drained, in order to return the flow to the main channel. One modern text contends that this sentence is a later addition, a comment on or explanation of the statement "look closely at the blood channels, needle without danger" just a little earlier in this paragraph.

What's meant by full and empty [is] either there is, or there's not: This is the beginning of a progression of six regularly-patterned four-character clauses; the second and fourth characters in all six clauses are opposites, viz: full and empty, having and not, after and before, retained and lost, empty and full, getting and losing. In my view (which most but not all agree with) the six clauses are in three connected or related pairs, with the second clause of each pair relating to, commenting on, or clarifying the first. In each of the second clauses, the first and third characters are ruo4, the second and fourth are the opposites

just listed, having and not etc; ruo4 has a number of meanings; it can be a pronoun, "you, your", it can mean "to follow, agree, accord with", it can indicate comparison or similarity, "is like, seems like, as if", and it can serve as a conjunction in various ways, "and, with, either .. or, then, if"; it's debateable what it means in this situation, but almost all sources prefer to see it in most or all instances as an indicator of similarity, likeness, or seeming, "as if, like, seems to be", rather than a conjunction or delineator between factors or elements. I'm of the opposite view, that ruo4 here acts as a differentiator or divider between two different qualities or conditions, "either ... or", or alternatively as a simple conjunction or particle with no inherent meaning or purpose other than to separate the opposite qualities; as I see it, the purpose of the entire sequence, then, is to clarify some of the key concepts or elements of the theory of filling and emptying.

The first sentence states or defines what's meant by "full" (shi2 "full, solid, true, real") and "empty" (xu1 "empty, void"), which is that fullness involves there "being" something (you3 "to be, exist; to have"), while emptiness is a state of there "not" being something (wu2 "not, without, nothing").

The second sentence states that if you examine before and after, which I take to mean the condition or situation before and after applying filling or emptying needling, you should see that something has either been "retained" (when filling; cun2 "to store, keep, retain, preserve, protect") or "lost" (when emptying; wang2 "to lose, be destroyed, die"). Xian1 "before, earlier, previous, first" and hou4 "after, later, behind" are stated in "reverse" order here, "after [and] before"; this reversal of the English idiom is common, as seen previously for example in "set their end [and] beginning.

The third sentence again involves shi2 "full" and xu1 "empty", this time with the verb wei2 "to be, to do" placed before each; I think the reason for the duplication of these two in the list, and the addition of a verb to each in this second instance, is because the subject or point of interest in this final sentence isn't the state or condition of being full or empty as it was in the first, but instead the action of doing or performing filling or emptying needling; which is why I've translated wei2 as 'to do" rather than "to be" (precisely the same issue regarding this character that was discussed in relation to "[for] going do counterflow, [for] coming do withflow" in the previous paragraph). So the third and final sentence states that "doing filling" involves "getting" something (de2 "to get, attain, gain"), while "doing emptying" involves "losing" something (shi1 "to lose, miss, fail; error, mistake", not wang2 as in the previous sentence). So, viewed this way, this is a fairly simple set of statements, albeit put somewhat poetically or stylistically, on the nature of full and empty and filling and emptying.

Lingshu 3 mostly agrees with this viewpoint. Suwen 54 instead views the text as six separate statements, not three sets of paired clauses: "'Full and empty' [means] the amount of cold [or] warm qi". 'As if without, as if having' [means] the illness can't be sensed. 'Examine after and before' [means] sensing the before [and] after [of] the illness. 'Doing emptying and filling' [means] the worker doesn't err [in] his method. 'Sometimes getting, sometimes losing' [means] departing from his method." (There are only five clauses in this; the fourth of the original, "as if retained, as if lost", isn't present; "sensed" is zhi1 "to know, realise".)

For the first sentence, "what's meant by full and empty [is] either there is, or there's not", modern sources typically adopt an idea similar to that of Suwen 54, that some sort of vague difficult-to-define condition, simultaneously having elements or aspects of having/being and not having/being is involved. For the second, "examine after and before,

either retained or lost", they commonly refer to two ideas, determining the sequence of treatment according to the acuteness of the condition, and using the sequence of the arrival of qi and blood to determine whether the needle is retained in treatment, and for how long. For the third, "doing emptying [or] doing filling, either getting or losing", they adopt various combinations of the ideas that a capable physican knows how to properly apply filling and draining, and achieves the desired result as and when it's needed, whereas a poor physican acts rashly and in error, or only sometimes succeeds, sometimes fails; and that the patient feels, or should feel, that something is somehow being gained or added in filling treatment, and that something is being lost or taken away in draining treatment.

On the hanging yang and at the two guards: It's generally agreed that, broadly speaking, this and the ensuing clauses mean that the physician has to pay close attention to the patient to determine whether needling has succeeded, whether the illness has been successfully removed or defeated; however, there's a wide disparity of opinion on precisely what's meant by "hanging yang" and "the two guards".

Yang2 in "hanging yang" is that of yinyang. The preceding character is xuan2, which principally means "to hang, suspend, dangle", or also "towering, precipitious; alone, independent; empty, deficient; to lift, raise". Liang3 means "two, double". Wei4 "to guard, defend" is the character used in Neijing to refer to the "defensive" or wei qi of the yang or outer regions of the body; nstead of wei4, the equivalent passage in both Jiayi and Taisu has a graphically similar character, heng2, whose original meaning is "yoke", the wooden board used to strap cattle together in a team, or by extension "transverse, horizontal", and various specific instances of things in that form, such as boards, signs or railings on a building etc; it can also mean "contrary, rebellious, perverse". Neither "hanging yang" or "two defences", or the alternative "two yokes", is a standard term; in both cases, this is the only instance in Neijing.

There are five different interpretations of "hanging yang" that I know of:

(1) The nose: Yang says it means "the nose", which "hangs" or is "suspended" below the "yokes", meaning the eyebrows, or the area above and/or below them (which is a standard meaning of the Jiayi/Taisu variant character heng2); that region, likened to the "mingtang" or "bright hall" (see the discussion of this at the end of Lingshu 37), should be examined before needling, to establish the prognosis for treatment. While there is justification or corroboration for the association between the nose and the Mingtang, there's no such known association with "hanging yang", and Yang doesn't provide any evidence for such. This reading isn't widely adopted, but it is endorsed in one of the modern Neijing dictionaries.

(2) The eyes, or the region around the eyes and/or eyebrows: One modern edition of Neijing says that the "hanging yang" means the sun and moon, which are here used as a metaphor for the eyes. Liu Hengru, editor of a well-known mid-20th century edition of Lingshu (Lingshujing Jiaokanben 1964), says that "the eyes are the 'hanging yang'", corroborating this with a passage from Hanshu describing a person having "eyes like suspended (xuan2) pearls, teeth like a string of shells". A couple of other modern sources endorse the general idea of the eyes or the area of the eyes, or specifically the region between the nose and the eyebrows, without providing any explanation or justification,

perhaps on the basis of or through association with the "region of the eyebrows" reading of heng2 referred to in the Taisu passage above.

(3) The heart: The principal source for this idea is Zhicong, who justifies it only by saying that the heart stores the spirit, which has to focus on the illness in order to judge whether it has been eliminated or still remains.

(4) Raise the spirit/yang qi: "Lift, raise up" is a possible meaning of xuan (although all the instances of this meaning I've seen cited are from a quite late date); regardless, Ma and Jiebin both base their readings on this. Jiebin says that "yang" means "spirit", and "raising/lifting the spirit" is one of the key points to achieve whenever needling.

(5) The yang network or luo channels: Huang Yuanyu (Qing 18th century) says that "'hanging yang' [means] the outer 'floating' yang network (luo) [channels]", that is, the small or fine channels "floating" or "suspended" superficially, in the outer or yang region of the body, on the skin surface; no modern source endorses this view.

Interpretations of the "two guards/defences" fall into two broad types, basically depending on whether the original Lingshu character wei4 or the Jiayi/Taisu variant heng2 "yoke" is accepted. Firstly, wei4 is interpreted in the most obvious sense in a Neijing context, as the wei or defensive qi of the body; Ma for example says that the "two defences" are the wei qi of both the practitioner and patient, both of which need to be "raised" or "lifted" (xuan2; see above). Jiebin takes the "two guards" to be two levels of wei or yang qi in the body, an external one corresponding to the typical or usual concept of wei qi, and an internal one protecting the zangfu and under the direction of the pancreas-spleen. Zhicong likewise refers to the idea of wei qi circulating in the outer or yang regions of the body during of the day, then going into the yin or inner region of the body at night, as outlined in Lingshu 76, those two regions of wei qi circulation being the "two guards/wei". (Note also that the Lingshu 49 system of facial divination terms has a "defensive, guarding" image associated with the region of the eyes, "the gate tower [is] the space between the eyebrows", which could arguably be related to the present image; see the "mingtang" discussion at the end of Lingshu 37.)

For the most part, these interpretations based on wei4 as in the Lingshu text are rejected in favour of the Jiayi/Taisu variant heng2 in Jiayi and Taisu, which is almost universally interpreted in the sense already mentioned, the eyebrows, or the region above or below them (a standard meaning of the character, as attested by various examples from early texts cited by a number of sources). The idea is, then, that the region of the eyes has to be scrutinised carefully by the practitioner; Yang proposes this has to be done before needling in order to gauge the likely outcome of treatment; the more common reading in modern texts is that it has to be done during the course of treatment, while the needles are inserted, in order to determine (in some unspecified way) whether and when needling has or hasn't taken effect and dispelled or removed the illness.

The nine needles' names [are] all different shapes. The first is called the sharp point needle, length 1 cun 6 fen; the second is called the round needle, length 1 cun 6 fen; the third is called the arrow tip needle, length three and a half cun; the fourth is called the sharp sided needle, length 1 cun 6 fen; the fifth is called the sword needle, length 4 cun, width 2 and a half fen; the sixth is called the round sharp needle, length 1 cun 6 fen; the seventh is called the long hair needle, length 3 cun 6 fen; the eighth is called the long needle, length 7 cun; the ninth is called the big needle, length 4 cun.

These are the nine types or shapes of needles referred to in the chapter title, and extolled a little earlier in the text as the "most marvellous" way of regulating or correcting conditions of excess and deficiency in the body.

This paragraph gives only the needles' names and their lengths, followed in the next paragraph by a description of their shapes, and what they're used for in clinical practice. Lingshu 78 "Nine Needles Treatise" gives the same types of information for each of the nine (name, length, description, use). The names used in the two chapters are precisely the same, as are the measurements, with one exception; Lingshu 78 has 1 cun 6 fen as the length of the seventh needle, instead of the 3 cun 6 fen given here; most sources note the discrepancy without making any further comment; Tamba and Shibue both say that 1 cun is correct, presumably on the basis that the Jiayi version of the text has that; my opinion is the opposite, that 3 cun is correct, for reasons discussed at the end of the next paragraph. Only one needle, the fifth, has a width as well as a length measurement (likewise in Lingshu 78).

There's little or no question about the translation of the names of the last two needles, the long needle (chang2 "long") and the big needle (da4 "big, great"); there is, however, some question as to what the name "big" might refer to, as discussed in the notes to the next paragraph. The character used for the second needle, yuan2, more typically has the "surround" radical added to it for the meaning "round", but the use of the radical-less character for that meaning is normal in ancient texts, as well as which the description of the needle clearly points to that meaning; there's no suggestion of any other meaning in any source. The radical-less version of yuan2 is also the first in the only two-character name in the set, the round-sharp needle, in which the second character is li4 "profit, benefit; sharp", one of five different characters in the set that can either mean "sharp" or some form of sharp implement or weapon. The seventh needle uses the character hao2 which means "hair" (as in "autumn hairs" above). The remaining names, of the first, third, fourth and fifth needles (chan2, di1, feng1, pi1), are all more problematic and open to different interpretations; all four mean "sharp" or a sharp instrument or weapon; only one (feng1) is a common character; I'll discuss those characters and the translations I've used for them in the following paragraph.

The first sentence could be rendered more loosely as, for example "the nine needles all have different names and different shapes"; I've used a more literal rendition, "the nine needles' names [are] all different shapes", on the presumption that what might be considered the awkwardness of the sentence is deliberate, and points out that the names <u>are</u> the shapes; that is, the needles are named after their shapes, not for example their function, or any other factor or association; the only possible exception to this rule is the ninth needle, as discussed in the next paragraph.

A cun4 is a length measurement, roughly equivalent to an inch; according to Endymion Wilkinson's "Chinese History: A Manual", at the presumed time of writing of Neijing, in the Qin-Han dynasties, a cun measured 2.31 cm, compared to the 2.54 of the modern English inch. In much of Neijing, and all subsequent medical and especially acumoxa literature, the cun isn't an absolute measurement of this kind; instead, it's a body-relative measure; for example, the length of the forearm from the elbow to the wrist is twelve cun, regardless of the absolute size of the person or the limb. However, the absolute rather than relative concept is clearly involved in relation to these needle sizes.

The sharp point needle has a big head and a sharp tip to remove and drain yang qi. The round needle, the needle is like an egg shape to rub the dividing spaces without getting to harm the muscles and flesh in order to drain dividing/division qi. The arrow tip needle is sharp like the sharpness of millet - it governs pressing the channel without sinking in in order to reach its qi. The sharp sided needle has a three-edged blade in order to release long-standing illness. The sword needle has a tip as sharp as a sword in order to get much pus. The round sharp needle is as big as a tail hair, both round and sharp, the middle of the body is slightly big, it's used to treat violent qi. The long hair needle is as sharp as a mosquito's mouth, it quietly and slowly goes forward/advances, it's fine in order to stay a long time and to nourish, in order to treat painful bi. The long needle is very sharp with a slight body; it can be used to treat distant bi. The big needle is as sharp as a bamboo sliver, its point is slightly round in order to drain water of the joints. The nine needles end there.

1. *The character used for the first needle is chan2, which the 1st century AD dictionary Shuowen defines as simply "sharp"; the modern dictionary Dacidian suggests more specifically sharp-pointed, and cites instances of its use to mean "to needle" in ancient texts, and in later times to mean a pointed instrument or awl; but it also (again in later times) referred to instruments with a sharp edge rather than point, such as a chisel; or also an earth-digging tool, apparently a hoe or shovel of some kind. Although this isn't given elsewhere as an intrinsic meaning of the character, some texts (eg Tamba) say that this needle is what later came to be called the "arrowhead needle", and that translation is used in some modern sources (more on this issue below). Both this chapter and Lingshu 78 say that this needle has "a large head [and] a sharp tip" ("head" apparently meaning the section near the tip, not the "body" or shaft), and Lingshu 78 also says more specifically that "a half cun from the tip it abruptly [becomes] sharp". On the basis of this description, and some of the definitions cited, I've used the translation "sharp-point" for this name.*

The function indicated here for this needle is "removing [and] draining yang qi". Not inconsistently with this, Lingshu 78 says that it "governs heat in the head [and] body", and says that the abruptly sharp point of the needle contributes to this function, since it means it "can't get to enter deep, so yang qi emerges"; that is, the shortness of the point means it can only penetrate the superficial regions where yang qi resides, it can't reach the yin regions and drain yin qi.

Illustrations of the nine needles in acumoxa works through history fall into two broad styles, as shown by the reproductions in Zhongguo Zhenjiu Shi Tujian "An Illustrated Manual of the History of Chinese Acumoxa" (editor Huang Longxiang 2003), where the earliest representatives of each are in Zhenjing Zhaiying Ji (author Du Sijing Yuan 13th century) and Gujin Yitong (author Xu Chunpu Ming 16th century). The Zhaiying version of this first needle is a somewhat peculiar flat broad spatula shape (a little like a short hurley stick with an almost uniform width throughout) with what appears to be a slightly convexly curved blade at the still-broad tip. It's difficult to see how this fits the description of the head of the needle narrowing abruptly to a point. This interpretation is presumably influenced by the "chisel, digging tool" meanings of this character, which Dacidian's entries suggest are anachronistic. The Gujin version has a short thick shaft ending in a classic triangular arrowhead, with what appear to be bevelled knife-edges on the two leading sides, showing clearly why the name "arrowhead" is often applied to this needle,

despite that not being an intrinsic meaning of chan2. This does satisfy the description of the needle coming to a tip, and the flared arrowhead shape is presumably based on the "large head" indication. I can't see anything in this shape that suggests the needle will enter the skin only a little way and then stop, as Lingshu 78 says it does; an arrowhead shape is of course designed to do precisely the opposite, to enter as fully as possible into the body and inflict considerable harm, which is exactly what the Gujin design gives the impression it would do.

As Huang Longxiang comments in the preface to these illustrations, this needle is one of the bases for the modern plum-blossom needle, and, leaving aside the multiple-needle aspect of the plum-blossom, that sort of design or idea seems considerably more appropriate than either of the illustrations just discussed, having a short sharp tip with a thick block or shaft behind it that absolutely limits the needle's penetration to a very shallow level. Such a thing can actually be seen on some modern plum-blossom needles, the instrument consisting of a short stout cylinder mounted transversely on the end of a thin handle, with one end of the cylindrical block cut to a flat circular surface that has a number of short needles mounted in it (the plum-blossom end), while the other end of the block instead tapers abruptly in a cone shape to a single point that has a single short needle mounted in it (the sharp-point end).

2. The round needle: Lingshu 78 adds to the description given here that this needle has a "tubular body and round tip" with "an egg's sharpness"; the general conclusion from these indications is that this needle isn't designed to penetrate the flesh at all, but to apply a massaging pressure to the surface of the skin; most sources consider that the name refers to the blunt or rounded tip, which I think is clearly correct, although one translation appears to have the shape of the body in mind instead, "tubular".

The Zhaiying illustration of this needle shows something like a heavy sewing needle or a cylindrical toothpick shape, moving fairly abruptly to about half its original diameter about a quarter of the way from the tip, then tapering to a point, with no apparent bluntness or roundedness. The Gujin illustration has a quite thick shaft (apparently about half the size of a pencil), halfway along its length decreasing immediately to about half that width, and maintaining that diameter to the tip, which is rounded into a blunt hemisphere.

In "to rub the dividing spaces", the characters kai1 mo2 both mean "to rub, press", fen1 means "to divide, separate", jian1 means "a space, the space between"; the usual interpretation of this, which I think is clearly correct, is that it refers to a standard idea in Neijing, that there are gaps, spaces or crevices in the body (as seen physiologically, for example, in the way body tissues such as muscle as made up of discrete "bundles" or "packages" bound into a larger whole by membranes or connective tissues) and the body's qi flows through those spaces.

3. The arrowtip needle: Lingshu 78 says that this needle has "a large body and a round tip", and also refers to "the sharpness of millet", which indicates a rounded end like the previous needle, a smaller sharper one, but again designed not to penetrate the skin, "without sinking [in]" (although that could be taken to mean it penetrates the skin but only superficially, a sense in which the relevant character, xian4 "trap, pit, depression; to fall or sink into, get stuck in", appears to be used in the next paragraph; it's also often

used in Neijing and Jiayi to describe the slight hollow or depression in which acupoints are typically located). Lingshu 78 also says that the purpose of the pressing action on the channel is "to make evil qi alone emerge". The increased sharpness of the point, the direct action on the channels, and the effect on evil qi, suggests to me that this needle is designed to be used after the fashion of a standard or classic acupuncture needle, applied to specific points to access and affect the "mechanism", the flow of qi and blood in the channels, but without breaking the skin as a standard needle does. That is, it has a true acupressure function rather than the broader or non-specific massage action of the previous needle, the round needle.

The characters an4 mai4 "press the channel" can be used in the sense "take the pulse" (they're seen that way, for example, in Suwen 5), and one source records an opinion that that's what's meant here, that there's some special relationship or related function between this needle and the pulse. I don't have any further information on this topic; it doesn't prima facie appear at all likely.

For the character used for the name of the needle, Dacidian gives the pronunciation di1, and says it's used as an equivalent for di2 "arrowhead"; this pronunciation and meaning is endorsed by, for example, Tamba (who also gives shi2 as an alternate pronunciation). How the roundness of the tip tallies with this name is unclear; one possible factor is that arrowheads of the time commonly weren't of the flared triangular variety referred to earlier; rather, the arrow consisted of a round shaft that simply tapered down to a point like a brush; that's the interpretation I've adopted, using the translation "arrowtip" rather than "arrowhead" in an attempt to convey some element of that idea (although this would appear to be an entirely artificial distinction; I don't have any evidence that there's any actual differentiation between these two English words in ordinary usage).

The character can also mean "a key", and that is used as the name in one English translation, although that meaning appears to come from a significantly later time, and its applicability to the needle shape is also dubious. Another translation calls this the "blunt" needle, which appears to be a paraphrasing or extrapolation from the description of its shape, rather than a translation of the character itself.

The characters shu3 su4 (used both here and in Lingshu 78) both mean some type of millet; "millet" is really a group of plants, not a single one, so generalising about it can be both difficult and misleading; however, some common types have seeds that are not as large as, and don't have the oval or elongated shape of grains such as wheat or rice; instead, they're small hard round balls about the size of a pinhead (only 1-2 mm or so), as often seen, for example, in birdseed mixtures.

The Zhaiying illustration of this needle is similar to that of the previous (the round needle), again showing a sewing needle or rounded toothpick sort of shape, thinner and marginally longer, and without the round needle's sudden change in size, instead simply tapering gradually to the tip, which again displays no apparent roundness or bluntness. Gujin's version is very like a modern filiform needle but a little thicker, with a notably thicker wound handle occupying a little under half its length, and an extremely small and very millet-grain-like round ball tip, only just larger than the main shaft.

4. The sharp-sided needle: The character feng1 is commonly used to mean simply "sharp"; Dacidian also defines it more specifically as "the pointed end or sharp section of a bladed weapon such as a knife or sword", or "a bladed weapon such as a knife or sword". In the

description "three-edged blade", ren4 means "the edge of a blade", yu2 means "an edge, side, aspect". On the basis of these definitions and description, I've used the translation "sharp-sided".

The Lingshu 78 description is quite different, saying (on two occasions) that it has "a tubular body [and] a sharp tip"; most commentators don't offer an opinion on the subject, but Jiebin says that the "round" description is incorrect; Yang instead amalgamates the two descriptions, saying "the sharp-sided needle [has] a tubular body, like the roundness of a [bamboo] tube; [and] a sharp tip, [meaning] the needle tip [is] sharp [on] three sides"; that is, a round shaft ending in a pyramidal point, which is not implausible.

The clinical application is "to release longstanding illness" (gu4 "long-standing or chronic illness, a longterm ailment that's difficult to cure"). Lingshu 78 says that it "drains heat [and] releases blood, and longstanding illness [is thereby] exhausted" (that is, removed, cured); and also that it "governs ulcers, heat, [and] releasing blood" (refer to Lingshu 81 regarding yong1 "ulcer, abscess" etc). The abscess and blood-releasing functions from Lingshu 78 suggest an element of lancing or puncturing that's consistent with the three-sided blade description in Lingshu 1.

The Zhaiying illustration of this needle is a longer version of the third or arrowtip needle, a sewing needle or rounded toothpick shape, tapering gradually and evenly to a sharp tip. The tip is lost in a blotch of black, but there's a line down the middle extending towards but not reaching the back end which is perhaps intended to represent the division between the two visible sides of the three-edged shape. Gujin shows a short dagger, with a handle occupying almost half its length, and a blade of even broadness curving fairly quickly to a point at the tip; it likewise has a line down the centre of the blade.

5. The sword needle: Dacidian defines pi1 as "a knife-life weapon with a double-edged blade", which is consistent with the indication that its tip is "as sharp as a sword"; that phrase, seen also in Lingshu 78, uses the standard character for "sword", jian4, combined with feng1 "sharp", the name used for the previous needle.

Lingshu 78 also says this needle is used to "get large [amounts of] pus", and adds that it "governs large purulent abscesses, two heats contending". Without going in to the question of what's meant by the last phrase, the involvement of abscesses, ulcers, carbuncles or the like, and also heat, is very like the previous needle, the sharp-sided needle; as is the releasing function implied by "pus", comparable to the releasing of blood by the sharp-sided needle. In both cases, the shape also involves an edged blade, rather than just a sharp tip. In other words, this and the sharp-sided needle are very similar in function, and in shape they're like two- and three-sided variants of the same design.

Suwen 54 has a passage that says: "The nine needles [are] the most marvellous, each has a suitable use"; in commenting on that, Wang goes through the nine needles, in the order of and using the same names as the current list, with the single exception of this needle, for which he uses a different character. That character is an obscure one, which does have some other meanings, such as "a small nail" (pronounced fei4), or "a leaf of a door" (fei1; both these pronunciations are consistent with the phonetic element of this character, fei1 "no, not"); but the earliest listings given for both those meanings in Dazidian, the 10th and 11th centuries, are later than Wang Bing's time; and for its use as the name of this needle, the presumption appears to be that it's simply a replacement character with the same

meaning and pronunciation (pi1) as the original character used in Lingshu. I haven't seen any explanation for why this substitution occurred.

The Zhaiying illustration is a little longer than the fourth needle, and thicker than the second, narrowing marginally from back to front, and ending in a sudden V-shaped sword point. A line down the middle of the front two-thirds or so of its length again presumably represents something about the "sword" shape. Gujin again shows a dagger, the handle and blade both slightly longer than the previous sharp-sided needle, curving evenly over the whole length of the blade, beginning with a very slight outward or widening curve for about the first half, then curving in to a sharp tip. In both texts, the needle is labelled with the Wang Bing variant character rather than the original Lingshu character.

6. The round-sharp needle:- The two characters used in the name, yuan2 li4, are discussed in the notes to the previous paragraph.

Mao2 means "the tail of a yak", and by extension any long hair, or strong and supple hair, for example horsehair. (The common synonym mao2 "body hair, fine hair" is the radical in this more complex character.) Shibue contends that the correct character here is actually li2, in which the "hair" element of mao2 is replaced by the phonetic element lai2; Shuowen defines this as "stiff hair that can be used to stuff and make clothing"; Shibue then says that mao2 and li2 became interchangeable in later times, but that it should be realised that the pronunciation of either character when used in this sense should be li2, not mao2.

The equivalent text in Lingshu 78 says the needle is as "sharp" as a tail hair, rather than da4 "big" using the graphically similar jian1 "sharp, point, tip"; the meaning is in any case basically unaffected.

Lingshu 78 also says, as here, that "the middle [of] the body [is] slightly big", but in another place says quite the opposite, that "its tip [is] slightly big, its body [is] instead small", and that this design means it "can be inserted deeply"; this seems not only contradictory, but illogical; most sources, including all the classical commentators, simply ignore this discrepancy, but Liu Hengru says that the two are clearly inconsistent, and notes that Jiayi separates the two descriptions with the words "one says", indicating that Huangfu Mi knew that these were two different views on the subject, and that he was recording or keeping both for reference; however, whether Huangfu Mi's addition of these words in his paraphrased conjunction of the two passages indicates he had some actual evidence that these were two separate and different opinions on the subject, or whether it simply shows that he saw the obvious inconsistency in the Lingshu text and wished to highlight it, is debateable. I personally think it's as or more likely that the "tip" and "body" positions in the second description have simply been reversed in error, and the text should say "the body slightly big, the tip instead small"; this makes the text both consistent with the other relevant passages and logical in itself.

Bao4 "sudden, violent" is used in Neijing to refer to things or conditions with either or both those characteristics, in either a physical or emotional context. There are only three instances where bao4 is followed by "qi" as here, one of the others being the equivalent Lingshu 78 passage (the third, in Suwen 5, compares "violent qi" to the nature of thunder; it doesn't appear to be relevant to the present discussion). One interpretation here is that "violent/sudden qi" simply means acute illness, illness that arises suddenly and has clear and strong symptoms. However, Lingshu 78 also relates this needle to conditions where "empty evil [resides as] guest in the main [and] network [channels] and becomes violent

bi"; the last character of this is bi4, typically defined as "painful obstruction", encompassing (but not limited to) conditions such as arthritis, rheumatism, osteomyalgia etc; there's another passage in Lingshu 7 that gives short descriptions of the use of the different needles, which says "illness, bi qi suddenly emerging, treat [it] using the round-sharp needle"; on this basis, many sources consider that this is the intended application for this needle, not "violent/sudden qi" but "sudden bi".

The Zhaiying illustration of this needle is like a thin undifferentiated length of wire, or a modern filiform needle, with only a small (say, half-pea size) ball or bead serving as handle or rear end; its length is between those of the third and fourth needles. Gujin's depiction is also like a modern needle, similar to its version of the third needle, but with a thinner shaft and a standard pointed tip.

7. The longhair needle: The character hao2 means "hair", generally said to be specifically long and slender or sharp hair (one source to the contrary says that it's short stiff hair, no other source adopts that idea). One English translation of this needle name is "filiform", meaning "having the form of a thread, threadlike", a term commonly applied to the modern standard acupuncture needle type; while this isn't a literal translation, the concept is quite similar and apt.

"Mosquito" is wen2 meng2, seen previously in "like a mosquito stopping"; "mouth" is hui4 meaning "mouth, snout, beak"; "sharp" is jian1 "sharp, point, tip", as seen in the Lingshu 78 description of the previous needle, the round-sharp.

I've taken the initial character of "quietly and slowly goes forward", jing4 "quiet, still, calm", to be a description of the action of the needle as it's being inserted, and the first character of the next clause, "[it's] fine" wei1 "fine, subtle, small", as a description of the needle itself; that is, the slender design of the needle makes it suitable for slow and gentle insertion, following which it can be left in the body a relatively long time without causing harm or discomfort, in order to nourish (yang3 "nourish, feed, nurture") the body's qi, in the manner of the filling procedure described in the "filling means following" section of above (the same section in which the "mosquito" image was previously seen). However, it's generally acknowledged that these two clauses, and the longer equivalent section in Lingshu 78, are problematic, and it's not entirely clear what they mean. Some sources for example take jing4 to mean the physician should wait quietly and calmly until the right moment arrives to insert the needle. One says that wei1 means "no, not" (a standard meaning, although this is a fairly common character in Neijing, and there don't appear to be any other instances in this sense), so the indication is precisely the opposite of the usual interpretation, that the needle should not be left in for any length of time. Another reading is that yang3 "nourish" means the patient must carefully rest and recuperate after the treatment is finished. Despite all these possibilities, I think, given its applicability to the design of the needle, and also the concordance with the previous instance of the "mosquito" image, that the idea of the slow insertion and long retention filling action is the most likely reading.

The indicated usage is "painful bi", as discussed in relation to the previous needle; Lingshu 78 says more specifically that "[it] governs cold [and] hot painful bi in the network (luo) [channels]", an indication that suggests "bi" here (and very possibly for the previous needle as well, and also the next) is not limited to the joints.

The "hair" image, the implied deep needling, and the use to treat bi conditions, are all the same as the previous, the round-sharp needle.

In relation to Huangdi's original statement in the introduction to this chapter that he "wishes to use fine needles", Tamba's opinion is that the "fine needle", or "small needle" as Qibo calls it in the ensuing paragraph, is spcifically this needle, the longhair needle; Wu Kun makes a similar comment, that this is the "small needle", the normal or archetypal form of the acupuncture needle, the type that is most commonly used: "The longhair needle is also called the 'small needle', its uses are particularly numerous, ... it's a necessity used every day."

The Zhaiying illustration is exactly like the previous needle, the round-sharp, but with the addition of a short handle extending onto the shaft in front of the end ball or bead. Gujin has a slightly longer and thicker version of the round-sharp needle.

8. The long needle: "Long" is the very common character chang2, meaning quite simply that.

"Sharp point" is the combination feng1 li4, the last of which is "sharp" as in the name of the "round-sharp" needle. Feng1 is what I translated as "sharp-sided" in the name of the fourth needle, but here I think its opposition to shen1 "body" indicates that it means the tip or point of the needle, which li4 then describes; that idea is corroborated by Lingshu 78, which says more unambiguously "its tip [is] sharp", using mo4 to refer to the "tip, end", and feng1 to describe its sharpness.

"Slight" is bo2 or bao2 "thin, slight, weak, light, flimsy"; the equivalent Lingshu 78 passage instead says simply that the body is "long", again using chang2, and some sources suggest that bo2 here is an error for that (on what basis I don't know, there's neither a phonetic or graphic similarity).

Yuan3 is another very common character, most often meaning "far, distant, a long way"; it can also mean "a long time, of long duration", and some sources say that's the correct interpretation here, that it's used to treat "longstanding bi", like the "longstanding illness" of the fourth or sharp-sided needle; however, given that the needle's most conspicuous characteristic is its extra length (seven cun, the only one above four cun); and that Lingshu 78 says specifically that "[it] governs treating deep evils [and] distant bi" (using shen1 "deep", followed by yuan3 again), the intended idea here is almost certainly "distant, far away", that is, distant from the body surface, deep inside the body.

The Zhaiying illustration of this needle is exactly the same as the sixth or round-sharp needle, but about a third as long again. The Gujin illustration is also like the sixth, but the shaft is almost twice as long, and considerably thicker, more like a toothpick than a strand of wire.

9. The big needle: "Joints" is a combination of the two characters ji1 "mechanism" and guan1 "pass, barrier"; these two were used as opposites in "the coarse guards the passes, the superior guards the mechanism" earlier in this chapter, but that's not at all the intention here; the two together mean simply "body joints", as clearly indicated by other passages in Neijing.

"Big" is the very basic character da4 "big, large, great". "Sharp" is jian1 "sharp, point, tip", as seen in the Lingshu 78 description of the sixth or round-sharp needle, and the "mosquito mouth" of the seventh, the longhair needle. "Point" is again feng1, as discussed in relation to the previous needle. "Slightly" is wei1 "small, fine, subtle", so this could be translated as

"its point [is] small [and] round", but the context suggests to me that the "slightly rounded" idea is much more likely.

The initial character used to describe the needle's sharpness is ting3, whose basic meaning is "straight, to straighten"; it's also used as an equivalent or substitute for a number of characters with the same phonetic element but radicals other than the "hand": with the "grass" radical, ting2 "the stem or stalk of a plant"; with the "bamboo" radical, ting2 "a small piece, strip or sliver of bamboo"; or with the "wood" radical, ting3, also meaning "the stem or stalk of a plant", or "a stick, cane, club".

One edition of Lingshu has the "wood" radical variant instead of the "hand", as does Taisu. Tamba endorses that character and the "stick, club" reading, as does his later compatriot Shibue. The idea of a stick or club is presumably seen as consistent with the name, the "big" needle.

Taisu has the "wood" radical character instead of the "hand" in the main text; Yang's commentary says that the intended character is the "bamboo" radical version, which he says means "small broken [pieces of] bamboo", a definition identical to and presumably taken from that in the 6th century dictionary Yupian, the "broken bamboo" involved probably being a referrence to the practice of breaking bamboo to create pieces or sticks to be used in divination, that is, in throwing the Yijing. One modern text cites a Tang dynasty (7th century) commentary to Houhanshu saying that the "hand" radical version can also refer to that practice. In support of the "bamboo" proposition, one source cites the use of this character in a medical context in a story from Hanshu dealing with the period of the Xin dynasty (9-23 AD), a short interregnum between the Western and Eastern Han dynasties, when the throne was usurped by an official named Wang Mang. After a rebel called Wangsun Qing is captured, Wang Mang has a team of imperial physicians, instrument makers and butchers cut him open (it's not clear whether he's already dead beforehand), then "measure the five zang, use bamboo slivers to guide along the channels, to know where [they] end [and] begin, to say [if/how they] could be used to treat illness"; in other words, bamboo slivers or strips (using the bamboo-radical version of the character in question, ting3) were used to pick out and perhaps mark the channels (presumably in this case meaning the blood vessels) inside the dissected body, like tweezers or drawing pins or a combination of both. Despite the involvement of "physicians", "zang", "channels", and "illness" in the situation, how applicable it is to a living person is clearly debateable. That is, the story is no real indicator at all that bamboo slivers of this type were used on or to penetrate the skin surface in anything like an acupuncture fashion, or even that they were potentially suitable for such an application. Despite that objection, I think the "bamboo slivers" idea is inherently plausible without such corroboration; the description of the needle is that it has a sharpness, but a slightly blunted or rounded one, and I think breaking bamboo, as in the divination process mentioned, is entirely likely to produce something of that kind, sharp, but less sharp than a honed metal edge or point.

If this is the case, what then does the name "big" refer to? Lingshu 78 says (on two occasions) that this needle is used "to treat big qi that can't pass through the joints"; the term "big/great qi" is used on a few occasions in Lingshu, with apparently different meanings; it's not clear what the intended meaning is here, but in any case the involvement of the term in relation to this needle is I think sufficient to justify the proposition that it's the basis of the name.

At the same time, I think the idea of a "sharp stick" is also plausible and consistent with the description of this needle, particularly if seen more in the sense of a relatively small stick or twig rather than a larger staff, cane or walking stick. This interpretation is also more in keeping with the principle I proposed in the previous paragraph, that the names of the needles are direct descriptions of their shape, as they indeed are for all the other eight. Despite this, I've preferred the "bamboo sliver" reading and the implied "big qi" name rationale here, for reasons discussed in the summary of the needles below.

From the description of the needle, with its "slightly rounded tip", and its use, to treat "big qi" or "water" in the region of the joints specifically (the only needle to be so limited to or focused on a particular part or region of the body), it's unclear whether it's meant to puncture the skin, or is only intended to apply external pressure, in the manner of the second and third, the round and arrowtip needles; and if it does pierce the skin, whether it's in a true acupuncture needling fashion, to access and affect the mechanism, or instead is some form of puncturing or lancing, in the manner of the fourth and fifth sharp-sided and sword needles. I haven't seen any comment on this issue, but my personal inclination is to the last of these options, as further discussed below.

The Zhaiying illustration of this needle is like the third, but just under twice as long, a thin sewing needle or rounded toothpick shape, tapering evenly to a sharp tip, with no evidence of roundness or bluntness. The Gujin illustration is like the fourth but a little longer, a short dagger with an almost half-length handle, a blade of even broadness with a line down its centre, curving fairly quickly to a point at the tip.

On its illustration, Zhaiying uses an entirely different name for this needle, fan2 "to heat, burn, roast", an apparent reference to a standard needling technique, heating the needle before inserting it into the body; that idea is confirmed by the alternate name it gives, cui4, which means to temper heated metal by quenching or plunging it in water to cool it; that character is also used to refer to heated needle treatment, I presume using the quenching of heated metal as a metaphor for the insertion of the heated needle into the coolness and moistness of the body's flesh (see Lingshu 6 for an instance of the character in Neijing). Gujin likewise uses huo3 "fire" as the primary name of the needle, and fan2 (as in Zhaiying) as an alternate name. I don't have any information on how this needle became identified with this form of treatment (perhaps due to the close graphic similarity of da4 "big" and huo3 "fire"); or whether in fact this is the same needle described in Lingshu, or a completely different one that has supplanted the "big" needle in these later works.

The needles can be divided into a few groups according to their use.

The second and third needles, the round and arrowtip, are designed for external massaging, without breaking or puncturing the surface. They are 1.6 and 3.5 cun long respectively.

The first needle, the sharp-point, is designed to break the skin only superficially; it's 1.6 cun long.

The fourth and fifth needles, the sharp-sided and sword, are designed for puncturing or lancing ulcers, to release pus and blood. They are 1.6 and 4 cun long respectively.

The sixth, seventh and eighth needles, the round-sharp, longhair and long, are all thin needles designed to be inserted in the standard or classic acupuncture or "small needle" fashion. They are 1.6, 3.6 (or 1.6) and 7 cun respectively.

The nature of the action of the ninth, the big needle, is unclear. It's 4 cun long.

So, the second through eighth needles form three groups, a massaging group (two needles), a puncturing group (two needles), and a standard needling group (three needles). Within each of those groups, the needles are of different lengths, and in each case are listed in increasing order of length, 1.6 and 3.5 in the massaging group, 1.6 and 4 in the puncturing group, and 1.6, 3.6 (or 1.6) and 7 in the standard group. I think this arrangement demonstrates that in the case of the disputed length, of the seventh or longhair needle, the correct measure is not 1.6 but 3.6, midway between the other two.

The remaining two needles are the first, the sharp-point, and the last, the big, 1.6 and 4 cun respectively; I think the grouping of the others suggests that these two also form a group, connected not directly in sequence, but as the "bookends" of the set. The further implication is that the big needle has the same action as the sharp-point needle; that is, that it's designed to superficially puncture the regions of the joints, to clear up edematous swellings, and perhaps directly release fluid; it's for this reason that I've preferred the "bamboo sliver" description of its sharpness to the "stick" option, as discussed earlier, since that image seems to me a more appropriate representation of the type of sharpness suitable for this sort of action.

So in all there are four groups of needles, for massaging, lancing, superficial puncturing, and standard needling; in each of these four there is a short and a long version. The short versions are in all four cases 1.6 cun; the long versions are all in the range of 3.5 to 4 cun (one 3.5, one 3.6, two 4). The standard needle group has an added member, an extra-long one, at 7 cun; this could be seen as indicative of the importance of this category, the "everyday necessity" that Wu Kun refers to; or simply, or also, because this is the only type of needling that requires a needle of such length, all the other categories are intrinsically limited to superficial use or unsuitable for very deep application.

Zhicong says that, in the same way that the "small needle" passage is given at the start of this chapter, and then a commentary is given on it in Lingshu 3, so too a rudimentary description of the nine needles is given here, followed by a more detailed account towards the end of the book, in Lingshu 78; I think quite the opposite is more likely, that the later chapter was written before the current section. As discussed in relation to the Yellow Bell earlier in this chapter, it's probable that the authors of the nine-focused chapters at the end of Lingshu, chapter 77 Nine Palaces [and] Eight Winds and chapter 78 Nine Needles Treatise, were closely involved in the creation of Lingshu as a compilation. My further speculation is that, in this first chapter, they collected a number of what were perceived as very early and important texts, notably the "small needle" section immediately following the introduction. But they also included this section on the nine needles, extracted from the already-written and more detailed chapter 78, to register or emphasise the presence of their theories in the work as a whole, and to reinforce the nine-based volume and chapter structure they gave to the book, providing an immediate or ostensible reason to have Qibo discuss "one to nine" in his introduction, and also to include the vital number nine in the title of the book's first chapter.

The orderliness of this set of instruments, as demonstrated in the preceding analysis, naturally prompts the question, to what degree are they really representative of the tools used by acupuncturists of that or any other time, and to what degree are they simply an abstract "number arts" construct? A significant consideration in this regard is that there's

little or no evidence for the use of some of them (the round needle, for example) elsewhere in Neijing.

The qi in the channels, evil qi is at the top, muddy qi is at the middle, clear qi is at the bottom. So, the needle sinks into the channel, then evil qi emerges. The needle middles/strikes the channel, then muddy qi emerges. Needle a great depth, then evil qi instead deepens, the illness increases. Therefore it's said: the skin, the flesh, the sinews and the channels all have their place, illnesses all have what is suitable; all the different shapes all take on what is suitable.

Evil qi is at the top: See the discussion of this at the end of this set of notes.

Evil qi instead deepens: Fan3 "to turn around, turn over; to the contrary, instead" could here be taken to mean either that the evil "instead" deepens, or that it physically "turns round, goes the other way", goes deeper into the body instead of being released to the exterior; there's no practical difference either way.

Illnesses all have what is suitable: As the final character, instead of yi2 "suitable, fit, right; should", Jiayi has she4 "to reside, lodge", giving "illnesses all have places [where they] lodge", which follows on more naturally or logically from the preceding "the skin, flesh, sinews [and] channels all have their place"; editions of Taisu have either the same character, or the graphically similar han2 "to hold, contain", which is generally considered an error. Jiayi and Taisu then both add a clause not present in Lingshu, "the needles all have what is suited [to them]", which in turn leads more directly and logically into "all the different shapes all take on what is suitable".

All the different shapes all take on what is suitable: Ren4 means to be appointed to or to accept or take on a position or post, to be charged with or in charge of certain duties or responsibilities; it could alternatively be translated as simply "to use, employ"; that is, each needle is appointed to the duties that are suitable to it, is used in the appropriate situations.

The standard reading of this paragraph is defined by the earliest commentary, Lingshu 3, which says it refers to three different types or classes of disorders or illnesses in three regions of the body. "Evil qi is at the top" means that external evils, particularly wind and heat, attack the upper half of the body (as seen at the start of Lingshu 4, "evil qi strikes a person high"). "Muddy qi is at the middle" means that evils formed from stagnant food and drink accumulate in the middle region of the body, in the stomach and intestines. "Clear qi is at the bottom" means that cold and damp evils invade or lodge in the lower region of the body (as also seen at the beginning of Lingshu 4, "the body half way and above, evil strikes it; the body half way and below, damp strikes it"; qing1 "clear" is taken to mean "cold", a standard meaning or equivalence). For "the needle sinks into the channel, then evil qi emerges", it takes the view that the combination xian4 "to sink down, depression" mai4 "channel" means the "sunken channels" on the surface of the body, or alternatively the "depressions [in] the channels", the acupoints; needling those, particularly in the head and upper body, can expel evils. For "the needle middles/strikes the channel, then muddy qi emerges", it takes zhong1 mai4 to mean "middle channel"; "needling the middle channel" then means needling the he/meeting transporter on the yangming channel, which later commentators state specifically means the foot yangming

stomach, Zusanli St36, an earth ("middle" in the five goes) transporter on an earth/middle channel. For "needle a great depth, then evil qi instead deepens", it says that needling a superficial illness too deeply will only push the illness deeper into the body and increase its severity; note that this reading, unlike the previous two, doesn't bear any relationship to its reading of the preceding parallel clause, that "clear qi is at the bottom" means "cold and damp strike the lower body". Broadly speaking, this interpretation of the passage is adopted by all sources, classical and modern, with only minor and insignificant variation or deviation.

My reading of the text is very different, as follows. In the internal structure of the channels, qi is in three layers, levels or strata. At the deepest level, meaning furthest from the skin or the exterior, is clear qi, the body's finest essence qi. At the middle or intermediate level is muddy qi, the coarser element of the body's proper qi. And at the top or most superficial level are any evils that have invaded the channels. That is, "evil qi is at the top, muddy qi is at the middle, clear qi is at the bottom". Consequently, if you "sink" a needle into the channel, that is, if you needle it superficially, shallowly, then you access the evil qi level or layer, and only evil qi is released or emerges to the exterior. If you needle to a middle level then muddy qi is released. If there is an evil in the channel and you needle deeply, it allows the evil to descend deeper into the channel, from the upper part into the muddy or clear proper qi levels, and thereby increases or worsens the illness. (The last is is the only point on which my interpretation agrees with the standard reading.) That is, "[if] the needle sinks [into] the channel then evil qi emerges, [if] the needle [goes to] the middle of the channel then muddy qi emerges, [if] the needle [goes to] a great depth then evil qi instead sinks down [and] the illness increases".

As I see it, this reading is the most obvious rendition of the actual text, it's logically consistent and plausible, and is consistent with the topic or setting stated in the introductory clause, "the qi in the channels" (which isn't really true of the standard interpretation); despite the utter lack of support or evidence for it in any other source whatsoever, I think it's clearly correct. The truly surprising aspect of the situation is that, even if this reading is dismissed as arrant nonsense, it's so plain, so evident as a possible interpretation, that it seems almost impossible that absolutely no mention whatsoever should be made of the idea anywhere at all in my reference sources, even if only to state that this possible interpretation is in fact wrong.

Not full, not empty, decreasing insufficiency and increasing having surplus; this is called intensifying illness; the illness increases severely. Treating the five channels, death; treating the three channels, weakness. Contending with yin, death; contending with yang, madness. The needle harms end here.

Not full, not empty: Jiayi, Taisu, Nanjing 81, and Wang's notes to Suwen 54 all duplicate shi2 "full" and xu1 "empty", giving "don't fill fullness, don't empty emptiness", which is clearly the intended idea, as shown by the ensuing "decreasing insufficiency and increasing having surplus".

Intensifying illness; the illness increases severely: "Intensifying" and "severely" here are both shen4 "deep, serious, severe".

Treating the five channels, death; treating the three channels, weakness: The five yin channels, and the six yang (three hand and three foot). The final character in this is a

relatively uncommon one, kuang1; the standard definition of it, as seen in Shuowen, is "fear, afraid, timid, cowardly". It occurs only five times in Neijing, in this passage and the related comment in Lingshu 3, in another passage in this chapter ("essence drains, then the illness increases severely and there's weakness") and a repetition of that passage in Lingshu 21, and in a passage in Suwen 28 unrelated to any of the Lingshu instances ("[when] the chi is empty, then the walking steps are weak"). In all these instances, most sources take the view that kuang1 refers to a condition of physical weakness or debility, not mental fearfulness or timidity; Wang's comment on the Suwen passage for example clarifies the character by adding bu4 zu2 "insufficient"; and Ma's comment to the current text specifically states that this is a "body" condition, "the ill person is weak (kuang1), and the body (xing2 ti3) has difficulty recovering". Major modern dictionaries all list this as a meaning (Dacidian, Dazidian, also Wang Li), citing only instances from Neijing. Not all sources agree; Unschuld-Tessenow for example adopts "walks timidly" for the Suwen instance. In my view, the non-standard "weakness" definition generally seems to better suit the context of the Neijing passages, but the standard "fearful, timid" meaning, the only definition for which there's independent evidence, is plausible in every instance, and can't be discounted.

Contending with yin, death, contending with yang, madness: "Contending" in both instances is duo2 "to take by force; to contend, vie, struggle with", as seen earlier in "[if you] meet and contend (duo2) with it, how [can you] not get emptiness?"; here it's typically taken to mean incorrectly draining the channels (which is in fact roughly the meaning in the previous instance just cited). Instead of "death", Jiayi has jue2, a common character in Neijing, and in Chinese medicine still, that refers to a condition in which qi departs violently from its proper place, course or balance, and counterflows or surges upwards, leading to disorders in the upper regions it's rushing into, and in the lower regions it's vacating, the most characteristic examples of which are cold and numbness of the limbs in the lower region, and mental disorientation, giddiness, fainting and stupor in the upper region; some sources adopt this; Tamba by contrast rejects it on the basis that the parallel Lingshu 3 text has "death", as here.

Needle, and qi doesn't arrive, don't ask the number; needle, and qi arrives, then remove it, don't needle again. The needles all have what is appropriate, all different shapes, all take on what they do. The essential of needling, qi arrives and it has effect. The signs of effectiveness are like the wind blowing the clouds, bright like seeing the blue sky. The way of needling ends here.

Needle, and qi doesn't arrive, don't ask the number: The last clause means that needling should be continued or repeated until the desired effect, "qi arriving", is achieved; by contrast, once qi does arrive, then the needle should be removed. "Qi arriving" is generally taken to be equivalent to the standard modern idea of "getting qi", experiencing a strong reaction or sensation around or travelling away from the needle; in modern practice the needle is often manipulated quite vigorously till this is achieved; to what degree this process can be identified with the Neijing idea of "qi arriving" is, to my mind, debatable. The physician should in some undefined way perceive that qi has arrived, "like the wind blowing the clouds, bright like seeing the blue sky".

The needles all have what is appropriate, all different shapes, all take on what they do: This is a slightly altered repetition of an earlier part of the chapter, the only major difference being that the previous text says that "illnesses" all have what is suitable/appropriate, this says "the needles"; some (eg Ma) consider that this repetition is meant to stress the importance of this concept, others take it to be a mistaken duplication.

Huangdi said: I wish to hear the places where the five zang and six fu emerge. Qibo said: Five zang, five transporters; five fives, twenty-five transporters. Six fu, six transporters; six sixes, thirty-six transporters. The main channels, twelve; the network channels, fifteen; altogether twenty-seven qis ascending and descending. Where they emerge is the well, where they flow is the stream, where they pour is the transporter, where they move is the throughpass, where they enter is the meeting. Where the twenty-seven qis move is all at the five transporters. The intersections of the joints, the three hundred and sixty-five meetings, those who know their essentials, one word and [it's] finished; not knowing their essentials, [there's] flowing and scattering without an end; what's meant by the joints is where spirit qi travels and moves, exits and enters, not the skin, the flesh, the sinews and bones.

The five zang and six fu: Neijing divides the body's internal organs into yin and yang types, termed zang and fu respectively. The original arrangement had five zang or yin organs, the heart, lungs, liver, kidneys, pancreas-spleen; and six fu or yang organs, the stomach, small intestine, large intestine, bladder, gall bladder, and an organ (or at least a conception of one) peculiar to Chinese medicine, the three burners (or three/triple heater). The total number, eleven, matched the original number of the main channels, as seen in both the Mawangdui texts that predate Neijing, and also in Lingshu 2. At some stage, the channels and the zang were augmented by the addition of a sixth, the "heart wrapper" xin1 bao1 (that is, the pericardium), or "heart master/governor/controller" xin1 zhu3 (xin1 bao1 is only used in Lingshu, 6 instances; xin1 zhu3 occurs in both Lingshu 24 instances, and Suwen 10 instances), giving six zang and six fu, six yin and six yang channels, a total of twelve, as seen for example in the detailed channel descriptions in Lingshu 10. Despite this addition, the practice of referring to the five zang and six fu persists right throughout Neijing, coexisting in some undefined way with the twelve channels, as seen in this paragraph itself, which, despite the "five by five and six by six" calculation given initially, says shortly afterwards that "the main channels [number] twelve". In later use, the two characters referring to these two classes of internal organs were clarified by the addition of the "flesh" radical to each; but in Neijing, the "no-radical" forms are used exclusively (with the possible exception of two instances of zang4 in Suwen 21); the first of these characters is normally pronounced cang2 (not zang4 as the "flesh" form) and means "to store, hide; a storehouse, warehouse, granary, repository"; the second has the same pronunciation as the "flesh" radical form fu3, and means "palace, mansion, great house, manor, residence".

The places where the five zang and six fu emerge: In English-language acumoxa terminology, acupoints are normally seen as "belonging to" or "being on" a particular channel; but in the early texts, the idea seen here, that the qi of the organ or channel "emerges" or "comes out" (chu1) at the acupoint, is a standard way of describing the association; Jiayi uses a character with a similar meaning, fa1 "to issue, send out, come out", in its typical formula for the description of the locations of acupoints, eg: "Tongtian (Bd7) ... is located

one cun five fen behind Chengguang (Bd6), [it is] foot taiyang (bladder) channel qi that emerges (fa1) [here]; the needle enters three fen [and] stays seven breaths, moxa three burns." The idea of each channel representing a particular type or character of qi is reflected in the present paragraph, in the statement that the twelve main and fifteen network channels represent "altogether twenty-seven qis".

Five fives ... six sixes: The numbers given here refer to a system discussed in more detail in the next chapter, in which what appear to be the earliest or among the earliest acupoints, designated points on the channels used for needling and moxa, are all located on the outer or lower limbs, in the region between the elbows and fingers or the knees and toes, or the "passes" as those regions are called earlier in this chapter, "the coarse guards the passes". Specific names are given to those locations a little later in this paragraph: "Where [each channel] emerges is the well, where [it] flows is the stream, where [it] pours is the transporter, where [it] goes is the throughpass, where [it] enters is the meeting"; those five names, and the descriptions or characterisations of the nature of the flow of the channel at each point, are precisely those used in the next chapter. In that chapter, those five are found on all eleven channels; the six yang channels have an added sixth acupoint, the "yuan" (typically meaning "original, source"; what meaning is intended in this context is unclear); hence the reckoning given here, that there are five zang and five associated yin channels, each of which has five transporters or acupoints, giving a total of twenty-five; and there are six fu and six associated yang channels, each of which has six transporters, giving a total of thirty-six.

The main channels, twelve; the network channels, fifteen: These numbers agree with Lingshu 10, which has Neijing's definitive description of the channel system; there is a network or luo channel corresponding to each of the twelve zangfu or main channels, plus one each for the front and back midline channels, du and ren, and a special "great network of pancreas-spleen".

Where they emerge is the well: See the note in the next chapter regarding this set of names.

The intersections of the joints: The character translated here (and again a little later) as "joints" jie2; its basic meaning is "a node or joint in a piece of bamboo; a fork in a branch"; this is extended to the body to mean "a joint", the point where two bones meet; possibly as an extension of the idea of the regularity of the joints in a piece of bamboo, and by corollary the intervening space between them, it also came to mean a regular period of time (such as the twenty-four "seasonal periods" of the year), or simply any period of time (see for example the Sunzi passage quoted earlier in relation to the crossbow, where it's translated as "timing", "moment"), or a regular festival or feast day (such as the New Year, the Mid-Autumn festival etc); again presumably as an extension of the idea of regularity, it also means "a standard, principle", or "to control, check, restrain, govern, regulate". See also the next note.

The three hundred and sixty-five meetings: As well as the obvious feature associated with the numbers 360 or 365, the days in a year, Neijing relates those numbers to hui4 "meetings", xue2 hui4 "hole meetings", xue2 "holes", qi4 xue2 "qi holes" (these all either explicitly indicate or are taken to mean "acupoints"), mai4 "channels", luo4 mai4 "network channels", luo4 "networks" (whose meanings are all explicit), xi1 gu3 "gullies and valleys" (opinions differ on whether these refer to the spaces in the flesh, the network channels, or the joints), and the character discussed in the previous note, jie2 "joints". The present passage offers an explicit clarification of the meaning of jie2: "What's meant by the

joints/jie2 is where spirit qi travels and moves, exits and enters, not the skin, the flesh, the sinews and bones." This definition of jie2 as something other than the "bones" leads to "the 365 jie2" commonly being defined as the body's acupoints, not joints. Of the handful of instances of the term in Neijing, there are some in which there's no significant indicator of the meaning of jie2, and some in which jie2 either clearly or probably means "joint"; the only passage that apparently indicates that jie2 in relation to 365 means something other than the joints is the present text. In fact, the direct association with 365 here appears to be with "meetings", not jie2; but more significantly, while the definition refers only to "joints/jie2", the fuller term used earlier in the text is "the intersection of the joints"; if in fact jie2 in the later clarification is intended as a shorthand for that same term (as Wang Bing's citation of the passage in Suwen 62 suggests that it is; see the next note) then the definition arguably becomes less exceptional, pointing out that the "meetings", the acupoints, which are places where "spirit qi travels and moves", fall in the subtle gaps or spaces between the skin flesh sinews and bones, the body's physical structures; the "intersections" between the joints are examples of those spaces or gaps. This is a complex and difficult question, but the simplified upshot of my examination of it is that I'm inclined to the view that "the 365 jie2" in all instances does mean what it seems to at face value, "the 365 joints".

Those who know their essentials ... scattering without an end: That is, if you understand the theories of the channels and the acupoints properly, you can address any difficulty quickly and decisively. This section of text isn't commented on in Lingshu 3, and isn't included in Wang Bing's citation in Suwen 62, which goes directly on from "the intersections of the joints, the three hundred and sixty-five meetings" to "[are] all where spirit qi travels and moves ..."; on this basis, these "know the essentials" statements are commonly thought to be a later addition.

Observe the colour, look at the eyes to know scattering or returning. Single[-mindedly focus on] the body, assess/listen to its movement and stillness, to know its evil and proper. The right governs pushing it, the left holds and defends it. Qi arrives, then depart. Whenever going to use the needle you must first examine the channels, look at the severe and easy of the qi, then you can treat. The qi of the five zang already cut off on the inside and you use the needle, instead filling the outside, this is called "double exhaustion"; double exhaustion must die; the death [will be] quiet. The treater has gone counter to the qi, treating the armpit and the chest. The qi of the five zang already cut off on the outside and you use the needle, instead filling the inside, this is called counterflow jue; counterflow jue, then there must be death; the death [will be] restless. The treater has gone contrary, treating the four ends. The harms of needling: strike and don't depart, then essence drains; harm the middle and depart then qi concentrates. Essence drains, then the illness increases severely and there's weakness; qi collects, then it gives birth to abscesses.

Lingshu 3 has comments on this paragraph down to "the qi of the five zang already cut off on the outside"; Lingshu 19 cites and comments on the opening sentences (down to "listen to the movement [and] stillness"); Lingshu 21 cites the entire final "needle harms" section, without comment, and with one significant variation in the text; Nanjing 12 comments on the middle "five zang cut off inside/outside" section.

Observe the colour, look at the eyes: Se4 "colour" commonly refers to the colour of the skin, the complexion; some adopt that reading in this instance, others (eg Lingshu 3) consider it refers specifically to the colour of or in the eyes, "the superior workman knows [how] to divine the five colours in the eyes ... in order to say what/where the illness [is]". Opinions also differ on whether this and the ensuing observations are carried out before needling, in establishing a diagnosis (the modern Chinese texts all adopt this view), or during treatment, to assess whether and when treatment has taken effect. Lingshu 19 omits mu4 "eyes"; that omission is generally considered an error.

To know scattering or returning: Some take the "scattering and returning" to be that of the illness being treated, others consider it refers to the body's own proper qi, or qi and blood.

Single[-mindedly focus on] the body: This literally says "one the body"; one reading of this is that it means the physician has to concentrate intently on the patient; "focus, concentrate, be single-minded" has been a standard meaning of yi1 since pre-Qin times, used in a number of idioms expressing that basic idea, eg "one heart one thought", meaning "wholehearted, focused, undistracted", etc. Alternative suggestions are that it means the physician has to establish whether there's a "unity, oneness, consistency" between the patient's different symptoms (a standard Neijing concept); or has to determine what the "one" actual or true condition of the patient's body is.

Assess/listen to its movement and stillness: Ting1 typically means "hear, listen to", or by extension of that "to heed, comply with, follow, obey"; but it can also mean "to examine carefully, to assess", which some consider is more likely in this context. Opinions also differ on whether "movement and stillness" refer to the patient's manner or actions generally, or to the pulse.

The right controls [and] pushes it, the left holds and defends it: Referring to the functions or actions of the hands on the needle. For the second clause, Taisu has "the left pushes it and defends [and] holds it", which isn't anywhere adopted, and appears to be an error.

The qi of the five zang already cut off on the inside: This is generally taken to mean a deficiency, emptiness or exhaustion of yin generally; conversely "qi of the five zang already cut off on the outside" means a general exhaustion of yang qi.

Double exhaustion: Chong2 "again, repeat", also zhong4 "heavy, serious".

The death [will be] quiet: The typical explanation of this and the later parallel clause "the death will be restless" is that, firstly, when yin is exhausted then yang has nothing to support it, and with yin and yang both exhausted there is no qi to promote movement; secondly, when yin is full and pent up internally then the patient is restless.

Treating the armpit and the chest ... the four tips/ends: Mo4 "tip, end, upper branches" etc apparently means the limbs, or particularly the distal extremities of the limbs, which form a yin/yang or inner/outer pairing with the more proximal "armpit and chest". The treatment implied in this set of indications is a rather counterintuitive one, that treating the ends of the channels closest to the thorax and zangfu (which would normally be considered more yin) increases yang, whereas treating the distal tips (which would normally be considered more yang) increases yin.

Strike and don't depart: "Strike" here is zhong "middle, centre; to hit, strike"; the same character is translated as "middle, centre" in the ensuing "harm the middle and depart". In that last instance, Lingshu 21 has bu4 "no, not, don't" instead of hai4 "harm, hurt, damage, injure", giving a more obvious logical counterpart to the original statement, "don't strike and depart, then qi concentrates" (zhi4 "to send, deliver; to summon,

gather"). That is, firstly, if you "strike" the illness but leave the needle in, then once the evil has drained or been eliminated, essence or proper qi begins to be eliminated, leading to weakness or debility (kuang1, discussed earlier in relation to "treating the three channels, weakness"); secondly, if you don't strike the evil but nevertheless remove the needle, then qi (perhaps specifically evil qi) is drawn to or collects at the point of needling and forms abscesses. Jiayi has "harm", as the present passage; Taisu has "not, don't", as Lingshu 21; all the modern sources prefer the more logical Lingshu 21 version.

Abscesses: Yong1 yang2; both characters mean some kind of relatively large purulent skin sore or swelling, a boil, carbuncle, furuncle, abscess, ulcer; the Lingshu 21 version of the passage instead of yang2 has ju1, meaning the same, giving the more common synonymous combination yong1 ju1 (see the discussion of this in Lingshu 81; there are 12 instances of yong1 ju1 in Neijing, 10 of those in Lingshu, five in Lingshu 81, including the title of that chapter; the only other instance of yong1 yang2 is in Suwen 12); Jiayi has only one version of the passage, which has yang2; Taisu has versions of both the Lingshu 1 and 21 passages, both of which have yang2.

The five zang have six fu, the six fu have twelve yuan. The twelve yuan emerge in the four passes; the four passes govern the five zang; when the five zang have illness you should treat the twelve yuan. The twelve yuan are where the five zang give the three hundred and sixty five joints qi and flavours; [when] the five zang have illness [it] corresponds [and] emerges at the twelve yuan. The twelve yuan all have where they emerge. Clearly know the yuan, observe their responses and know the harms of the five zang.

The six fu have twelve yuan: See the discussion at the end of this set of notes.

The four passes: See "the coarse guards the passes" earlier in the chapter.

Treat the twelve yuan: Note the principle involved in this, that acupoints on the yang channels should be used to treat illness of the yin organs, the zang.

Give the three hundred and sixty five joints qi and flavours: Refer to the earlier discussion of the "365 joints". Bing3 can mean either "to give, endow, provide, supply" or "to receive", so two entirely opposite interpretations are possible regarding the direction in which this flow or distribution goes, from the zang to the 365 joints, or from the joints to the zang; the former seems more logical in terms of Neijing theory generally, and makes more sense of the ensuing statement, "[when] the five zang have illness [it] corresponds [and] emerges at the twelve yuan"; that is, if nourishment flows out of the zang through the yuan to the joints, then if the zang are ill, it makes sense that the illness should likewise move out from the zang to the yuan. Ying1 "to respond, correspond" here, and again in "observe their responses" perhaps indicates that the yuan are used not only to treat illness, but also as diagnostic indicators or reflex points.

The twelve yuan: Yuan2 means "a spring, source; origin". The most common idea of what the name means in relation to a class of acupoints is that those acupoints have a direct or particular connection with "original qi", a term denoting the original stuff that the universe, or a person's body, was formed from or imbued with; yuan2 in that term is in fact a different character, but the equivalence between the two is quite plausible; however, the supposed association with yuan/original qi is decidely less so, given that the term "original qi" doesn't occur at all in Neijing (it is seen in other Han texts eg Chunqiu

Fanlu, Qianfulun). Huang Longxiang in Zhongguo Zhenjiu Xueshu Shi Dagang "An Outline History of Chinese Acumoxa" (2001) gives an extended argument for an alternative proposition, that in the earliest period of the use of acupoints there was only one acupoint on each channel, and that these were those acupoints, the yuan or "original" acupoints; in my view significant doubt is cast on that proposition by the fact that the yuan acupoints appear originally to have only been present on the yang channels, not the yin.

The title of this chapter is "the nine needles and the twelve yuan"; a modern acumoxaist seeing this would presume it refers to the twelve channels, each of which has a yuan acupoint on it. However the text here suggests that's not the case; it initially discusses the yuan of the yang channels only, "the six fu have twelve yuan" (there are six fu and six associated yang channels, each occurring on both left and right side of the body, hence "twelve"). It then contrarily lists the yuan acupoints of the yin channels only, plus an uncommon pair of midline yuan acupoints not related to the normal zangfu system; there are five yin channels, giving ten yuan bilaterally, those plus the extraordinary two giving yet another set of twelve that the chapter title could possibly refer to.

In the next chapter, the full list of the transporter acupoints is given; the yuan acupoints of the yang channels are included in the list, they are explicity and only identified or named as yuan, and they are over and above, entirely separate and additional to, the five transporters. The acupoints named in the present chapter as the yin channel yuan are in the same listing, but they're not identified as such; instead, they are all without exception the shu-transporters of those channels. The acupoint numbers involved in this arrangement are consistent with those given earlier in this chapter, five by five (that is, five yin channels with five transporter acupoints on each) and six by six (that is, six yang channels, with five transporter acupoints plus one yuan acupoint on each).

This situation presents a complex set of questions about why it is so. Why are the yin yuan given in this chapter and in a separate list, rather than an additional identifier simply being added to them in the list in the next chapter? Why is there a naming consistency in the yin channel yuan, or shu-transporters, (all including tai4/da4 "great") that's not present in the yang ones? Is the attribution of "yuan" to the yin channel shu-transporters an afterthought or later alteration, an imitation of the original set of yang channel yuan acupoints; or are they recorded here so that it's not forgotten that before their incorporation into the five transporters system they were yuan acupoints? Why does the text preceding the yin yuan listing apparently talk about using the yang yuan only? Why are the gao and huang given yuan along with the five zang? What "twelve yuan" does the chapter title refer to; is it the yuan of only the yang channels, or only the yin channels plus the gao and huang? I don't have any certain conclusions regarding this long list of uncertainties. However, I will note that I'm inclined to the view that the evidence is in favour of the yuan originally applying to the yang channels only, with the list of yin yuan in this chapter being a later addition. I reiterate also that one thing I don't consider uncertain is this: the yuan acupoints are not named because of some relationship they have to yuan or original qi, a term and concept that does not figure at all in Neijing.

In the absence of a clear indication of the intended meaning of yuan2 in this situation, I've simply transliterated it.

Lesser yin (shaoyin) within yang, the lungs; their yuan emerges at Dayuan (Taiyuan Lu9). Dayuan, two. Great yang (taiyang) within yang, the heart; its yuan emerges at Daling (Pc7);

Daling, two. Lesser yang (shaoyang) within yin, the liver; its yuan emerges at Taichong (Lr3); Taichong, two. Reaching yin (zhiyin) within yin, the pancreas-spleen; its yuan emerges at Taibai (Sp3); Taibai, two. Great yin (taiyin) within yin, the kidneys; their yuan emerges at Taixi (Kd3); Taixi, two. The yuan of the gao emerges at Jiuwei (Rn15); Jiuwei, one. The yuan of the huang emerges at Boyang (Qihai Rn6); Boyang, one. All these twelve yuan govern treating the five zang and six fu having illness. Swelling, treat the three yang; supper draining, treat the three yin.

Lesser yin: The naming system used for the zang here is not the same as that used for the channels, in which lung for example is the hand taiyin, not shaoyin. There are various explanations of this set of names; the most plausible is this: The second part of each name, "in/within yang/yin" refers to the physical location of the organ in the body; there are two "in yang" organs, the lungs and heart, both of which are located above the diaphragm, in the yang portion of the body; there are three "in yin" organs, the liver, pancreas-spleen and kidneys, all of which are located below the diaphragm, in the yin portion of the body. The first part of the name refers to the nature of the season associated with the zang in the five goes system; the lungs are lesser yin (shaoyin), because they correspond to autumn, which is a yin season, but not as yin as winter, great yin or taiyin, which corresponds to the kidneys; likewise, the liver (spring) is lesser yang, shaoyang, and the heart (summer) is great yang, taiyang. Pancreas-spleen is zhiyin, in which zhi4 means "to reach, arrive at", or by extension of the idea of arriving at a point, "end point, furthest point, extreme, ultimate"; the proposed meaning of this, which I think is correct, is that pancreas-spleen corresponds to late summer, at which point the year approaches the cold of autumn and winter, or "reaches/arrives at yin"; translations such as "extreme yin" or "ultimate yin" are seen for this, I believe they are incorrect.

Dayuan, two: Da4 "big, large" is here used instead of the character in the standard form of the name of this acupoint, tai4 "big, great", which is graphically almost identical, and essentially synonymous. All five zang channel acupoints in the list have da4 or tai4 as their first character. Each acupoint's entry ends with its name, followed by "two", meaning that these are bilateral, one each on the left and right hand sides of the body; by contrast, the yuan of the gao and huang have just "one", because they are on the front midline.

Daling: As in the next chapter, an acupoint on the pericardium channel, not the heart channel, is used for the heart.

The yuan of the gao emerges at Jiuwei: See the discussion below.

Swelling, treat the three yang: There's no obvious connection between the two clinical indications given here and the preceding or ensuing text. "Supper draining" is defined as watery diarrhea with whole undigested food or grains in it.

After the five zang yuan, two added or extraordinary yuan are given, for two things called "gao" and "huang". The standard definition of these terms derives from a story in the early historical chronicle Zuozhuan, from the 10th year of Duke Cheng (581 BC): "The duke (of Jin) fell ill and asked Qin to send a physician, and the duke of Qin sent the physician Huan to treat him. Before he arrived, the duke had a dream in which the illness appeared as two children. One of them said: 'He is a good doctor. I fear he will harm us. Where can we flee from him?' The other said: 'Take residence above the huang, below the gao, how can he reach us?' The physician arrived and said: 'The illness cannot be treated. It is above

the huang and below the gao, it can't be attacked, it can't be reached, medicines can't get there, it can't be treated.' The duke said: 'What a good doctor!' He lavished him with gifts and sent him home." From this the term "gaohuang" came to mean a place in the body beyond the reach of treatment, or a condition beyond remedy; the idiom "illness enters the gaohuang" is still used to mean untreatable illness, or in a non-medical sense, a hopeless, incurable or irredeemable situation of any kind.

Gao1 means "fatty meat, fat, grease"; huang1 has no meaning other than that represented in the Zuozhuan passage; its definition in Shuowen, for example, quotes that text. From the context of the Zuozhuan story, it's commonly concluded that the place referred to is the space above the diaphragm and below the heart. Gao1 is sometimes specifically said to mean the fat at the apex or bottom of the heart; another view is that it refers to the fatty membranes surrounding the organs generally. Huang1 is sometimes described as being some place or structure just above the diaphragm; the 3rd-4th century commentator Du Yu instead says that it means the diaphragm itself; the Shuowen definition compounds the uncertainty in the situation by defining it as "above the heart, below the diaphragm", an inherently illogical description that's the opposite of the common perception.

In a paper on this subject published in 1983, Li Ding contends, firstly, that gao1 is an error for the graphically similar ge2 "diaphragm" (contrasting with Du Yu's contention that huang1 meang "diaphragm"); the Taisu version of the present passage has ge2 instead of gao1, so too does Wang in a citation of this text in Suwen 39. And secondly, that huang1 refers to the membrane that covers the internal organs, the peritoneum, omentum or mesentery (again, contrasting with the fact that some sources offer this as a definition of gao1); this is what Suwen 43 for example purportedly refers to when it says that "wei qi ... goes along inside the skin, in the flesh dividing spaces, smokes into the huang membrane (huang1 mo2), scatters in the chest and abdomen". These proposed meanings are consistent with the locations of the two yuan acupoints given here; Jiuwei Rn15 is on the front midline, just below the junction of the sternum and xyphoid, close to the diaphragm; Boyang is given in Jiayi as an alternative name for Qihai Rn6, also on the front midline, 1.5 cun below the navel, directly above a section of the omentum. Li also contends that these anatomically direct and meaningful definitions are much more in keeping with the general nature of Neijing theory than the supposed "gaohuang" between the heart and diaphragm.

Now, when the five zang have illness, [it's] like a thorn, like a stain, like a knot, like a blockage. A thorn, though longstanding, can still be pulled out; a stain, though longstanding, can still be cleaned; a knot, though longstanding, can still be untied; a blockage, though longstanding, can still be broken through. If it's said that longstanding illness can't be treated, reject this saying. When those who are good at using the needle treat illness it's like pulling out a thorn, it's like washing a stain, it's like untying a knot, it's like breaking through a blockage. Though an illness is longstanding it can still be concluded. Those who say it cannot be cured have not gained/attained the art.

Can still be cleaned: Xue3 "snow" is here used to mean "cleanse, wash", a standard meaning.

Needling all heat [disorders is] as though using the hand to test hot water. Needling cold clear [disorders is] like a person not wanting to move/go. When yin has yang illness treat Xialing Sanli; go straight ahead, without danger; if qi goes down then stop, if it doesn't go down then return to the beginning. For illness high and internal treat Yinlingquan (Sp9); for illness high and external, treat Yanglingquan (Gb34).

Using the hand to test hot water: That is, when treating a hot or heat illness, needling should be shallow and quick, like someone quickly dipping a finger into a bowl of hot water to test its heat.

Needling cold clear [disorders]: Qing1 "clear" is typically taken to mean "cool, cold" (as seen earlier in "clear qi is at the bottom").

Like a person not wanting to move/go: Like someone reluctant to leave or travel; that is, when treating cold disorders use the opposite approach to that used for hot disorders, needle deeply and leave the needle in for a long time.

When yin has yang illness: "Yang illness" is typically taken to mean a hot or heat disorder; "yin" is generally not specifically defined, possibly the internal regions or organs, although if it's taken to mean the lower half of the body then it presents an exact opposite to "high", the upper body, in the next sentence.

Xialing Sanli: Xia4 ling2 "below the mound" is an early name for Zusanli St36; refer to the discussion of this in the next chapter.

Go straight ahead, without danger: Wang3 "to leave, go" is preceded by zheng4 "proper, correct, straight", seen earlier in the chapter in the sense of "perpendicular" ("the needle perpendicular"), here more likely meaning "direct, straightforward". In keeping with that idea, it's commonly thought that dai4 "danger, peril" is here used in the sense of a homonym meaning "idle, slack, sluggish" (a standard equivalence), that is, "don't be sluggish/slow".

If qi goes down: Xia4 "down, below, to descend" is used on a few occasions in Neijing to refer to an illness "subsiding, decreasing, improving, healing". If the illness doesn't "go down" then you should "return to the beginning", that is, repeat the needling procedure.

End of Lingshu 1

Lingshu 2: Root/basic transporters

There are two characters frequently used to refer to acupoints in Neijing. One of those is xue2 "hole, cave, den"; the rationale behind this name appears to be that the acupoint is seen as a hole, cave or tunnel leading down into the "underground rivers" of the body, the channels below the skin.

The second character is that used here, shu4. Graphically, there are three versions of it, with the "flesh" radical on the left-hand side, with the "vehicle" radical, and one that has only the phonetic or right-hand element of those two characters (which I refer to here as the "no-radical" variant, although it of course does contain its own radical). Of these, the "vehicle" version is a common character, meaning "to transport, to move something from one place to another", in which sense it's pronounced shu1; in Neijing, this character is used both in that sense, and also to mean "acupoint". The no-radical version is more commonly used in general Chinese as a surname, pronounced yu2, which is presumably

why some older sources give that for its pronunciation in the "acupoint" sense, which the more authorative sources say isn't correct (more on this below); in classical Chinese the no-radical version can also mean "to agree, to assent to something"; there is an opinion that it's used in an extension of this sense in one passage (in Suwen 4), but leaving that possible exception aside, this is a usage not seen in Neijing. Unlike the other two variants, the "flesh" radical version is only used to mean "acupoint"; it has no other or pre-existing meanings, or existence, its use originates in Neijing; (Dacidian does record its later use in another sense, meaning "ample, plentiful" in a 10th century Song dynasty text, an obscure and later usage that can safely be ignored in relation to this discussion.)

The 1st century AD dictionary Shuowen Jiezi says of the no-radical character that it means "to hollow out logs to make a boat", and that it is composed of three graphic elements; the top three strokes form an obsolete character meaning "to gather, assemble"; the bottom left element is zhou1 "boat" (simplified in the standard modern form to the same shape as yue4 "moon", which is also the shape of the radical form of rou4 "flesh"); and the two strokes at the bottom right are a simplified form of "water" (now typically altered to the radical form of dao1 "knife"); that is, the character is a representation of things being joined or assembled to form a boat, which is then floated on the water. Shuowen places the character in the "boat" category; in modern dictionaries it's instead listed under the top two strokes, the ren2 "person" radical, which is a purely graphic categorisation unrelated to its actual etymology.

Possibly due to this etymology, or from the root "move, transport" meaning of the "vehicle" radical variant (or perhaps some degree of both), it's commonly concluded that the basic idea underlying all three versions of the character is that of "transport", meaning that these characters refer to points on the body where the flow or "movement" of the channels, and the "transporting" of the qi and blood in the channels, can be accessed and affected; that idea, and that translation, "transporter" (as seen in some other English translations, such as Tessenow-Unschuld and Maciocia), are adopted here, and used indiscrimately for all three versions of the character.

While all three versions clearly have the same meaning in Neijing, they're by no means simply scattered randomly throughout the work. Lingshu has no instances of the no-radical version in the "acupoint" sense (there are 36 occurrences, but all as the second character of the name of Huangdi's interlocutor Shaoyu in chapters 46, 50, 53 and 63; there are no instances of either of the other two versions of shu4 in those chapters). Lingshu instead has about 60 instances of the "flesh" variant, and around 80 of the "vehicle" variant, of which about 60 are used in the "acupoint" sense (the remaining 20 or so are as a verb, "to move"). Suwen by contrast basically uses only the no-radical character, of which it has over 80 instances; there are 10 instances of the vehicle variant, but only one is in the "acupoint" sense; the flesh variant is not used at all.

In parallel with this, Lingshu has only 7 instances of xue2 "hole" (five of them in the combination qi4 xue2 "qi hole", a term also seen 8 times in Suwen, and one in the reverse, xue2 qi4 "hole qi"); while Suwen has 70 instances of xue2 (the great majority, 61, in chapters 58 Qi Holes Treatise and 59 Qi Palaces Treatise, both of which are principally composed of listings of acupoints).

Summarizing broadly, Lingshu has an even mix of the flesh and vehicle versions of shu4 "transporter" and doesn't use the no-radical version at all; it also uses xue2 "hole" hardly

at all. Suwen uses only the no-radical version of shu4, and has almost as many instances of xue2, although the latter are concentrated in just a couple of chapters.

There are other instances of Neijing using a "no-radical" version of a character that in later use adopted the "flesh" radical, notably for instance the two characters used to designate the yin and yang internal organs, zang4 fu3, which now always use the "flesh" radical, but in Neijing are always without that radical. By analogy with this sort of situation, it might be concluded from the use of shu4 in Neijing that Suwen represents the original or earlier usage, and Lingshu shows the later adoption of the "flesh" and "vehicle" radicals; however, an examination of other texts of the period shows the situation isn't so simple.

Of the other medical texts from the Han dynasty and the immediately ensuing period, firstly, Nanjing (probably c 1st century AD Eastern Han) has 19 instances of the no-radical version of shu4, and none of either the flesh or vehicle variants; it has only one instance of xue2 (in the combination qi4 xue2). Shanghanlun (early 3rd century AD Eastern Han), which, unlike Neijing, is not primarily an acumoxa text, has only eight instances of the no-radical character, and none of the other two forms; and four instances of xue2, all in the same paragraph. Its companion text, Jinkui Yaolue, has no instances of any of the forms of shu4, nor any of xue2. Maijing (c 280 AD Jin dynasty) has 20 instances of the no-radical form of shu4, 3 of the vehicle, none of the flesh; and 2 instances of xue2.

Jiayi (mid 3rd century AD Jin dynasty) presents a particularly interesting picture, since (other than a very small number of passages from Nanjing) it consists entirely of passages copied from Suwen and Lingshu, and a third text that has not survived independently, called Mingtang Kongxue Zhenjiu Zhiyao "The Bright Hall Holes Acumoxa Treatment Essentials", or Mingtang for short, thought to have been written perhaps a century or so after Neijing. Like Suwen, Jiayi shows a preponderance of the no-radical version, around 180 instances, almost twice the 90 or so in Suwen and Lingshu combined; as discussed below, over 50 of this increased number are changed from other versions in Neijing, the rest are presumably instances originating in Mingtang. Jiayi has 37 instances of the flesh form, and approximately 24 of the vehicle, in both cases significantly less than the Neijing count.

Comparing the equivalent passages in the two texts shows that in a significant number of instances the form of the character used in Jiayi is not the same as that in Neijing. Firstly, there are no instances of the no-radical in Neijing being altered to a different version in Jiayi. Secondly, there are 10 instances of the flesh being alike in both texts, around 22 instances of the flesh in Neijing being altered to the no-radical in Jiayi, no instances of it being changed to the vehicle. Thirdly, there are 13 instances of the vehicle being alike in both texts, 22 instances of it being altered to the flesh in Jiayi, and over 30 instances of it being altered to the no-radical. There are around 140 instances of xue2 in Jiayi, almost double the Neijing count; again, the difference presumably represents instances originating in Mingtang. (The discrepancies and approximations in these figures are due firstly to some unreliability in the electronic versions of my texts, Jiayi in particular, and the lack of time to check it thoroughly, and also to a significant number of relevant passages in Neijing not appearing in Jiayi.)

The upshot of these figures is that there are some clear trends in the use of shu4 in its different forms, and also xue2, in the texts following Neijing. Those trends are, firstly, a preference for the use of the no-radical form of shu4, with a corresponding reduction in the use of the flesh form, and the increasing restriction of the vehicle form to the verb "move, transport" usage; and secondly, an increase in the use of xue2. In all these

respects, Lingshu differs notably to the later texts, while Suwen on the contrary is in accord with them.

The medical texts from the 2nd century BC Mawangdui tombs have no instances of the flesh or no-radical forms of shu4 (there is one instance of the latter, but as the name yu2, not as "acupoint"), and the few instances of the vehicle form are all as the verb "to move", not as "acupoint". There are also no instances of xue2.

The interpolated qidalun "seven great treatises" or "stems and branches" chapters of Suwen also have no instances of any of the three forms of shu4, nor of xue2 (a reflection of the general absence of acumoxa as a topic in these chapters, in contrast to Suwen proper).

There are also instances in Neijing where "acupoint" is indicated by none of the characters discussed here, such as "the movement of the mechanism doesn't depart from the holes" in Lingshu 1, which uses kong1 "hollow, empty".

There are some differing opinions regarding the pronunciation of the different forms of shu4, particularly whether the vehicle form retains or alters its typical pronunciation shu1 when used in the "acupoint" sense; the dedicated dictionaries Neijing Cidian and Huangdi Neijing Cidian both indicate it does retain shu1 in that sense, as does Tessenow-Unschuld; the major general dictionaries Hanyu Dacidian and Dazidian (and also Wang Li) instead both say that all three versions of the character have the pronunciation shu4 when used in the "acupoint" sense; I don't have any informed basis on which to decide between these; the option I've arbitrarily adopted is the pronunciation of shu4 for all three forms.

The title of this chapter uses the "vehicle" form of shu4, as does the introductory sentence, "where the five transporters reside"; the other twenty instances in the chapter are all the "flesh" form.

Huangdi asked Qibo saying: The way of all needling [is that you] must understand where the twelve main and network channels end and begin; the places where the network channels separate, where the five transporters stay, what the six fu meet with, which of the four seasons emerge and enter, the places where the five zang flow, the measures of wide and fine, the condition of shallow and deep, where high and low reach to, I wish to hear this explained. Qibo said: Allow me to discuss it in order.

You must understand: Tong1 "to connect; to penetrate, thoroughly understand, master".

The measures of wide and fine: The final character in this is shu3/shu4 "number; art, skill" or shuo4 "frequent", which is here generally considered to be used in another of its standard pronunciations and senses, cu4 "fine, dense, tightly woven", contrasting with the preceding kuo4 "wide, broad, vast"; this clause is typically taken to refer to the different sizes of the channels, the large and relatively sparse warp or main channels, and the small and densely distributed network and grandchild channels; the ensuing clauses, "the condition of shallow and deep, where high and low reach to", are likewise considered to refer to the different locations and conditions of the channels.

The lungs emerge at Shaoshang (Lu11); Shaoshang [is] on the inner side of the big finger (*thumb*); [it] is the well, wood. [It] flows to Yuji (Lu10); Yuji [is on] the hand fish; [it] is the stream. [It] flows to Dayuan (Taiyuan Lu9); Dayuan [is] in the depression one cun behind the fish; [it] is the transporter. [It] flows to Jingqu (Lu8); Jingqu [is] in the middle of the cunkou, [it] moves and doesn't stop; [it] is the throughpass. [It] enters at Chize (Lu5); Chize [is on] the

moving channel in the middle of the elbow; [it] is the meeting. [This is] the hand taiyin (*great yin*) main channel.

On the inner side of the thumb: Modern anatomy describes positions on the arms and legs in terms of a standard posture; in the case of the arms that is with the arms hanging down near the side and the fingers pointing downward, and the palms facing forward so that the thumbs project to the outside; from that perspective, Shaoshang is on the anterior side of the thumb, near the corner of the root of the thumbnail. Traditional acumoxa texts likewise use a standard posture, but a different one, with the hand hanging by the side and the palm on or facing the thigh, in ordinary or military fashion; or alternatively, with the forearms swung up from that position until they're parallel with the ground, with the fingers pointed forward, the palms still facing each other. So in acumoxa terms the palm is "inner" as opposed to the anatomical "anterior", the thumb side of the forearm is "upper" (in the swung-up position) as opposed to anatomical "lateral" (or radial), and the little finger side of the forearm is "lower" as opposed to "medial" (or ulnar); consequently, Shaoshang is on the "inner" rather than the "anterior" side of the thumb.

It is the well, wood: See the discussion below regarding the names given to the transporters or acupoints in this system.

On the hand fish: The "fish" is the thenar eminence, the fleshy pad at the base of the thumb, which is apparently considered reminiscent of the body of a fish; the same term is sometimes also applied to the muscles of the inner lower leg.

Dayuan (Taiyuan Lu9): See the note on this in the yuan acupoints section of Lingshu 1. Taisu instead of yuan1 "abyss" has the semi-synonymous quan2 "spring, fountain"; this is an instance of the use of altered or alternative characters to avoid using the personal name of the emperor, in this case the Tang emperor Gaozu (r 618-626), whose personal name was Li Yuan. Taisu also omits the specific measure "one cun".

In the middle of the cunkou: Kou3 "mouth"; refer to the note in Lingshu 1 regarding cun4 "inch". The cunkou "inch mouth", also known as the qikou "qi mouth" or maikou "channel mouth", refers to the pulse of the radial artery just proximal to the wrist, near the styloid head of the radius; this is the principal pulse-taking position in Chinese medicine; the constant movement of the pulse in this position is what's referred to in "it moves and doesn't stop" (in which ju1 "to stay, reside" is used in another of its standard meanings, "to stop, cease").

It is the throughpass: This is a word I've coined to translate jing1 "to pass through" in this particular usage, a task that's arguably done just as well by one of the common standard translations, "traversing", an alternative possibility (not in general use) being "transit".

The moving channel in the middle of the elbow: On the elbow or cubital crease, on the pulse on the radial side of the biceps tendon. Dong4 mai4 "moving channel" is a standard Neijing term meaning "pulse", still used in modern Chinese to mean "artery". In English, quite separate words are used to refer to a "blood vessel, artery", and the beating or movement that can be felt at certain points on those vessels, the "pulse". In Neijing, that's typically not the case; the text often uses simply mai4 "channel" to refer to a pulse, a point on the channel where a pulse can be felt; that is, mai4 refers both to the channel itself, and to the beating or movement of the channel. In many circumstances, it's not entirely clear which of those senses is intended; and conversely, in every situation, the decision to translate as "channel" or "pulse" is a purely contextual one; to reflect this, in situations

where I've adopted the idea of "pulse", I've always also appended "channel" (viz "pulse/channel"), simply as a reminder or reflection of the fact that, to a Chinese reader, this equivalence or ambivalence is always apparent and unavoidable. This patent equivalence between "channel" and "pulse" also throws a rather stark light on the highly dubious nature of the common modern view that the channels in Chinese medicine are an entirely intangible or energic system of some kind, removed from and separate to the ordinary circulatory system.

Leaving aside the yuan acupoints included in the yang channels, there are five acupoints or transporters listed for each channel; each is given a name or description, and the movement or passage of the channel at each point is likewise described or characterised; the terms used are consistent throughout; the channel "emerges" at the "well", "flows" to the "stream", "flows/pours" into the "transporter", "goes/moves/travels" to the "throughpass", "enters" at the "meeting".

The first pairing is chu1 "emerge, come out" with jing3 "well", which can also less commonly mean "source, spring". The second has liu2 "to flow" with ying2 "a small flow of water, a small stream or brook". The third has zhu4, also meaning "flow", but implying a larger or stronger flow, with shu4, the "flesh" form of "transporter", as discussed above. The fourth has xing2 "to go, walk, move, travel", with jing1 "warp, main, classic" etc, as discussed in relation to "the main channels" in Lingshu 1, which can also mean "to pass through", either in the sense of experiencing something, or physically passing through or crossing a point or place. The fifth and last has ru4 "to enter, go in", with he2 "to meet, join; to shut, close; accord, harmonious".

The overall picture drawn from these is that of the pathway or course of a river, "emerging" at the "spring", "flowing" as a "small stream", "flowing strongly" enough to be able to "transport" river traffic, "moving, going" more slowly to "pass through" the lowland plains, and finally "meeting with" and "entering" into a sea or lake. In fact, only four of the ten characters have a specifically water-related meaning ("well", "stream", and the two "flows"), so the "river" image is far from explicit; but I think the composite nevertheless justifies it; Yang states the analogy explicitly, "like a river emerging from a spring, to reach the sea, which is the meeting".

The usual English translations or terms are well, spring, stream, river, sea; I don't know where these originate, but I think there are significant errors in them, in that the first two both mean a starting point, a spring, and the third implies a relatively small rather than a larger stronger flow of water; I think they should instead be spring, stream, young or small river, old or great river, and sea or lake. That is, the river rises at the spring, develops to a small flow as stream, becomes a full river with a strong fast flow (while still in the mountains or hills, a young or small river), reaches the plains and meanders slowly (an old or great river), and finally enters the sea or lake.

The five are often referred to in English by their Chinese names, jing, ying, shu, jing, he, with the first and third differentiated by the addition of their English description, jing-well and jing-river; these transcriptions are in the modern pinyin system, older books have them in pre-pinyin transcription systems, eg ting yung yu ching ho.

The first of the series, the "well" transporter, in each case has an extra designation given to it; for the yin channels, this is in every case "wood", for the yang channels it's "metal". The implication from this is that the five transporters correspond to the five goes in a sequence

beginning from those points. So, for the yin channels, the jing-well is wood, the ying-stream is fire, shu-transporter earth, jing-throughpass metal, he-meeting earth. For the yang channels, the jing-well is metal, ying-stream water, shu-transporter wood, jing-throughpass fire, he-meeting earth. Jiayi states these implied associations explicitly.

At this stage, I've not attempted to translate acupoint names (a complex and difficult study in itself).

The channel abbreviations I've adopted for acupoints are: lung Lu, large intestine (colon) Cn, stomach St, pancreas-spleen Sp, heart Ht, small intestine Sm, bladder Bd, kidney Kd, pericardium Pc, three burners/heaters Tb, gallbladder Gb, liver Lr, du Du, ren Rn. Two main considerations have led to the adoption of this non-standard set; firstly, the need for relatively distinctive character combinations to facilitate computer searches; and secondly, an attempt to avoid prefixes that are relatively easily confused in [iting.

The heart emerges at Zhongchong (Pc9); Zhongchong [is] at the end of the middle finger; [it] is the well, wood. [It] flows to Laogong (Pc8); Laogong [is] in the middle of the palm, in the inner space at the root joint of the middle finger; [it] is the stream. [It] flows to Daling (Pc7); Daling [is] directly below and in the space between the two bones behind the palm; [it] is the transporter. [It] goes to Jianshi (Pc5); the path of Jianshi [is] in the middle of the space between the two sinews [at] three cun; if there is a transgression then [it] arrives, no transgression then [it] stops; [it] is the throughpass. [It] enters at Quze (Pc3); Quze [is] in the middle of the depression on the lower ridge of the inner elbow; bend and get it; [it] is the meeting. [This] is the hand shaoyin (*lesser yin*).

The heart emerges at Zhongchong: See the discussion of this below.

The root joint: The metacarpophalangeal joint, the knuckle joining the hand to the finger, the "root" of the finger.

The path of Jianshi is in the middle of the space between the two sinews [at] 3 cun: The 3 cun measurement is taken to mean proximal to the wrist crease, which is what Jiayi says plainly, "three cun behind the palm, in the middle of the depression between the two sinews". The inclusion of dao4 "way, path" is unusual, and its meaning not clear; some consider it a mistaken addition, but given the ensuing similarly unusual "transgression" clauses, that may not be the case.

If there is a transgression then it arrives: "Transgression" in this and the next clause is guo4 "to pass, cross; go too far; transgression, error, fault". These statements are generally taken to mean that if there is an illness in the channel then it manifests here in some way, if it doesn't then it's as normal, perhaps meaning (although no source specifically states this) that if there's a disorder then a pulse can be felt "arriving", if there's no disorder then it can't be felt, it "stops". Note the similar presence of unusual or added clauses in the throughpasses of liver and kidney below.

The lower ridge of the inner elbow: As discussed previously, this refers to the standard posture with forearms swung forward and palms facing each other; in that position, what's anatomically described as the medial side of the biceps tendon at the cubital crease is on the "inside" aspect of the elbow "below" the biceps tendon. "Bend and get it" means that the elbow should be flexed, not extended, in order to make this position more apparent.

Despite the "heart emerges" designation, this isn't what Lingshu 10 identifies as the heart channel, but instead the "heart master" or "heart wrapper" channel, the pericardium. The theory underlying this is stated in Lingshu 71: "Huangdi said: The hand shaoyin channel alone is without transporters, why? Qibo said: The shaoyin is the the heart channel; the heart is the great master of the five zang and six fu, where essence spirit is housed; this zang is firm and strong, evil cannot be taken in; if it's taken in then the heart is harmed; if the heart is harmed then the spirit departs; if the spirit departs, then death. So, all evils located in the heart, all are located in the heart wrapping network; the wrapping network is the heart master channel. So [the shaoyin/heart channel] alone is without transporters." In other words, the heart is the strongest and most vital of all the organs, as well as which it has a protective organ around it to deflect any harms that might want to attack it; when treating the heart, it's the acupoints on the channel of that protective organ that are used, not those of the heart itself.

This principle is effectively adhered to throughout Neijing; as opposed to the many needling indications for its foot shaoyin kidney counterpart, there are few such indications for the hand shaoyin heart (there are instances in eg Suwen 28, 32, 36); Tongli Ht5, the starting point of the heart luo channel, is the only heart channel acupoint referred to by name; the listing of the supposed 365 acupoints in Suwen 59 gives only one for the heart channel, without naming or locating it specifically (generally taken to be Yinxu Ht6). There's a significant change in Jiayi, which lists all but one (Qingling Ht2) of the nine standard acupoints on the heart channel; however, it too has very few indications for those acupoints (the notable exception being a number for Shenmen Ht7).

As in this chapter, the two different texts describing the channels system in the Mawangdui manuscripts from the 2nd century BC both have eleven channels, not twelve; but in both cases, the missing channel corresponds to the pericardium channel, not the heart; that same arrangement is also seen in Lingshu 41.

The liver emerges at Dadun (Lr1); Dadun [is] at the end of the foot big toe and in the middle of the three hairs; [it] is the well, wood. [It] flows to Xingjian (Lr2); Xingjian [is] in the big toe space; [it] is the stream. [It] flows to Dachong (Taichong Lr3); Dachong [is] in the middle of the depression two cun above Xingjian; [it] is the transporter. [It] goes to Zhongfeng (Lr4); Zhongfeng [is] in the middle of the depression one cun and a half in front of the inner ankle; [if you] make [it] go counterflow then [there's] stagnation, [if you] make [it] harmonious then [it] connects; shake the foot and get it; [it] is the throughpass. [It] enters at Ququan (Lr8); Ququan [is] below the assisting bone, above the big sinew, bend the knee and get it; [it] is the meeting. [This is] the foot jueyin.

At the end of the foot big toe: There is a version of zhi3 using the "foot" radical that specifically means "toe", but it's not used at all in Neijing, the "hand" radical variant instead serves for both "finger" or "toe" (a standard usage); zu2 "foot" is added here to clarify what's meant.

The three hairs: The small clump of hairs proximal to the nail of the big toe.

The big toe space: The space between the big toe and second toe.

[If you] make [it] go counterflow: Another unusual statement associated with the throughpass, as seen in Jianshi Pc5 previously; typically taken to mean that needling

inappropriately will lead to stagnation, using the correct needling technique will keep channel qi open and flowing, although there's no clear reason why this is appropriate to this particular acupoint.

Shake the foot and get it: Another movement indicator to aid in identifying the location of the acupoint, like "bend and get it" for Quze Pc3; Jiayi has "stretch the foot".

Below the assisting bone: Fu3 "to aid, assist; attached, dependent". There are five instances of this term in this chapter; its standard definition is the fibula, the smaller and outer of the two bones in the lower leg, and that definition clearly fits the instance in the gallbladder channel, referring to a location a little above the outer ankle. It's used in the large intestine channel in reference to the location of Quchi Cn11, suggesting that in that instance it refers to the radius; that usage could well be considered analogous to the "fibula" definition, since the radius, whether in the acumoxa or anatomical posture, is the outermost of the two forearm bones at the elbow. It also occurs in all three of the foot leg channels, liver pancreas-spleen and kidney; in all those cases, the standard "fibula" meaning seems entirely implausible, since that bone goes nowhere near the yin aspect of the leg; consequently, some sources give a quite different definition of it for these instances, the lower aspects of the bony prominences on both sides of the knee, that is, the condyles of the tibia; there are instances in Lingshu 13 and 14 where that same definition seems applicable. An early meaning, perhaps the root meaning, of fu3 is a reinforcing spar or parallel pair of spars going across a wheel, through or beside the hub, outside the main set of spokes; that idea of "an outside reinforcing spar/projection" suits all these definitions, suggesting it might be the intended meaning of the name.

Above the big sinew: Jiayi and Taisu after this add an extra clause, "below the small sinew", giving the opposite of the indicated location of Yingu Kd10 below, "below the big sinew, above the small sinew". There is a large bundle of tendons on the medial side of the back of the knee, involving a number of muscles; those usually mentioned in acupoint location descriptions are the semimembranosus and semitendinosus, which are anatomically the two most lateral or posterior, that is, closest to the middle of the back of the knee; however the sartorius and gracilis are also involved in the same bundle. When the leg is raised and the knee bent, "above" the sinew places Yuquan Lu8 anatomically medial or superior to this entire bundle of tendons, including the sartorius and gracilis, not just the semimembranosus and semitendinosus. There is a fairly prominent divide or gap in the bundle, which appears to be between the semimembranosus (the more medial of the two) and semitendinosus (the more lateral, closest to the middle of the knee), the latter forming the smaller of the two groups, and, with the knee bent, the lower or inferior; the description of Yingu Kd10 "below the big sinew [and] above the little sinew" then plausibly places it in this gap. In these terms, the Jiayi/Taisu description of Yuquan, "above the big sinew, below the small sinew", makes no obvious sense; indeed, if it's presumed that the big and small sinews involved are the same, then clearly it's logically impossible for both "above the big, below the small" and "below the big, above the small" to be correct; on this basis, I think the Jiayi/Taisu addition should be discounted.

The pancreas-spleen emerges at Yinbai (Sp1); Yinbai [is] on the end of the inner edge of the big toe; [it] is the well, wood. [It] flows to Dadu (Sp2); Dadu [is] in the middle of the depression behind the root joint; [it] is the stream. [It] flows to Taibai (Sp3); Taibai [is] below the wrist bone; [it] is the transporter. [It] goes to Shangqiu (Sp5); Shangqiu [is] in the middle

of the depression below the inner ankle; [it] is the throughpass. [It] enters at Yinlingquan (Sp9); Yinlingquan [is] in the middle of the depression below the assisting bone; stretch and get it; [it] is the meeting. [This is] the foot taiyin (*great yin*).

Pancreas-spleen: See the discussion of this below.

The inner edge of the big toe: The standard posture for the feet is with the toes pointed straight ahead, not splayed as in the anatomical position.

Below the wrist bone: Wan4 means simply "the wrist", and basically nothing else, so its use here is either quite idiosyncratic, or simply an error; Jiayi, Taisu, Qianjin, Waitai and Wang instead all have he2 "kernel, pit, stone, nut", which is an obviously more appropriate description of the bony prominence of the 1st metatarsal joint.

Stretch and get it: Yinlingquan's position is defined in relation to the "assisting bone" only (the inner condyle of the tibia; see above), not in relation to the sinews at the back of the knee, so unlike its neighbours Ququan Lr8 and Yingu Kd10, both of which call for the leg to be bent, in this case the leg is straightened to make the curve or tapering of the condyle easier to find.

The most common translation of pi2 is "spleen"; I instead adopt the view given in Huang Longxiang's essay on the matter in Zhongguo Zhenjiu Shi Tujian "Illustrated Survey of the History of Chinese Acumoxa" (2003), that what is referred to by the character encompasses both the spleen and the pancreas, and in fact, in the absence of a specific indicator to the contrary, should be presumed to refer to the pancreas. Huang's proposal can be briefly summarised as follows:

The spleen is not a vital organ, the pancreas is, so its absence from an obviously sophisticated medical system such as that embodied in Neijing is unlikely. In Neijing and all ensuing Chinese medical theory, the pi2 is closely associated with the stomach; anatomically and physiologically there is such a close association between pancreas and stomach, there is not between spleen and stomach. Chinese medical texts' (including Neijing's) descriptions of the location, shape, and associated illnesses of this organ often suggest pancreas, only sometimes spleen. Yilin Gaicuo "Correcting Errors in the Medical World", the earliest major work to reassess traditional medical theories in the light of direct anatomical dissection observation (1830), clearly uses pi2 to refer to the pancreas, and a quite different character to refer to the spleen. Huang contends that the exclusive association of the character pi2 with the spleen began with practices adopted in translations of medical works between Japanese and English in the 19th century.

The confusion regarding the issue is still prevalent in modern English works on Chinese medicine; many simply make no mention of the pancreas; some comment rather uncertainly on its apparent absence from Chinese medical theory; some state that there is a line of thought that says that its functions are encompassed by the spleen. The strongest opinion on the subject is taken by George Soulie de Morant, a Frenchman who lived in China and studied acumoxa in the early to mid 20th century, and is widely regarded as the father of the modern Western practice of acumoxa; he associates the relevant channel with both these organs, briefly citing similar factors to those raised by Huang. He also adopts a system, apparently on the basis of his own experience, which I don't endorse, that the taiyin channel on the left hand side corresponds to the spleen, that on the right to

the pancreas. The name spleen-pancreas or pancreas-spleen is still occasionally used in English for this organ and channel in English, probably largely as a legacy of Soulie.
While adopting "pancreas-spleen" as the name of this organ and channel, I still at this point (largely through inertia) use the abbreviation Sp for acupoints on the channel.

The kidneys emerge at Yongquan (Kd1); Yongquan [is in] the heart of the foot; [it is] the well, wood. [It] flows to Rangu (Kd2); Rangu is below the apparent bone; [it is] the stream. [It] flows to Daxi (Taixi Kd3); Daxi [is] in the middle of the depression above the heelbone behind the inner ankle; [it] is the transporter. [It] goes to Fuliu (Kd7); Fuliu [is] 2 cun above the inner ankle; [it] moves and doesn't cease; [it] is the throughpass. [It] enters at Yingu (Kd10); Yingu [is] behind the assisting bone, below the big sinew, above the small sinew; press [and] it responds to the hand; bend the knee and get it; [it] is the meeting. [This is] the foot shaoyin (*lesser yin*) main channel.

The heart of the foot: The middle of the underside of the foot, the sole.
Rangu is below the apparent bone: See the discussion of this below.
[It] moves and doesn't cease: Generally taken to mean that there's a continuous pulse here; however, it's also generally acknowledged that in practice there isn't, on which basis some propose that this statement is meant to apply to the previous acupoint in the list, Taixi Kd3; while that's an entirely logical proposition, its likeliness is significantly weakened by the repeated pattern of additional comments of this kind for the throughpass transporters in this list (see Jingqu Lu8, Jianshi Pc5 and Zhongfeng Lr4 above).
Behind the assisting bone: Refer to the discussion of this and the "big" and "small sinew" in the liver channel above.
Press [and] it responds to the hand: Presumably meaning a pulse can be felt on pressure.
Bend the knee: As with Ququan Lr8 earlier.

The acupoint name Rangu and the anatomical feature translated here as "apparent bone" are homonyms, both ran2 gu3; the second character of the acupoint name is gu3 "valley", matching gu3 "bone". Ran2 in both cases is the same character, which can mean "burning, ablaze, on fire", from which it comes to mean "blazing" in the sense of bright, colourful, striking to the eye; it can also mean "to understand" (which seems an extension of the same basic idea, of something "striking" the mind or being apparent), and also "to assent, agree, to think something is correct or right"; as well as this, it has numerous meanings as a connecting particle, "so, thus; however" etc.
The usual interpretation of ran2 in the acupoint name (as seen eg in Grasping the Wind) is "burning", taking it to be a reference to the fact that this is the fire point of the channel; that idea is corroborated by the alternative name given in Jiayi, Longyuan "dragon abyss", whose two characters directly mirror "blazing" and "valley". While the logic of this in relation to the acupoint name is plausible, it seems less so in relation to the name of the bone; there's nothing obvious about it that would appear to justify the description "burning/blazing"; it might be proposed that it's named after the acupoint, but that seems unlikely, the opposite is more characteristic.
My personal contention is that ran2 here is intended in the sense "apparent, plain, obvious", referring to the prominence or clear visibility of the bone (the tuberosity of the navicular bone); that isn't a standard definition of the character, but it's an arguably plausible

extension of its "bright, striking", "see, understand", or "so, thus" senses, and is implied in its use in compounds such as xian4 ran2, the first of which means "to appear, show; evident", the compound meaning "open, evident, plain, obvious, apparent". I've not seen any such contention made plainly in any source, but it's possibly what Yang intends in his comment on the subject; he notes that Mingtang (ie Jiayi) says the acupoint is "in the middle of the depression below the large bone rising in front of the inner ankle"; he then comments that "this large bone is the 'ran2' bone", that remark perhaps implying that he sees the name ran2 as a reference to the "large, rising" nature of the bone, that is, "apparent, evident, obvious". Viewed this way, this bone name is also of a kind with two others seen in the chapter, the "highbound bone" and "kernel bone" in the bladder and pancreas-spleen channels respectively (the latter in the Jiayi etc version).

Some interpretations of the name consider that it refers to the "fire within water" idea that's inherent in the "mingmen" or "life gate" concept, which is mirrored by this being a fire transporter "burning" within a "valley, abyss" on a water channel (kidneys); however, that is entirely anachronistic, no such mingmen or "fire in water" thinking exists in Neijing.

The bladder emerges at Zhiyin (Bd67); Zhiyin [is] on the end of the foot little toe; [it] is the well, metal. [It] flows to Tonggu (Zutonggu Bd66); Tonggu [is] in front of the root joint on the outer side; [it] is the stream. [It] flows to Shugu (Bd65); Shugu [is] in the middle of the depression behind the root joint; [it] is the transporter. [It] passes to Jinggu (Bd64); Jinggu [is] on the outer side of the foot below the big bone; [it] is the yuan. [It] goes to Kunlun (Bd60); Kunlun [is] behind the outer ankle above the heel bone; [it] is the throughpass. [It] enters at Weizhong (Bd40); Weizhong [is] in the very middle of the back of the knee; [it] is the meeting; bend and get it. [This is] the foot taiyang (*great yang*).

Bladder: The name of this organ is a two-character combination, pang2 guang1. Pang2 has some independent meanings eg "shoulder, thigh, wing" that all appear to date from post-Neijing times; Shuowen defines it as "ribs", but I don't know of any instances of its use with this meaning, or in fact any instances other than in the combination pang2 guang1 in pre-Qin/Han texts. Guang1 has never had any meaning or use other than in this combination. There are four other organs with two-character names, all of which are simple combinations of common characters, all with clear independent meanings; the large and small intestines are combinations of chang2 "intestine" with da4 "big, large" and xiao3 "small", exactly as in the English names; the pericardium can be xin1 bao3 "heart wrapper" or xin1 zhu3 "heart master"; the first character of the three burners/heater is san1"three", the second is jiao1 "to scorch, burn, heat"; these can all be clearly represented in English by translations that represent the original Chinese characters individually. I've no idea why the bladder alone should have evolved with a combination of two dedicated characters, each of which is meaningless individually, and either of which would have been sufficient individually. This is the standard and, as far as I know, only word for this organ; any occurrence of "bladder" in any medical translation, ancient or modern, is a representation of this two-character combination. There's not really any way in English of reflecting the fact that it's two characters in the original Chinese; "urinary bladder" might be considered to do so, but that would tend to suggest that one of the characters means "urine", which isn't the case at all. The phenomenon of two unique and otherwise meaningless characters always being used together isn't

uncommon in Chinese; for example, the two characters hu2 die2 "butterfly" are never used individually, and neither has any other meaning; however this arrangement is certainly the exception; the great majority of word-combinations, in both ancient and modern Chinese, are made up of characters that have independent meanings.

Jinggu [is] on the outer side of the foot below the big bone: Taisu instead says that this transporter is "under the outer ankle"; that's not consistent with the location given in Jiayi, and is not followed; the standard location is below the prominence or tuberosity of the 5th metatarsal, about midway between the ankle and toes on the outer side of the foot. The character jing1 means the capital city of a state or country, and that's the translation commonly adopted for this, "capital bone", but it can also mean a high mound or hill, which is possibly what's actually intended in this name, "the highmound bone". In relation to this and the preceding Shugu "binding/bundle bone", modern commentaries typically say that these were ancient names for these bones, which suggests some sort of independent verification of what's in the Neijing texts; I don't know what those assertions are based on; I've never seen a source cited in either case, and I can't find any occurrences of either term in pre-Qin/Han literature.

It is the yuan: As discussed in Lingshu 1, the yang channels in this chapter all have one more acupoint than the yin, the yuan.

[It] goes to Kunlun: Kunlun is the name of a large mountain range in the west of China, running along the north of Tibet and west of the Tarim Basin in Xinjiang province; in ancient times, it was regarded as a mountain or range of great spiritual significance, a place where heaven and earth met, inhabited by mythical creatures and identities; here it's used as a metaphor for the outer ankle.

The very middle of the back of the knee: Unlike English, there is a dedicated character in Chinese that refers to back of the knee, guo2. The character zhong1 "middle, centre" is often fairly "soft" in its meaning, simply indicating "in" rather than something more precise, "centre, middle"; here it's followed by yang1, also meaning (among other things) "middle, centre", the combination indicating that a relatively precise "middle" is indicated.

Bend and take it: Instead of de2 "get, attain", which is seen in all the previous location directives, "shake the foot and get it", "bend the knee and get it", "stretch and get it", the character used here is qu3 "to take, select", which is commonly used in Neijing to mean "treat, needle". "Bend" in this instance is also different, the previous instances being qu1 "bend, crooked"; here it's wei3, the first character of the acupoint name, which likewise means "bend"; it can also mean "to hang or fall down, to drop; to decline, sag, droop", and some take that and the "treat" meaning of qu3 to mean, not that the knee should be bent to facilitate locating the acupoint, but that the patient should lie down when the acupoint is needled; I find this reading unlikely.

The gallbladder emerges at Qiaoyin (Zuqiaoyin Gb44); Qiaoyin [is] at the end of the next toe to the little toe; [it] is the well, metal. [It] flows to Xiaxi (Gb43); Xiaxi [is] in the space between the little toe and the next toe; [it] is the stream. [It] flows to Linqi (Gb41); Linqi [is] in the depression going up one cun and a half; [it] is the transporter. [It] passes to Qiuxu (Gb40); Qiuxu [is] in the middle of the depression in front of [and] below the outer ankle; [it] is the yuan. [It] goes to Yangfu (Gb38); Yangfu [is] above the outer ankle in front of the assisting bone at the end of the severed bone; [it] is the throughpass. [It] enters at

Yanglingquan (Gb34); Yanglingquan [is] in the middle of the depression outside the knee; [it] is the meeting; stretch and get it. [This is] the foot shaoyang (*lesser yang*).

In the depression going up one cun and a half: That is, one and a half cun proximal to the previous acupoint Xiaxi Gb43, in the space between the fourth and fifth metatarsals.
In front of the assisting bone at the end of the severed bone: The "assisting bone" here means the fibula (see above). The "severed bone" (jue2 "to cut off, sever; exhausted, finished") means the part of the fibula just above the outer ankle; the focal or defining point of it is generally considered to be Xuanzhong Gb39, 3 cun above the ankle, and the bone or region is supposedly so-called because the fibula stops being visible or prominent around that point; here this feature is obviously seen as extending 1 cun beyond that to Yangfu; Juegu "severed bone" is alternative name for both Xuanzhong and Yangfu.
In the middle of the depression outside the knee: Jiayi more specifically locates Yanglingquan Gb34 1 cun below the knee, in the depression on the outer ridge of the shinbone; this seems quite different to the modern location, in front of and below the head of the fibula; that location appears to originate in texts from the 12th century, one of which attributes it to Sun Simiao's 7th century (Tang) Qianjin texts, although it doesn't appear in the surviving versions of those books.

The stomach emerges at Lidui (St45); Lidui [is] at the end of the next toe inside the big toe; [it] is the well, metal. [It] flows to Neiting (St44); Neiting [is] in the outer space of the next toe; [it] is the stream. [It] flows to Xiangu (St43); Xiangu [is] up the inner space of the middle toe, go upwards two cun in the depression; [it] is the transporter. [It] passes to Chongyang (St42); Chongyang [is] in the depression five cun up the instep; [it] is the yuan; shake the foot and get it. [It] goes to Jiexi (St41); Jiexi [is] above Chongyang one cun and a half in the depression; [it] is the throughpass. [It] enters at Xialing (Zusanli St36); Xialing [is] three cun below the knee, outside the shin bone, three li (Sanli); [it] is the meeting. Three cun further below Sanli is Juxu Shanglian (St37 Shangjuxu). Three cun further below Shanglian is Juxu Xialian (St39 Xiajuxu). The large intestine pertains/connects to the upper, the small intestine pertains/connects to the lower. [This is] the foot yangming stomach channel. The large intestine [and] small intestine both pertain/connect to the stomach. This is the foot yangming (*bright yang*).

The next toe inside the big toe: Nei4 "inside" here might be considered to mean towards the middle or inside of the foot (that is, the second toe), not towards the midline of the body; or could be regarded as a mistaken addition; Jiayi, Qianjin and Yixinfang all omit it.
The outer space of the next toe: "Next toe" here apparently still means the toe next to the big toe, the second toe, the "outer space" of that toe and the ensuing "inner space of the middle toe" referring to the same place, the groove between the second and third metatarsals.
Xialing is three cun below the knee: Xia4 ling2 "below the mound". After saying that the location is outside the shinbone, the text adds san1 li3 "three li"; the placement of those characters initially suggests the possibility that they're a measurement of some kind, but there's no obvious sense to them as such, and the later repetition of the term instead indicates that it's an alternative name for Xialing; notably, Xialing appears to be the original name, Sanli a supplementary or later name. This combination of names has been

seen previously, in "when yin has yang illness treat Xialing Sanli" in Lingshu 1; in that instance the whole is typically regarded as a single connected name, "below the mound three li" meaning the same as "three cun below the knee" here, with the "mound" in question thereby being the knee, and "li" (a distance measure, in ancient times 300 paces) being a metaphoric equivalent for "cun". Some doubt is cast on those conclusions by the fact that, in this passage, these appear to be two quite separate names, not a single connected one; Lingshu 5 likewise has a listing of stomach channel acupoints that uses the name Xialing and not Sanli; in this light, I think, firstly, that it's more likely that the "mound" in question is the condyle of the tibia, which I also consider in practice is a better indicator of this acupoint's location then the three cun measurement; and further, that li is not an equivalent for cun, as discussed further below.

Three cun further below Sanli is Juxu Shanglian: See the discussion below.

The large intestine pertains/connects to the upper: Shu3/zhu3 "to belong to, to be of the same kind, in the category of; to join, connect" is here apparently used in the same sense discussed in relation to "adjoin" and "conjoin" in Lingshu 10, meaning both to pertain, relate or "belong" to, and to connect or link to.

The last part of this paragraph, in which two further acupoints are introduced, has no equivalent in the preceding channels; there is a similar extraordinary section at the end of the next channel, the three burners.

Ju4 xu1 means "huge/great emptiness"; lian2 means "edge, ridge", apparently referring to the sharp ridge or edge of the tibia; shang4 and xia4 are "above, upper" and "below, lower"; in the standard names for these acupoints (originating in Qianjin, 7th century Tang), lian2 is omitted and shang4/xia4 repositioned, giving Shangjuxu St37 and Xiajuxu St39 "upper/lower huge/great emptiness"; the "great emptiness" is generally interpreted as the space or furrow between the bone and muscle along the outer edge of the tibia. The large intestine relates and/or connects (in some unspecified way) to the upper of these two, the small intestine connects to the lower (the opposite of the placement or sequence of the organs themselves); in this way, "the large intestine [and] small intestine both pertain/connect to the stomach".

As discussed above, perhaps the most common rationale for the name of the acupoint above these two, Zusanli St36, is that the distance measurement li3 is a metaphor for "cun", referring to the location of the acupoint three cun below the knee; as also noted above, there are some difficulties with this explanation, which are widely acknowledged. An alternative explanation is that li3 is a substitute for that character with the "jade" radical added, li3 "to regulate, govern, order, administer", indicating that this acupoint can regulate three things; there are different ideas of what these three things might be, such as the pancreas-spleen, stomach and kidneys, or the three burners, upper, middle, lower.

For what reason I don't know, I've never seen suggested what seems to me an even more obvious possibility, that the "three" referred to in Sanli are the three things involved here, in the text that appears to actually introduce the name Sanli as an alternative or equivalent to Xialing, that is, the stomach, small intestine, and large intestine; with li3 intended in the sense "street, neighbourhood".

There are a few different passages in Lingshu in which the idea of a "street" is used to refer to some section or aspect of the body. Lingshu 52 discusses "the qi streets of the six fu" (jie1 "street"), referring to four major sections of the body; "chest qi has a street,

abdomen qi has a street, head qi has a street, shin qi has a street"; the same idea is apparently referred to (again using jie1) in Lingshu 62, "the four streets [are] the paths and roads of qi". Lingshu 54 refers to "the three regions and three streets rising" (li3 "street, neighbourhood"), variously interpreted as three sections of the face, or the three burners. Most aptly to the present discussion, Lingshu 35 states that "the five openings of the stomach [are] the gates and doors of the house-row neighbourhoods"; the "five openings" are typically identified as the throat, the openings from the throat to the stomach, stomach to small intestine (duodenum), small intestine to large intestine, and the anus; and "the house-row neighbourhoods" appears to mean the full length of the gastric tract encompassed by those openings or "gates"; what I've translated as "house-row neighbourhoods" is lv3 li3, the last as in Sanli, the first meaning the main entrance to a street, or a group of a certain number of households (refer to Lingshu 35 for a fuller discussion of these). This use of li3 in reference to the gastric tract I think makes the plausibility of the "three streets" reading of Sanli obvious.

At this point the discussion is forced to branch into what could reasonably be regarded as an unexpectedly odd direction. As well as its obvious meaning "great emptiness", ju1 xu1 also occurs in early texts as the name of an animal; actually, the second half of a four-character name qiongqiong juxu. For example, Lushi Chunqiu (239 BC) has a passage describing two (presumably imaginary) animals in the northern regions, the jue and qiongqiong juxu (jue2 means "to fall, tumble"; qiong2 normally means "locust, cricket"; translated by both Knobock/Riegel and Major et al as "the stumbler" and "the fabulous-big-and-small" respectively), that live in a symbiotic relationship; the jue is poor at moving quickly, the qiongqiong juxu is poor at feeding itself, so the jue feeds the qiongqiong juxu, and when there's danger the qiongqiong juxu flees carrying the jue; the story is retold in a couple of later texts (Huainanzi 2nd century BC, Shuoyuan 1st century BC) using different variations of the characters for the names of the creatures (Shuoyuan uses the same characters seen in Lingshu; Lushi Chunqiu adds the "foot" radical to ju1, giving "distant, apart"; Huainanzi adds the "horse" radical to both, giving two characters with no other meanings). In Lushi Chunqiu, the story is in a section of the text that discusses the idea of acting cooperatively, with the different members of a partnership each contributing what he can, and through the partnership making up for what he cannot do ("using what he can [do] to support what he cannot"); in Huainanzi it follows a discussion of how the legendary kings Yao, Shun and Yu were not as capable at particular tasks as their assistants, but they nevertheless achieved merit because of their ability to constructively employ the abilities of others. As unlikely as it might seem, this is all quite apt to the idea of this section of the stomach channel hosting a connection to the small and large intestines, suggesting the possibility that the name "juxu" isn't a reference to the location of these acupoints, but is a reference to or metaphor for the symbiotic relationship existing at these acupoints.

Having said all this, this sort of relatively obscure reference isn't characteristic of acupoint names generally; they are instead mostly characterised by fairly simple images or objects, streams, hills, mounds, depressions, ridges etc, which the obvious "great emptiness" reading of ju4 xu1 fits better.

There is an "oral tradition", as Grasping the Wind calls it, which most Chinese medicine students and practitioners have probably heard, that the name Sanli refers to the idea that needling the acupoint can revive a person's strength when he/she is tired, enough to

allow him/her to walk another three li; I've never seen this recorded in any Chinese text, ancient or modern, and have no idea where it originates (there's no sign of it, for example, in the 2004 edition of Zhongguo Zhenjiu Xuewei Tongjian, a very comprehensive encyclopedic collection of material relating to the individual acupoints).

The three burners ascends to meet with the hand shaoyang. [It] emerges at Guanchong (Tb1); Guanchong [is] on the end of the next finger to the little finger; [it] is the well, metal. [It] flows to Yemen (Tb2); Yemen [is] in the space between the little finger and next finger; [it] is the stream. [It] flows to Zhongzhu (Tb3); Zhongzhu [is] in the depression behind the root joint; [it] is the transporter. [It] passes to Yangchi (Tb4); Yangchi is located in the depression on the wrist; [it] is the yuan. [It] goes to Zhigou (TB6); Zhigou [is] three cun above the wrist in the depression between the two bones; [it] is the throughpass. [It] enters at Tianjing (Tb10); Tianjing is located in the depression above the big bone on the outside of the elbow; [it] is the meeting; bend the elbow then get it.

The three burners ascends to meet with the hand shaoyang: This uncharacteristic introduction to the listing is adopted for all three yang channels; Jiebin proposes that it's because the related organs or fu are below the midpoint of the body (or the diaphragm), but the channels are above (which isn't the case for the hand yin channels, whose organs are all above the diaphragm).

Yangchi is located in the depression on the wrist: Shang4 "above" can mean simply "on", which is how it's generally read here, meaning the acupoint is on the wrist crease, but it could also be taken to mean that it's located "above" the wrist; that wording is used in the next acupoint, Zhigou, to mean "proximal to"; the same applies to Jiayi's version of this location, "on the outer hand, in the depression on the wrist", in which both instances of "on" are again shang4.

In the depression above the big bone on the outside of the elbow: Jiayi and Wang have "on the outside of the elbow, 1 cun behind the big bone, in the depression in the space between the two sinews".

The three burners lower transporter is located in front of the foot big toe, behind the shaoyang. [It] emerges on the outer ridge of the middle of the back of the knee; [its] name is called Weiyang (Bd39); [it] is the taiyang luo. The hand shaoyang main channel [is] the three burners; [it is] what the foot shaoyang [and] taiyin govern. The taiyang separate [channel], above the ankle five cun, [it] separates to enter and pass through the calf belly, emerges at Weiyang (Bd39), joins the proper [channel] of the taiyang, enters to connect to the bladder, ties to the lower burner. If it's full then [there's] shut up 'long'; if it's empty then [there's] losing urine (*incontinence*). If there's losing urine then fill it; if there's shut up 'long' then drain it.

The three burners lower transporter: As with the previous channel, an extra section is appended at the end of the usual set of acupoints, introducing the last connection between the leg channels and the arm yang channels; in the previous instance, these extra connections were introduced in the paragraph related to the leg channel host, the foot yangming stomach hosting the small and large intestines; in this instance it's at the end of the guest or hosted channel, the hand shaoyang three burners. In the previous paragraph,

other than saying Shang and Xiajuxu "pertained/connected" to their respective organs, no particular designation was given to the added acupoints; here the three burners acupoint is called xia4 shu4 "the lower transporter" (Jiayi says "the lower assisting transporter"); Lingshu 4 has a list that includes these three added acupoints, along with the ordinary he/meeting transporters of the foot yang channels, referring to them collectively using that designation, he2 "meeting"; the standard term for the three hand channel related acupoints is now a combination of this passage's xia4 "below, lower" and Lingshu 4's he2 "meeting", the xia4 he2 "lower meeting" acupoints; I don't know where this particular term originates.

In front of the foot big toe: See the discussion of this below.

The middle of the back of the knee: Zhong1 "middle, centre" here appears to mean vertically, not horizontally; that is, on the popliteal crease, not on the vertical midline.

What the foot shaoyang [and] taiyin govern: See the discussion below regarding "shaoyang [and] taiyin". Opinions differ as to whether jiang1 here means the two channels in question "govern, control" the three burners, or the three burners "moves, goes to" those channels (both are standard meanings).

The calf belly: This is a two-character combination; shuan4 means the muscles or flesh of the lower leg, the calf; chang2 means "intestine", as in the names of the large and small intestines, here more loosely translated as "belly"; the two together mean the same as shuan4 alone, the calf muscles, in particular the bulging or "bellying" mass of the upper gastrocnemius.

Shut up 'long': Bi4 "to close, seal, shut up, block", with long2, which refers to various urinary disorders; this is the same combination translated as "sealed 'long'" in the liver channel pathway in Lingshu 10, refer to the note there.

As this paragraph states, the lower he/meeting of the three burners is Weiyang Bd39, which is on a branch of the foot taiyang bladder channel, lateral to Weizhong Bd40 on the crease of the back of the knee (the popliteal crease). There are two sections of the text that are at odds with this picture; the first is "in front of the big toe"; the second is the involvement of the foot shaoyang and taiyin (gallbladder and pancreas-spleen).

In the first instance, instead of "big toe", both Jiayi and Taisu have "taiyang", giving "in front of the foot taiyang, behind the shaoyang", which is consistent with the position of Weiyang, between the main line of the foot taiyang bladder (through the middle of the back of the leg) and the shaoyang gallbladder (in front of the fibula); the Lingshu 4 passage referred to in the previous note likewise says "three burners illness ... the signs are on the great luo outside the foot taiyang; the great luo is in the space between the taiyang and shaoyang".

In the second instance, if "yin" and "yang" are considered to be mistakenly reversed (as Jiebin proposes they are), then the corrected text indicates a connection or relationship between the three burners and the foot taiyang bladder and its yin partner, the shaoyin kidney; Taisu corroborates this view, saying "the foot [section of] the three burners, [it's] the taiyang that governs it", with no involvement of any other channel (neither Jiayi or Lingshu 4 has an equivalent for this text).

These two changes provide a direct, consistent and plausible picture of the connection between the three burners and the bladder channel, and each is corroborated by a major source; on that basis, I think that version of this paragraph is correct.

Not all sources agree with this view. For "in front of the big toe", an alternative suggestion is that "big toe" is an error for "little toe", the location of the bladder channel on the foot; however, that doesn't explain what's then meant by "in front of the little toe", or "behind the shaoyang". For "[it is] what the foot shaoyang [and] taiyin govern", some sources take this at face value, meaning that there's a connection of some sort between the three burners and the gallbladder and pancreas-spleen. Another suggestion is that it means the branch of the bladder channel involving Weiyang runs between the gallbladder and pancreas-spleen channels (which is technically true, but improbably imprecise).

The "big toe" indication could be considered to corroborate the involvement of the pancreas-spleen; and "above the ankle 5 cun" could be considered to corroborate the involvement of the gallbladder, since that's the location of the gallbladder luo, Guangming Gb37, whereas there's no bladder channel acupoint at that distance from the ankle (Feiyang Bd58 is 7 cun above, Fuyang Bd59 3 cun). Despite these possibilities or factors, I think the altered version proposed earlier is clearly the most likely representation of the original intent of the text.

Luo4 "network, link" is used here in the same sense applied in the description of the "luo" channels at the end of Lingshu 10, that is, "to link, connect, join", rather than the more normal meaning of the character, "network". Likewise, the use of zheng4 "proper" in "joins the proper [channel] of the taiyang" appears to match the use of that character in the descriptions of the "proper" channels in Lingshu 11; the taiyang channel in that chapter runs the opposite direction of the main bladder channel, up the leg into the torso, as does that described in this paragraph. The luo and "proper" channels are generally acknowledged to represent a layer of theory later than that embodied in the main channel descriptions in Lingshu 10; and the twelve-channel alternating-direction system of Lingshu 10 is clearly a later development than the eleven-channel single-direction system seen in the present chapter. This suggests strongly that this chapter has (at least) two layers of theory; the original text is that in which the transporters are listed, on eleven channels, all running from the extremities towards the torso, with no involvement beyond the elbows and knees; the entire lower meeting point system is a later addition to that; the "neck" or "tian" acupoints section later in the chapter might well be a third layer above that.

The hand taiyang small intestine above meets with the taiyang; [it] emerges at Shaoze (Sm1); Shaoze [is] on the end of the little finger; [it] is the well, metal. [It] flows to Qiangu (Sm2); Qiangu is located in the depression on the outer ridge of the hand in front of the root joint; [it] is the stream. [It] flows to Houxi (Sm3); Houxi is located on the outer edge of the hand behind the root joint; [it] is the transporter. [It] passes to Wangu (Sm4); Wangu is located on the outer edge of the hand in front of the wrist bone; [it] is the yuan. [It] goes to Yanggu (Sm5); Yanggu is located in the depression below the sharp bone; [it] is the throughpass. [It] enters at Xiaohai (Sm8); Xiaohai is located outside the big bone of the inner elbow in the depression a half a cun away from the end; stretch the arm and get it; [it] is the meeting. This is the hand taiyang main channel.

Qiangu ... on the outer ridge of the hand: Jiayi and Taisu instead have "on the hand little finger".

Houxi is located on the outer edge of the hand: Taisu omits "on the outer edge of the hand"; Jiayi, Waitai and Yixinfang have "on the hand little finger outer edge".

Wangu is ... front of the wrist bone: Jiayi has "in front of the wrist, below the rising bone".
Yanggu is ... below the sharp bone: Jiayi and Qianjin have "on the outer edge of the hand, in the middle of the wrist, below the sharp bone".
The sharp bone: The bony prominence on the little finger side of the back of the wrist, the styloid process of the ulna.
Outside the big bone of the inner elbow: The "big bone" is the bony prominence on the inside of the elbow, the medial epicondyle of the humerus; Xiaohai Sm8 is located between that and the point of the elbow (the olecranon of the ulna, which is probably what's meant by duan1 "end, extremity" here; Jiayi, Taisu, Qianjin and Yixinfang all add "elbow" before that character); in the standard posture, this point is slightly lateral to or "outside" the medial epicondyle.
Stretch the arm and get it: Jiayi and Taisu both say the opposite, "bend the elbow".

The large intestine ascends to meet the hand yangming. [It] emerges at Shangyang (Cn1); Shangyang [is] on the end of the next finger to the big finger (*thumb*); [it] is the well, metal. [It] flows to in front of the root joint, Erjian (Cn2); [it] is the stream. [It] flows to behind the root joint, Sanjian (Cn3); [it] is the transporter. [It] passes to Hegu (Cn4); Hegu is located in the space of the forked bone of the big finger (thumb); [it] is the yuan. [It] goes to Yangxi (Cn5); Yangxi is located in the depression in the space between the two sinews; [it] is the throughpass. It enters at Quchi (Cn11), located on the outer elbow in the depression of the assisting bone; bend the arm and get it; [it] is the meeting. [This is] the hand yangming.

In the space of the forked bone of the big finger (thumb): Qi2 "to fork, branch, diverge"; Taisu omits "forked bone"; Jiayi has "in the space between the hand big finger [and] the next finger".
The depression in the space between the two sinews: The two sinews that become prominent at the base of the back of the thumb when it's stretched away from the palm, anatomically the extensor pollicis longus on one side, the extensor pollicis brevis and abductor pollicis longus on the other, forming the so-called "anatomical snuffbox".
The assisting bone: As discussed in the liver channel section earlier, one reading of this term in this situation is the radius, the outermost of the two forearm bones; some contend instead that it's intended in the same way as the "condyles" reading of the foot instances, the equivalent on the arm being the prominences formed at both inside and outside of the elbow at the epicondyles of the humerus; since the radius meets the humerus at the lateral epicondyle, there's little or no practical difference in the present circumstance; the standard location of Quchi is at the lateral end of the cubital or elbow crease, just anterior to where the lateral epicondyle of the humerus meets the head of the radius.
Bend the arm and get it: Jiayi and Wang have "press the hand to the chest to get it".

These are called the transporters of the five zang and the six fu; five fives, twenty-five transporters; six sixes, thirty-six transporters. The six fu all emerge on the three yang of foot and ascend to meet with the hand.

The six fu all emerge on the three yang of foot: That is, through the three lower he/meeting acupoints given in this chapter, all six of the fu or yang channels are represented on or clinically accessible from the three yang channels of foot; this notion of a set of acupoints

on the lower body that's capable of treating the entire body is taken to the next step in the next passage, in the neck acupoints system. Note that the three lower he/meetings aren't represented in the numbers given before this, five fives (five yin channels with five transporters) and six sixes (six yang channels with five transporters plus yuan).

In the middle of the broken bowls, the ren channel, [its] name is called Tiantu (Rn22). The first next moving channel to the side of the ren channel [is] the foot yangming; [its] name is called Renying (St9). The second next channel, the hand yangming, [its] name is called Futu (Cn18). The third next channel, the hand taiyang, [its] name is called Tianchuang (Sm16). The fourth next channel, the foot shaoyang, [its] name is called Tianrong (Sm17). The fifth next channel, the hand shaoyang, [its] name is called Tianyou (Tb16). The sixth next channel, the foot taiyang, [its] name is called Tianzhu (Bd10). The seventh next channel, the channel in the very middle of the neck, the du channel, [its] name is called Fengfu (Du16). The moving channel inside the armpit, the hand taiyin, [its] name is called Tianfu (Lu3). Three cun below the armpit, the hand heart master, [its] name is called Tianchi (Pc1).

In the middle of the broken bowls: Que1 "damaged, broken; incomplete, lacking" pen2 "bowl, basin"; this is the Neijing term for the supraclavicular fossa, the large hollow or depression above the collar bone or clavicle. Since Tiantu is on the front midline, zhong1 "middle" here apparently means midway between the left and right broken bowls, rather than on the midline of each bilaterally.

The first next moving channel: Ci4 "order, sequence; next in sequence". See the note in the lung paragraph earlier in the chapter regarding "moving channel".

Tianrong Sm17: The text says this is a foot lesser yang (gallbladder) acupoint, but subsequent texts assign it to the hand taiyang small intestine channel; Jiebin proposes that this indicates Tianrong was originally considered a gallbladder acupoint; Ma instead contends that the channel mismatch shows Tianrong is an error, and the intended acupoint is actually Tianchong Gb9, 2 cun inside the hairline, above and behind the ear; Tamba refutes this, saying that location is clearly outside the line around the neck formed by the other acupoints; some more modern texts say that, on the basis of the inclusion of acupoints in the underarm region, that objection isn't necessarily justified; I'm in agreement with Jiebin and Tamba, particularly in light of the indication in the associated paragraph later in this chapter that the foot shaoyang acupoint is located "below the ear, behind the jaw bend", which is a reasonable thumbnail description of the standard location of Tianrong; the equivalent listing in Lingshu 5 also has Tianrong as the foot shaoyang acupoint in this group.

The moving channel (pulse) inside the armpit: This is closer to what's now regarded as the location of Jiquan Ht1, in the centre of the axilla, than the location for Tianfu Lu3 given in Jiayi and subsequent texts, on the inner ridge of the upper arm, 3 cun below the armpit; it's notable however that this does agree with the Lingshu 10 description of the lung channel pathway, which says it goes into the armpit or axilla, not above it on the front of the shoulder as all modern texts have it; the location given in Lingshu 21 (which has a listing of a number of these same acupoints) says "below" instead of "inside" the armpit (the two are arguably equivalent in this context).

Three cun below the armpit: The standard location of Tianchi Pc1, as seen in Jiayi, likewise places it 3 cun below the axilla, but also stipulates that it's 1 cun lateral to the nipple, not directly below the midpoint of the axilla, which is instead the location of Yuanye Gb22.

Needling Shangguan (Gb3), open the mouth, [you] can't yawn; needling Xiaguan (St7), yawn, [you] can't open the mouth. Needling Dubi (St35), bend, [you] can't stretch; needling the two passes, stretch, [you] can't bend.

These two pairs of opposing needling indications have no apparent relationship, not only to the immediately preceding and ensuing passages, but to anything in the chapter. Yang regards them as instances of action and effect; for example, if you needle Dubi St35 incorrectly then it will lead to inability to bend the knee. The general view is instead that they're actions to be carried out to facilitate needling, eg when needling Dubi have the leg bent rather than straightened.

Open the mouth, [you] can't yawn: The first verb is qu4 (this is the pronunciation given by Dacidian and Dazidian; others have qu1 or qu3) "open mouthed"; the second is qian4 "to yawn"; the same two are reversed in the Xiaguan indication. The obvious difficulty with this is that both characters indicate essentially the same thing, rather than opposite conditions; the generally proposed solution to is that qian4 is an error or substitution for that character with the addition of he2 "to meet, join; to close" etc (the character used as the name of the fifth transporter), giving he1, which can be used as an equivalent for he2; in this light, the passage instead reads: "Needling Shangguan (Gb3), open the mouth, [you] can't close [it]; needling Xiaguan (St7), close [it, you] can't open the mouth." Shangguan and Xiaguan mean "upper ..." and "lower barrier/pass"; a little above the earlobe and about 1 cun in front, there's a depression in a corner formed by the front edge of the jawbone and the bottom edge of the horizontal ridge of the cheekbone (the zygomatic arch); if you place a finger in this depression then open your mouth you should feel the top of the jawbone swivel forward and fill the hollow, displacing your finger; that's the location of Xiaguan St7; directly above it, on the upper border of the zygomatic arch, is Shangguan Gb3.

Needling the two passes: Instead of liang3 "two", Taisu has the graphically similarish nei4 "inside", giving Neiguan Pc6 "inner pass"; some adopt that reading; others take "the two passes" to mean Neiguan plus its counterpart on the back of the arm, Waiguan Tb5 "outer pass".

The foot yangming, the moving channel flanking the throat; its transporters are located in the middle of the breast. The hand yangming [is] the next place, its transporters [are] outside [the previous], not reaching the bend of the jaw one cun. The hand taiyang [is] level with the jaw bend. The foot shaoyang is located below the ear, behind the jaw bend. The hand shaoyang emerges behind the ear [and] ascends further [to] above the completed bone. The foot taiyang [is at] the hair margin in the middle of the big sinews flanking the nape.

After the brief and puzzling needling indications interruption, this paragraph continues directly on from the earlier list of acupoints in the neck region. Here, brief location descriptions are given for the six yang channel acupoints; see the previous section for their

identities, and for the locations of the remainder, the du, ren, lung and pericardium acupoints.

The moving channel flanking the throat: The renying pulse.

Its transporters are located in the middle of the breast: A puzzling statement; the typical explanation is that it refers to the line of stomach acupoints running down the middle of the chest (on the nipple line), although they have no obvious relevance to this passage.

Not reaching the bend of the jaw one cun: "Jaw" here is jia1, meaning the region of the jaw beneath the ear; the "jaw bend" means the angle of the mandible, the point where the basically vertical line of the jawbone below the ear turns forward towards the chin, becoming basically horizontal. Bu4 zhi4 "not arrive at, not reach to" indicates that the location is short of the jaw bend by a cun; Jiebin takes this to mean a cun below the jaw, I think it's far more likely to mean anterior to, in keeping with the progression of these acupoint locations from front to back.

[And] ascends further [to] above the completed bone: Wan2 gu3 "completed bone" means the mastoid process, and is also the name of the acupoint located at the tip of that process, Wangu Gb12. The position of the acupoint involved here, Tianyou Tb16, appears to be identified by giving a brief description of the course of the channel just after it passes through that point; that is, the acupoint is located behind the ear, a little below the mastoid process (which is consistent with the standard location).

There are three separate lists involving these acupoints, all in Lingshu. The present one is the most complete, involving ten acupoints, one for each of the six yang channels, one for each of the two hand yin channels involved in the chapter's initial listings of transporters (lung and pericardium; these are the only ones not in the neck region), and one each for the two midline channels, du and ren. Seven of the ten have tian1 "heaven, sky" as the first character of the name; the exceptions are Renying St9, Futu Cn18, and Fengfu Du16; Jiayi records an alternate name for Renying that fits this pattern, Tianwuhui "heaven five meetings".

Both the other listings are partial ones. The second, in Lingshu 21, has only five acupoints; it begins with Renying St9 and moves backward in regular sequence (in the same fashion as the present chapter) through Futu Cn18 and Tianyou Tb16 to Tianzhu Bd10, then adds Tianfu Lu3; after initially giving brief locations for these, it repeats the list, giving indications of what they're used for in treatment.

The third listing is a concealed one of sorts, in Lingshu 5; it lists all six yang channels, giving five acupoints for each, in a (mostly) regular pattern, using consistent verbs to denote the action of the channel at each point (three of them the same as the characters used in the early listings in the present chapter); they "root" (gen1) at the jing-well acupoint; then flow (liu2) to the yuan; pour/flow (zhu4) to the jing-throughpass, and finally enter (ru4) at two different places, the second of which is the luo acupoint as seen in Lingshu 10, the first is the acupoint from this "neck" or "tian" group, all six of which agree with the current listing (including attributing Tianrong Sm17 to the foot shaoyang gallbladder).

It might be expected, given the listing of these acupoints immediately following the full listing of the five transporters, that they would be a major set of acupoints, used routinely in everyday clinical practice; however, that's not the case; basically, as far as the Chinese acumoxa tradition is concerned, they don't exist; I've never seen a reference to them as a special group in any text, ancient or modern; an analysis of this chapter in one Chinese

translation, for example, lists them simply as the "major acupoints of the neck and armpit regions".

It would appear that this neglect or avoidance in the Chinese tradition is a legacy of Jiayi (meaning in effect its source text, Mingtang); volume 3 of Jiayi has a long listing of all the acupoints individually, giving descriptions of their location, associated channel, needling and moxa directions, alternate names, and any special functions or status, for example, jing-well, luo, yuan, xi-cleft, meetings or intersections with other channels etc; no such special marker or name is applied to the acupoints in this group. Why this should be so is a mystery; it doesn't indicate that the system derives from a later date, since Jiayi includes the Lingshu 5 passage that has these acupoints embedded in an indirect form, and also has the Lingshu 21 listing, although not as a single block, its individual parts are separated and placed in different sections (but with the final sentence discussed below also included, indicating clearly that the Jiayi or Mingtang author extracted the five individual parts from an originally unified passage).

By contrast, this group is commonly regarded as a standard set of acupoints in the European tradition; they are seen for example in Felix Mann, JR Worsley, Van Buren, and more recently Deadman/Al Khafaji's "Manual of Acupuncture"; in all these they're named "window of the sky points". From the cursory examination I've made of this, it appears that this tradition of recognising them in European circles is a legacy of a translation of Neijing into French by Albert Chamfrault sometime in the 1950's or 60s. The Lingshu 21 passage ends by saying "these are the heavenly windows' five regions"; in the OICS English translation of Chamfrault made some time in the late 1970s, this is given as "these are the five great window of the sky points"; the French original is apparently "fenetres du ciel", which is of interest, because "ciel" exactly matches the Chinese tian1, in that both those words can mean both "heaven" and "the sky"; "window of the sky" is apparently the translation adopted by the English acumoxaist Felix Mann. "Heavenly windows" in Lingshu 21's concluding sentence is tian1 you3, which is the name of Tianyou Tb16; some editions instead of tian1 have da4 "big, great" (it differs from tian1 by only one stroke); Chamfrault's "great window of the sky points" appears to make use of both options. Taisu has "these are the five regions/parts [of] the great transporters", with no reference to either "window" or "heaven/sky"; Jiayi has the even further removed "these are the five regions/parts of the great transporters of the stomach". Chamfrault was a student of Soulie de Morant, so it might be supposed that the European "window of the sky" tradition ultimately derives from Soulie, but as far as I can see it's not in his work at all.

I've seen some discussion of this group of acupoints in English language acumoxa circles in recent years, with doubts raised as to whether it actually exists or has ever existed in Chinese acumoxa, or existed in Neijing. As this discussion shows, they most certainly are listed in Neijing, and in a fashion that suggests they are considered to be a set of special acupoints, similar in type to the five transporters, more than simply a casual, off-hand or arbitrary listing of a few acupoints. However, in the mainstream history of Chinese acumoxa, they don't exist as a defined entity or group, apparently due to their lack of identification as such in Jiayi. Their adoption by the European acumoxa community in the mid-20th century represents in my opinion not an error but a significant redress of that Jiayi/Mingtang omission almost 2000 years earlier.

Having said that, I don't necessarily endorse the view of their clinical use adopted by the European tradition, in which they're regarded as having special spiritual or psychological

significance, or a special function of opening the body out to the head and the heavens; those may be entirely reasonable and/or effective developments or extrapolations, but it's by no means correct to state or imply that they are the originally intended or intrinsic functions or properties of this group of acupoints; the only concrete indications of their clinical use are given in Lingshu 21.

In my view, the significant point about this group is that they mirror the other group introduced earlier in the present chapter, the lower he-meetings. That is, with the addition of the three lower he-meetings connecting or related to the hand yang channels, the he-meetings on the yang channels of foot form a complete set or "ring" of six yang channel acupoints. Likewise, the core feature of these neck or "tian" acupoints is that they form a complete set or ring of six yang channel acupoints. A reflection of this same notable yang-channel focus has already been seen in Lingshu 1 in relation to yet another set of acupoints, "when the five zang have illness you should treat the twelve yuan"; there's a significant element of it also in the "roots and ends" system in Lingshu 5, in which only the six yang channels have the extended listing discussed earlier, including yuan and luo acupoints etc, the yin channels instead have only a root and an end acupoint.

The yin chi moving channel is at Wuli, the forbidden of the five transporters.

Chi3 is a unit of measurement, in the Han period equivalent to about 9 inches, or 23 centimetres; because it's roughly equivalent to the English foot, it's often translated as that; unlike the English word "foot", it doesn't refer to that part of the human anatomy. In Neijing, the term is used to refer to the yin or anterior aspect of the forearm; examination of the state of the skin in that region, either alone or in combination with assessing the pulse, is one of the major Neijing forms or elements of diagnosis. In later use, chi3 was also used to refer to one of the three subsections of the region of the radial pulse at the wrist (the most proximal); it's typically considered that it doesn't occur in this sense in Neijing, although there's some debate on the point. In English, the word "cubit" is an old term for the forearm, and also for an ancient measurement based on the length of the forearm (Oxford: "an ancient measure of length derived from the forearm; varying at different times and places, but usually about 18–22 inches"); as a consequence of these shared meanings of "a measure of length" and "forearm", "cubit" is also sometimes used as a translation for chi3. See Lingshu 74.

The text here states that there's a "forbidden" point of some kind, named Wuli (wu3 "five", li3 a distance measure, as discussed earlier in relation to Sanli), on the "yin chi", the yin aspect of the forearm. The standard interpretation of this is that an acupoint listed with that name in Jiayi, Shouwuli Cn13 (this modern name has shou3 "hand, arm" prefixed to it), located on the upper arm 3 cun above Quchi Cn11, is a forbidden point that can cause mortal problems if it's needled, particularly if it's needled a number of times.

There are two other statements of the Wuli idea in Lingshu. Lingshu 60: "Meet Wuli in the middle of the path and halt [it], five arrivals and [it] stops, five goings and the qi of the zang is exhausted; so five fives twenty-five, and exhaust their transporting; this is what is called 'contending with heaven's qi." Lingshu 3, commenting on Lingshu 1's "contending with yin, death", says: "'Contending with yin, death' means treating Wuli on the chi, five goings" ("goings" in this is generally taken to mean draining needling). Neither of these passages offers a location for Wuli.

In its listing of acupoints, Suwen 58 says "great forbidden twenty-five, five cun below Tianfu (Lu3)"; the standard location of Tianfu is on the inner side of the arm, 3 cun below the axilla; 5 cun below that roughly accords with the location of Shouwuli Cn13. Commenting on this, Wang states explicitly that the "great forbidden twenty-five" means the acupoint Wuli; he then quotes the Lingshu 60 passage just given, and attributes another quote to Lingshu that isn't in the surviving edition, which says that Wuli is five li behind Chize Lu5 (which is in the middle of the bend of the elbow/cubital crease, near Quchi Cn11), in which "li" is apparently used as an equivalent for "cun", as discussed in relation to Zusanli earlier. Commenting on the present passage, Yang likewise says that "in the yin chi pulse" means "the moving channel [of] the five zang, located above the elbow, Wuli". Jiayi doesn't specifically identify Shouwuli as the forbidden Wuli referred to in these passages, but it does say that Shouwuli is in the middle of a large channel (possibly meaning a pulse), and that it's forbidden to needle.

There are some obvious difficulties with this identification of Shouwuli with the Wuli of the present passage; firstly, Shouwuli is on the outer arm, on a yang channel, not "yin"; and secondly, it's above rather than in or on the "chi" section of the arm; it's suggested that "yin" is simply an error for "yang", but no satisfactory explanation is given or the chi issue.

As with the "needling Shangguan" etc passage that interrupts the tian acupoints section above, there's no obvious relation between this sentence and any of the rest of the chapter.

The lungs meet the large intestine; the large intestine [is] the fu of transmitting pathways. The heart meets the small intestine; the small intestine [is] the fu of receiving fullness. The liver meets the gall bladder; the gall bladder [is] the fu of middle essence. The pancreas-spleen meets the stomach; the stomach [is] the fu of the five grains. The kidneys meet the bladder; the bladder [is] the fu of the jinye. The shaoyang connects/pertains to the kidneys; the kidneys ascend to link to the lungs; so it governs two zang. The three burners [are] the fu of the central ditches; water pathways emerge in it; [it] connects/pertains to the bladder; it is a lone/orphan fu. These are what the six fu meet with.

The lungs meet the large intestine: This paragraph lists the standard connections or partnerships between zang and fu, followed by a brief description of the nature or function of the fu only; there's a suggestion here again of the yang focus referred to at the end of the tian acupoints discussion above. Only five zang are included in the list, pericardium is not present; the sixth fu, the three burners, is consequently described as "a lone/orphan fu", not having a directly related zang.

The large intestine [is] the fu of transmitting pathways: Instead of dao4 "road, path", Taisu has that character with the "cun/inch" radical added, dao3 "to lead, guide, conduct, transmit"; Wang likewise has the graphically similarish song4 "to send, deliver", and also cites a Tang dynasty quotation of the Qin-Han text Hanshi Waizhuan (which isn't in the extant version of that text) that has shu1 "to transport, move"; Nanjing 35 has "the fu of transmitting draining moving/travelling pathways"; Yang (commenting on the dao3 version) says that this refers to the function of the large intestine transmitting or conducting dregs downward, of moving the matter that comes out of the stomach and small intestine, and that's the generally adopted idea, regardless of which version of the text is preferred.

The gall bladder [is] the fu of middle essence: Nanjing 35 and Jiayi instead of zhong1 "middle, centre" have jing4 "clean", and instead of jing1 "essence" have that character with the "water" instead of "rice" radical, qing1 "clear", giving "the gallbladder [is] the clear clean fu"; in the typical view, the two versions are regarded as meaning much the same thing; Yang says that the gallbladder is different to the other fu, in that it doesn't process the "muddy" substances or dregs that go through or come out of the digestive system (including urine); instead, it stores an "essence fluid", bile. Zhong1 "middle, centre" is taken to be a reference to the physical location of the organ in the middle of the thorax, or to the gallbladder receiving an essence (bile) that's considered to derive from the "middle" organs, the five zang.

The bladder [is] the fu of the jinye: Jin1 can mean "a ferry or crossing", or "to moisten"; ye4 refers to "fluids, liquids" generally; the combination of the two is a term specific to Neijing, used to mean the body fluids, the various liquids or moist substances that permeate and lubricate the body's tissues and joints; see Lingshu 30 regarding (one author's perception of) the differentiation between the two. Providing an accurate translation for them individually is a difficult question, the paired term and either character individually are all commonly translated as "body fuilds". Lingshu has 29 instances of the paired term, 4 other instances of jin1, 25 of ye4; Suwen has 12 instances of the paired term, 2 other instances of jin1, 18 of ye4. There are differences of opinion as to whether the function referred to here relates only to the bladder regulating urine, or to a broader relationship with the body fluids generally (perhaps in conjunction with the three burners, as discussed in the next note).

The shaoyang connects/pertains to the kidneys: Some take shaoyang to refer to the hand shaoyang three burners; Jiayi and Taisu instead have "shaoyin", which some take to refer to the foot shaoyin kidney. One view resulting from these possibilities (and the different possible readings of jiang1; see the next note) is that the indicated "zang" (purportedly being used in the general sense of "organ" rather than a yin organ specifically) are those apparently referred to directly in the text, the three burners, kidneys and lungs. A different view, based on the "shaoyin" version, is that the kidneys connect to both the bladder and the lungs. An alternative "shaoyin" based reading is that, since the kidney channel also connects to the lungs, it's thereby capable of having an association with two yang organs, the bladder, and also the three burners, which the next sentence says connects to the bladder. A connection between kidney and lungs is stated in the Lingshu 10 pathway of the foot shaoyin kidney channel, which also says the channel connects to the liver and heart.

So it governs two zang: As with the previous instance of jiang1 in this chapter, there are differing opinions here as to whether it means "govern, control, regulate", or "move, go" (that is, "so it goes to two zang").

The fu of central ditches: Du2 "ditch, drain"; that is, the body's internal fluid pathways. In this sentence, in contrast to its now-standard association with pericardium and fire, the three burners is instead not directly associated with any zang, but it is related to the bladder, and its functions are entirely water or fluid related; despite the lack of a direct zang partnership, these factors obviously suggest an association with the kidneys; that set of connections is specifically stated in Lingshu 47, "the kidneys meet the three burners and bladder"; note also the connection between bladder and three burners through the lower-he/meeting of the latter, Weiyang Bd39.

In spring, treat the network channels, all the streams, the great main channels' flesh dividing spaces; [if it's] severe, treat it deeply; [if it's] light, treat it shallow. In summer, treat all the transporters, the grandson networks, on the muscles flesh and skin. In autumn, treat all the meetings, the rest as the spring method. In winter, treat the regions of all the wells [and] all the transporters; [it] should be deep, and leave it. This is the sequence of the four seasons, the places where qi is at, where illness resides, what's suitable to the zang.

Treat the network channels: Opinions differ as to whether luo4 mai4 here means the network channels generally, the small channels branching of the larger main or warp channels; or the specific channels detailed in Lingshu 10, and the associated luo acupoints; the former is more commonly adopted here, the rationale being that in spring, qi begins to rise out of the deeper main channels into the more superficial network channels.

All the transporters: Since the passage uses the names of others of the five transporters, ying-stream he-meeting and jing-well, it's generally considered that shu4 here refers to the third of the transporters, rather than all five collectively; note also that, with this reading, there's a regular progression along the transporters through the seasons, ying-stream in spring, shu-transporter in summer, he-meeting in autumn, and jing-well in winter. Shu4 occurs again in winter, where some consider it refers to the beishu or back transporters rather then the shu-transporter, an understandable conjecture considering the departure it otherwise represents to this regular sequence.

The grandson networks: Sun1 "grandson", in Neijing used metaphorically to mean the third "generation" or layer of the channels, a set of channels even finer than the network channels.

On the muscles flesh and skin: Spring includes a directive to needle according to the state of the illness, deep if it's severe, shallow if it's light; this is consistent with the idea that spring is an intermediate season, between the yin of winter and the yang of summer. On the same basis, autumn has a directive to follow the same needling principle, to do "as the spring method". In winter, "[needling] should be deep, and leave it". Based on this pattern, "muscles flesh and skin" would appear to represent the superficial regions of the body, meaning that in smmmer, needling should be shallow; although it's not stated, comparison with the winter directive also implies that needling in summer should be of short duration.

Lingshu 44 has a passage in which the same five transporter seasonal associations are used, with the added point implied in the present passage, the jing-throughpass transporters are needled in long summer; see also the similar passage at the beginning of Lingshu 19, which has a different set of principles. (And also, the discussion of various seasonal needling principles in Suwen Q10.)

Turning sinews, stand and treat it, [this] can make [it] stop straightaway. Limp jue, stretch out and needle it, [this] can make [the patient] quickly feel better.

Another isolated fragment, with no apparent relationship to anything else in the chapter. There are two opposing conditions; the first is "turning sinews", using zhuan3/zhuan4 "to turn, transmit, revolve", meaning a muscular cramp or spasm, seen frequently in Lingshu 13, the "channel sinews" chapter. The second is "limp jue"; see the note regarding "jue"

(counterflowing, cold, numbness) in relation to "contending with yang, madness" in Lingshu 1; the first character is wei3 "to wilt, become flaccid, wither, shrivel, atrophy" etc.

For the spasming condition, the instruction is apparently to have the patient "stand up" (li4 "to stand up, erect; quickly, immediately") when needling. For the limp condition, the directive is to "stretch out" (zhang1 "to open, open out, stretch, expand"), apparently meaning the patient should be put in a comfortable position with the limbs spread or opened out, relaxed, loosened; some sources say this implies the opposite of the previous, that the patient should be lying down; needling is then applied (Jiayi instead of ci4 "needle" has yin3 "to draw, guide", which could refer to a needling action, or massage, or qigong-style exercises).

The final two characters of the passage are li4 "stand; straightaway" etc, as seen just before in "stand and treat it"; and kuai4 "quick, fast" (in which sense it's a synonym for li4) or "happy, pleasant, comfortable"; opinions differ on whether this combination means the formerly "limp" patient can "quickly/soon (kuai4) stand (li4)", or "straightaway (li4) feel better (kuai4)".

End of Lingshu 2

Lingshu 3: The small needle explained

The chapter title refers to the fact that this entire chapter is made up of quotations from the early part of Lingshu chapter 1, the "small needle" passage, followed by explanations of what the text means; in the translation, the Lingshu 1 text is placed in inverted commas. My general intent here is to comment only on the Lingshu 3 text itself, not to evaluate the explanations it proposes; for my views on the Lingshu 1 text, refer to that chapter.

What's meant by "easy to lay out" is easily said. "Difficult to enter" [means] difficult to explain to a person. "The coarse guards the shape" [means] guards/observes needling technique. "The superior guards the spirit" [means] guards/observes a person's blood and qi having excess [or] insufficiency, being able to supplement and drain. "Spirit" [and] "guest" [mean] proper and evil meeting together; "spirit" [means] proper qi; "guest", evil qi. "At the gate" [means] evil follows proper qi where it exits and enters. "Don't see the illness" [means] first understand evil and proper, what main channel [it's] an illness of. "How can you know its origin" [means] first understand what main channel [it's] an illness of, what places to treat. "The subtlety of needling is in quick and slow", the idea is slow and quick. "The coarse guards the passes" [means he] guards the four limbs and doesn't understand the going and coming of blood and qi, proper and evil. "The superior guards the mechanism" [means he] understands how to guard qi. "The movement of the mechanism doesn't leave the holes" [means] understanding emptiness and fullness of qi, using the slowness and quickness of the needle. "The mechanism in the holes is clear, clean and fine" [means] once the needle gets qi, pay close attention to guarding qi, don't lose [it]. "Its coming can't be met" [means if] qi is flourishing [you] can't supplement. "Its going can't be pursued" [means if] qi is empty [you] can't drain. "It can't be divided by a hair" means qi is easily lost. "Strike and it doesn't issue" means not understanding the meaning/idea of supplementing and draining; blood and qi are already exhausted and the qi doesn't go down. "Know its going and coming" [means] understand the counterflow and withflow, flourishing and empty of qi. "[You] must await the

moment" [means] understanding the time when qi can be got. "The coarse are in the dark" [means] ignorant, not understanding the subtle secrets of qi. "Marvellous, the workman alone has it" [means] thoroughly understanding the idea of the needle. "Going is counterflow" means qi empty and small; "small" [is] counterflow. "Coming is withflow" means balanced body qi; "balanced" [is] withflow. "Clearly know counterflow and withflow and properly perform without question" means knowing what places to treat. "Meet and contend with it" [means] draining. "Pursue and assist it" [means] supplementing.

Difficult to explain to a person: The verb in this can be zhu4 "to state or explain clearly", or also zhuo2 "to depend on, be close to, attach or adhere to", which some here take to mean "abide by, adhere to"; I think the ensuing "to a person" favours the "explain" readng.

Guards/observes needling technique: Shou3 "to guard, protect", or "to abide by, observe". That is, a mediocre practitioner applies standard needling methods, but without really understanding the principles underlying them, diagnosing fullness or deficiency of blood and qi, and applying the appropriate filling or draining.

Evil follows proper qi where it exits and enters: That is, as proper qi moves through the body, particularly through the couli opening to the outside through the skin, evil qi follows it, taking advantage of the openings and pathways that proper qi moves through, using these normal pathways to invade the body.

"Quick and slow", the idea is slow and quick: The characters for "quick" and "slow" in the first clause (shuo4, chi2) are different to those in the second (xu2, ji2), providing a clear explanation in the original text that only translates as a nonsensical repetition in English.

Guards the four limbs: That is, the commentator here takes "the passes" to mean the outer limbs, from the elbows and knees to the fingers and toes, the locations of the five transporters; a poor physician knows the locations of the acupoints in these regions and uses them mechanically or symptomatically, without properly understanding the principles of counterflowing and withflowing, filling and draining.

Doesn't leave the holes: The commentator takes the view that this means understanding the principles of fullness and emptiness of qi, and the consequent principles of quick and slow needling; it's not apparent to me how this reading is arrived at.

The qi doesn't go down: Xia4 "down, below, to descend" is here used to refer to the illness or evil "declining, subsiding"; that is, if a physician doesn't properly understand supplementing and draining, then in his attempts to expel evil qi, he instead first exhausts proper qi and blood, then keeps "striking, knocking" with the needle, trying to achieve an effect, but still the evil qi or illness doesn't decline or depart.

Balanced body qi: Ping2 "peaceful; balanced"; xing2 "shape, body".

What's meant by "empty then fill it" [is, when] the qikou (*qi mouth*) is empty then [you] should supplement it. "Full then drain it" [means if] the qikou is flourishing then [you] should drain it. "Stagnant and stale then remove it" [means] to remove blood [from] the channels. "Evil overcomes then empty it" means [if] all the main channels are flourishing, [then] drain the evil of all of them. "Slow and quick then [is] full" means slowly entering and quickly emerging. "Quick and slow then [is] empty" means quickly entering and slowly emerging. What's meant by "full and empty, as if there is, as if there's not" means fullness is having qi,

emptiness is without qi. "Examine after and before, as though lost, as though kept" means the emptiness [and] fullness of qi, the before [and] after of supplementing [and] draining; see [if] the qi has already gone down or is still existing. "There's emptiness and fullness, as though getting, as though losing" means supplementing [gives] fullness, as though having gained [something]; [when] draining, then [there's] a restlessness, as though having lost [something].

The qikou (qi mouth) is empty: That is, when the pulse if empty, supplement; when it's full, drain.

Slowly entering and quickly emerging: That is, insert the needle slowly, remove it quickly.

See [if] the qi has already gone down or is still existing: "Qi" here again appears to mean "evil qi", illness. Chang2 "normal, constant" appears to be used as an equivalent for shang4 "still, yet", a standard equivalence.

Supplementing [gives] fullness: Bi4 is a relatively uncommon character (this is the only instance in Neijing), meaning "full, suffused", here followed by the demonstrative or intensifying ran2 "so, thus, like".

A restlessness: Huang3 "restless, uneasy, distracted, frustrated, downcast". Some contend it's intended in the sense of a homonym meaning "vague, unclear", meaning that the patient feels a vagueness, a lack of clarity or unawareness. That same homonym can also mean "sudden", which some take to mean the patient should "suddenly feel as though having lost something", that is suddenly feel better, relieved. Others simply say that the patient should feel eased, relieved, or "as though having lost something", which seems to be more a paraphrase of the ensuing clause than a reading of huang3. As with bi4 in the preceding sentence, this is the only instance of the character in Neijing; it too is followed by ran2.

"The qi in the channels, evil qi is at the top" means evil qi strikes a person high, so evil qi is at the top. "Muddy qi is at the middle" means water and grains all enter into the stomach, their essence qi ascends, flowing into the lungs; the muddy flows into the intestines and stomach, meaning [if] cold and warm aren't suitable, drinking and eating aren't regulated, then illness is born in the intestines and stomach, so it's called "muddy qi in the middle". "Clear qi is at the bottom" means [when] clear damp earth qi strikes a person [it] must begin from the feet, so it says "clear qi is located below". "The needle sinks into the channel then evil qi emerges" [means] treat it above (*ie treat the upper region of the body*). "The needle middles the channel then muddy qi emerges" [means] treat the yangming meeting. "Needle a great depth then evil qi instead deepens" means [for] a shallow floating illness [you] don't want to needle deeply; [if you needle] deep then evil qi follows it [and] enters, so it says "instead deepens". "The skin, the flesh, the sinews [and] channels all have their place" means the main and network channels all have that which they govern.

Refer to the notes to the original passage in Lingshu 1.

The muddy flows into the intestines and stomach, meaning: The final character in this, yan2 "to speak, words, to mean", is used throughout the chapter, placed after a quotation from Lingshu 1, to introduce the author's comment on or interpretation of that original text; its inclusion here seems an error, since the preceding text isn't from Lingshu 1, and is clearly a part of the commentator's explanation of "muddy qi is at the middle".

Treat it above: Apparently meaning that, since "evil qi strikes a person high", treatment should be applied to the upper part of the body.

Treat the yangming meeting: For illnesses involving "muddy" qi in the stomach and intestines, needle "the middle", meaning an earth ("middle" in the five goes) acupoint on an earth channel, Zusanli St36, the earth/he-meeting transporter of foot yangming stomach.

The main and network channels all have that which they govern: Generally taken to mean that the channels all run through different parts of the body's skin, sinews and muscles, and so the different channels are suitable for treating disorders in different parts of the body.

"Treating the five channels, death" means there's illness in the middle, qi is insufficient, but the needle is used to completely and greatly drain all the yin channels."Treating the three channels only" means totally draining the qi of the three yang makes the ill person weak, [and he/she] won't recover. "Contending with yin, death" means treating Wuli on the chi, five goings. "Contending with yang, madness"; [these are] true words.

Treating the three channels only: In this citation of Lingshu 1, wei2 "only, alone" is incorrectly used instead of kuang1 "weakness" (refer to the note in Lingshu 1 regarding this character); kuang1 is correctly used in the ensuing explanation.

Treating Wuli on the chi, five goings: See the note on this topic in Lingshu 2. Wang3 "to go, leave, depart" is here generally taken to mean draining needling.

[These are] true words: An odd statement; one suggestion is that zheng4 "proper, true, upright" etc is an error for the character preceding it, kuang2 "madness", meaning that "mad words/speaking", wild or deranged speech, is a symptom of the disorder; whether this really amounts to a plausible clarification is debatable.

"Observe the colour, look at the eyes to know scattering or returning; single[-mindedly focus on] the body, listen to its movement and stillness" means the superior worker knows how to divine the five colours at the eyes, and knows how to examine the chi and cun (*the forearm, and the wrist pulse*), small and big, slow and urgent/quick, smooth and rough, in order to say what the illness is. "To know its evil and proper" means to know the theory of the winds of empty evils and proper evils. "The right governs pushing it, the left holds and defends it" means holding the needle and emerging and entering. "Qi arrives, then depart" means when supplementing or draining, [once] qi is regulated, then remove it. Regulating qi, from beginning to end, consists of single[-mindedness], holding heart. "The intersections of the joints, the three hundred and sixty-five meetings" [means] the network channels seeping into and irrigating all the joints. What's meant by "the qi of the five zang already cut off on the inside" [is] the maikou (*'channel mouth', the wrist pulse*) qi is cut off internally, not arriving, [and] instead treating the outside locations of the illness and the meetings of the yang main channels, and also leaving the needle to summon yang qi; [when] yang qi arrives then internally [there's] double/heavy exhaustion; [if there's] double exhaustion, then death; [at] the death there's no qi to move so [the person is] still/quiet. What's meant by "the qi of the five zang already cut off on the outside" [is] the maikou qi cut off externally and not arriving, [and] instead treating the transporters of the four extremities, and also leaving the needle to summon yin qi; [when] yin qi arrives then yang qi instead enters;

[when it] enters then [there's] counterflow; [when there's] counterflow, then death; [at] the death, yin qi is excess, so [the person] is restless. Why the eyes are examined [is because] the five zang make the five colours following and bright; [if they're] following and bright, then the voice is clear; the voice is clear then means the voice is different to ordinary life.

Knows how to examine the chi and cun: That is, "listen to/assess its movement [or] stillness" is taken to mean examining the pulse (the cunkou) and the chi/forearm. The context indicates that diao4/tiao2, typically meaning "to regulate, adjust", is here instead used to mean "examine, assess", apparently a Neijing peculiarity; see the note to "evaluate the chi" in Lingshu 74.

Empty evils and proper evils: The commentator here contends that "proper" and "evil" aren't intended as direct opposites, the body's proper qi as opposed to external evil; rather, they're two different types of evil or illness, "empty" and "proper" evils; the theory of these is expounded in Lingshu 4 and Suwen 26; an "empty evil" is a perverse or unseasonal climate that attacks the body; a "proper evil" is a normal or regular climate that's able to attack the body if it's in a weakened or exposed state, such as when sweating after working hard.

Emerging and entering: That is, taking out or inserting the needle.

Single[-mindedness], holding heart: Whether the author considered that "one" here means the "one thing" that needs to be observed in treatment, or "single[-mindedness]", isn't clear; but the ensuing comment shows that in effect the latter was his perception of the meaning of the Lingshu 1 text. Chi2 "to hold, grasp; keep, maintain" xin1 "heart" is a standard word, meaning the attitude or approach that a person takes to doing something, here meaning maintaining a focused and diligent attitude. This appears to be a comment on part of the opening sentence of the paragraph, "single[-mindedly focus on] the body", although since that clause just cited in fact consists of just the single character yi1 "one", it's difficult to be certain of this, and there's considerable debate and disagreement on the topic.

The intersections of the joints: This is the only citation in this chapter that's in a significantly different place or order to the equivalent original text; in Lingshu 1, it's in the next paragraph, the opening part of the "twelve yuan" section; this chapter has no other comment on any of that section, which suggests a likelihood that this isn't part of the original chapter, it's a comment added at a later stage.

The meetings of the yang main channels: He2 "meeting" is here generally taken to mean the he-meeting transporters of the yang channels. The parallel "transporters of the four tips/extremities" in the next part is considered to mean the five transporters generally, but I propose that the yin/yang patterning of these indications suggests it refers to the four transporters other than the he-meeting, those closer to the tips or extremities; they are considered suitable for treating yin illness, the he-meetings for treating yang illness. Compare this to Lingshu 4: "The streams and transporters govern/treat the main channels externally, the meetings govern/treat the fu internally."

Nanjing 12 proposes a quite different interpretation of what's meant by the qi of the zang being cut off on the outside or inside; "cut off on the inside" refers to a depletion of liver and kidney, which is incorrectly treated by supplementing lung and heart; "cut off on the outside" refers to the opposite, a depletion of lung and heart, which is incorrectly treated by supplementing liver and kidney.

Why the eyes are examined: This appears to refer back to the beginning of the paragraph, "observe the colour, look at the eyes", suggesting it may be a comment added at a later date to the rest. That initial impression is strengthened by the fact that it appears to draw on a section of Suwen 9 that discusses colours and voice (Lingshu 1 doesn't mention the latter): "The five qis enter the nose [and] are stored in the heart [and] lungs; [they] ascend [and] make the five colours ordered [and] bright, [and] the sound [of] the voice can be clear." "Ordered [and] bright/clear" in that text is a standard term, xiu1 ming2; instead of xiu1 "to order, regulate", Lingshu 3 has the graphically similar xun2 "to proceed, go along; to follow" (it and ming2 don't form a standard word); on the basis of this concordance, I think "ordered" is the actual intent of xun2 here; some agree with that assessment, others reject it.

The voice is clear: Zhang1, a character with numerous meanings, here apparently meaning "clear, plain, apparent", that is, clear and loud; Suwen 9 has that character with the "feathers" radical added, a homonym and synonym.

The voice is different to ordinary life: Ping2 sheng1 "ordinary life" is a standard word meaning "normal, ordinary, the usual situation"; this is typically taken to mean that a "clear" voice is one that has a marked difference to the average voice, or the ordinary or typical state of a particular person's voice.

End of Lingshu 3

Lingshu 4: Evil qi, zangfu, illness shapes

Huangdi asked Qibo saying: How does evil qi strike a person? Qibo answered saying: Evil qi strikes a person high. Huangdi said: Do high and low have measures? Qibo said: The body half way and above, evil strikes it; the body half way and below, damp strikes it. So it's said: evil striking a person is without constancy; striking in yin, then [it] flows to the fu; striking in yang, then [it] flows to the main channels.

Striking in yin, then [it] flows to the fu; striking in yang, then [it] flows to the main channels: The reasons for this are explained in the next two paragraphs.

Huangdi said: Yin and yang [have] different names [but] the same type/kind; above and below meet each other, the main and network channels pass through each other like a ring without an end. Evil strikes a person, whether striking in yin or striking in yang, above and below, left and right, having no regular constancy; what are the reasons for this? Qibo said: All the meetings of the yang, all are on the face. Striking a person takes advantage of when there's an empty time, either recently exerting strength, or drinking and eating, sweat emerges, the couli open and are struck by evil; striking on the face then [it] descends the yangming; striking on the nape then [it] descends the taiyang; striking on the jaw then [it] descends the shaoyang. Those that strike on the breast, the back, [and] both rib-flanks, also strike these main channels.

Yin and yang [have] different names [but] the same type/kind: This is generally taken to mean that the channels, while divided into yin and yang, are all fundamentally the same.

Like a ring without an end: Note the difference between this and Lingshu 2, in which the implied arrangement is that all the channels run from the extremities towards the trunk and head, and are not linked one to the next, the same as the Mawangdui arrangement.

An empty time: That is, a time when a person is in a weakened or "empty" state, such as after working, encountering wind while sweating etc.

The couli open and are struck by evil: Cou1 li3 is a common and important concept in Neijing; it refers to the gaps in the flesh below and through the skin, the pores, the openings through which the skin and flesh connect to the outside, through which sweat emerges, and through which evils are also able to invade the body; and also the "grain", striations, or "dividing spaces" in the flesh, the small gaps that exist between the body's tissues, that allow the passage of the channels, qi and blood. Li3 (among numerous other things) means the lines, grain, pattern, veins in materials such as wood or stone; cou1 means the same as the combined term, and has no other meaning. There are 41 instances of "couli" in Lingshu, and 5 of cou1 alone; Suwen has 25 of "couli", 6 of cou1 alone.

Striking on the jaw: Jia1, the region of the jaw beneath the ear, as seen in "not reaching the bend of the jaw" in Lingshu 2.

Yangming ... taiyang ... shaoyang: These refer to the leg channels, yangming stomach, taiyang bladder, and shaoyang gallbladder; they correspond to the regions indicated in the text, firstly the face for the yangming, the back of the neck for the taiyang, and the jaw for the shaoyang; and secondly the breast for the yangming, the back for the taiyang, and the sides of the ribs for the shaoyang. These channel connections appear to constitute the major part of Qibo's explanation to Huangdi's question, why does there seem to be no constancy or pattern to where illness strikes, that is, no pattern to what parts of the body are affected by the attack of evils; that statement initially seems a little puzzling, given that the text has just been discussing the regular way in which different types of evil attack high and low etc. Qibo's explanation has two elements; firstly, the evils simply strike different parts, the face, neck, jaw, etc; but more importantly in terms of the perceived randomness of the manifestation of illness, even if evils strike in a relatively limited area, or places quite close to each other, like the different regions of the head and neck, once they've struck, they're then transmitted to other parts of the body along the pathways of the channels that run through the originally affected parts, resulting in illness in places that seem quite unrelated to each other, and unrelated to the original site of the incursion or attack.

Huangdi said: How does it strike in yin? Qibo answered saying: Striking in yin normally begins from the arm [or] shin. The arms and shins, their yin skin is thin, its flesh is moist, so [when] everything is subjected to wind [it] only harms the yin. Huangdi said: Does this therefore harm the zang? Qibo answered saying: [If] the body is struck by wind it need not stir the zang; so, [if] evil enters into the yin main channels, then the zang qi is full, [so] evil qi enters and is not able to guest, therefore it turns back to the fu. So, striking yang then [it] flows to the main channels, striking yin then [it] flows to the fu.

Their yin skin: That is, the skin on the yin aspects or sides of the arm and leg, the anterior forearm, the medial leg and upper arm.

Its flesh is moist: The term translated here as "moist", nao4 ze2, is sometimes used to describe things that are very moist, slimy, boggy, which doesn't appear to be the intention here; refer to the note to "slimy moisture flows to the bones" in Lingshu 30.

It need not stir the zang: Dong4 "to move", here apparently meaning "stir, agitate, disturb".

The zang qi is full, [so] evil qi enters and is not able to guest: Ke4 "guest", here used as a verb, "to reside as a guest, to lodge". That is, the zang are strong, so evil qi isn't able to penetrate and lodge in them; this is similar to the Lingshu 71 explanation of the use of pericardium channel acupoints to treat the heart, "[the heart] is firm and strong, evil cannot be taken in"; that similarity is accentuated in the Jiayi version of the text, which, instead of ke4 "guest", has the graphically similar character used in Lingshu 71, rong2 "to take in, contain; bear, allow" (conversely, in Lingshu 71 Maijing and Taisu instead have ke4). The next paragraph in the present passage then states that, while external factors generally don't affect the zang, internal factors can, such as emotions, incorrect diet, sexual excess.

Striking yang ... striking yin: Note that the two areas discussed in relation to evil invading the body, the head and the arms and legs, are the areas that naturally tend to be exposed, rather than the trunk, which is generally covered and protected; this is presumably another aspect of or element in the question regarding why or how illness seems to strike randomly throughout the body, that is, if it's the head and limbs that are exposed to external evils, why do illnesses show up in other parts of the body.

Huangdi said: How does evil strike a person's zang? Qibo said: [If there's] worry, anxiety, fear [or] alarm/dread then [it] harms the heart. [If] the body is cold, [and] cold is drunk, then [it] harms the lungs; these two colds affect each other, inside and outside are both harmed, therefore qi counterflows and travels upward. Sometimes there's a fall, bad blood stays internally. Or sometimes there's great anger, qi ascends and doesn't descend, accumulating below the rib-flanks, then [it] harms the liver. Sometimes there's struck falling, or drunkenly entering the side room, sweat emerges [and] meets with wind, then [it] harms the pancreas-spleen. Sometimes there's exerting strength lifting a heavy weight, or entering the side room an excessive amount, sweat emerges, bathing [in] water, then [it] harms the kidneys. Huangdi said: How are the five zang struck by wind? Qibo said: [If] yin and yang are both affected, evil then gets to depart. Huangdi said: Good!

Worry, anxiety, fear [or] alarm/dread: Instead of kong3 ju4, both basically meaning "fear", Nanjing 49 has si4 lv4, both basically meaning "thought, thinking".

Sometimes there's a fall: The initial characters in this are you3 suo3, "having/being some/certain/that which", rendered fairly loosely here as "sometimes"; the construction is repeated four more times in the paragraph. "Fall" here is duo4 zhui4, both meaning "to fall down, drop", zhui4 also meaning "to hang down, droop"; the combination is a standard one, meaning "to fall down"; in this instance generally considered to mean falling or tumbling as a result of an accident or mishap, as opposed to one of the possible meanings of "struck falling" later in the paragraph.

Accumulating below the rib-flanks: Nanjing 49 omits this.

Struck falling (1): Ji1 "to hit, strike, attack", pu1 "to fall forward, to fall down"; there are two instances of this construction in this chapter; the second, the associated symptom of a "very big" pancreas-spleen pulse, is generally taken to refer to an entirely internal

condition, meaning that a person becomes giddy and faint, suddenly swoning, falling to the ground as if hit or struck by an external blow. In the present instance, in consideration of the various other external situations involved, "sometimes there's a fall", "exerting strength", "bathing in water" etc, it's instead typically thought to mean a person suffers an actual hit or blow of some kind and falls down. There's one other instance of the term in Lingshu, in chapter 77, preceded by the same you3 suo3 construction used here (see above), for which the internal "swooning" reading is generally adopted. There's also an instance of ji1 followed by duo4 "to fall, tumble" instead of pu1 (see the "sometimes there's a fall" note above) in Lingshu 24; it involves a key element of the previous "falling" condition in this paragraph, "bad blood" staying internally. Other than the citation from the "military method" in chapter 55, "don't attack (ji1) an imposing battle array", these are the only instances of ji1 in Lingshu.

Struck falling (2): For this sentence, Nanjing has "[inappropriate] drinking and eating, [becoming] fatigued and tired, then the pancreas-spleen is harmed".

Entering the side-room: This is a euphemism for "having sex". Fang2 is a common character, basically meaning "a room"; Shuowen specifically defines it as a side-room, not a main hall or room, "fang2 [means] a room on the side"; both Dacidian and Wang Li's definitions endorse that meaning, "in ancient times it indicated the rooms on both sides of the main room" (Dacidian); this nuance of a side or private room, rather than a main or public one, is obviously consistent with the idea of sexual activity; the translation "side-room" is an attempt to suggest the intended euphemism. There's a passage towards the end of Lingshu 66 that is a version of the present text; it likewise has two instances of "enter the side-room", which are the only other instances of fang2 in Lingshu (other than its use as a star or constellation name in Lingshu 76).

Exerting strength lifting a heavy weight: Nanjing for this has "sitting a long time on damp ground, exerting strength [and] entering water, then the kidneys are harmed".

Evil then gets to depart: One view of wang3 "to leave, go" is that it means simply "move", meaning that evil gets to enter into and move through the channels; Lingshu Lve instead has the graphically almost identical zhu4 "to stay, reside, be stationed", which makes more obvious sense.

Huangdi asked Qibo saying: The head, the face and the body are attached [with] the bones, connected [with] the sinews, [with] the same blood, unified by qi. [When] heaven is cold then it cracks the earth [and] freezes ice. [In] this thorough cold, though the hands and feet are sluggish, yet the face is not clothed. Why? Qibo replied saying: The twelve main channels, the three hundred and sixty-five networks, their blood and qi all ascends to the face and goes to the hollow openings. Their essence yang qi ascends [and] goes to the eyes and is/becomes sight; their separate qi goes to the ears and is/becomes hearing; their zong qi ascends to emerge in the nose and is/becomes smell; their muddy qi emerges from the stomach, goes to the lips and tongue and is/becomes taste; the jinye of the qi all ascends to smoke into the face; then the skin is also thick, the flesh firm; so heavenly heat [or] severe cold can't overcome it.

Yet the face is not clothed: That is, if the bones, muscles, blood, qi etc, all the different parts of the body are all connected and linked to each other, why don't they all respond the

same way to the same situation; why do the limbs become sluggish in the cold, while the face doesn't even need to be covered?

The hollow openings: Kong1 qiao4; the openings or orifices of the sense organs, the ears, nose, mouth, eyes.

Separate qi: Bie2 "to separate, part, leave"; I've seen no decent or convincing explanation of what this means; a number of sources cite Jiebin's comment, that "separate qi is qi travelling to/at the side, qi from the two sides ascends and travels to the ears" (whatever that might mean).

Zong qi: Zong1 means "ancestral, venerable; to gather, converge; basic, root", or also "many". In Neijing, it occurs in three compound terms of which there are multiple instances, combined with qi4 "qi", mai4 "channel, pulse", and jin1 "sinew, tendon", in each case with zong1 as the initial adjectival character qualifying the ensuing noun. Opinions as to its meaning differ from source to source, term to term, instance to instance. Refer to the discussion in Suwen Q2.

To smoke into the face: Xun1 "smoke, to smoke"; the idea of the body's qi or fluids permeating the body's tissues by "smoking" or "steaming" through them is seen on a number of occasions in Neijing.

Huangdi said: [When] evil strikes a person, what is the illness shape/form like? Qibo said: [When] empty evil strikes the body, shivering and trembling moves the body. [When] proper evil strikes a person, [it's] subtle, first seen in the colour/complexion, not perceived in the body, as though having, as though without, as though lost, as though kept, having shape, without shape, none knows its condition/state. Huangdi said: Good!

This is the theory referred to in one of Lingshu 3's explanations of the "small needle" passage; an "empty evil" is a perverse or unseasonal climate that attacks the body; a "proper evil" is a normal or regular climate that's only able to attack the body if it's in a weakened or exposed state, such as when sweating after working hard. The results of these two types of evil striking the body are quite different; an empty evil, being essentially perverse by nature, has a strong effect on the body, causing it to react noticeably, "shivering and trembling", and creates serious illness; a proper evil, because its nature is not as intrinsically perverse, only has a mild effect, "not perceived in the body", and is easy to remove or heal. Another passage related to this theory is seen in Suwen 26.

Shivering and trembling: Sa3/xian3 xi1, which could alternatively be rendered as "cold shivering": see the discussions of these characters in relation to "trembling, shivering with cold" in the stomach channel passage of Lingshu 10, and "cold-shivering" in Lingshu 66.

Subtle: Wei1 "small, slight; subtle; profound, abstruse".

As though having: Notice the similarity between this set of descriptions, using the connecting or dividing marker ruo4, and those in the Lingshu 1 "small needle" passage, "either there is, or there's not ... either retained or lost" etc.

Huangdi asked Qibo saying: I have heard that seeing the colour/complexion [and] knowing the illness is called bright; pressing the channel/pulse [and] knowing the illness is called spiritlike; asking [about] the illness [and] knowing its place is called workmanlike. I want to hear about seeing and knowing it, pressing and getting it, asking and reaching the highest point of it; how is this done? Qibo replied saying: The mutual correspondence between

colour, pulse and the chi is like the mutual correspondence between beater and drum, shadow [or] echo, [they] don't get to lose each other. Likewise also the signs appearing at root and tip, root and leaves; so if the root dies then the leaves wither. Colour, channels/pulse, [and] the shape/body flesh don't get to lose each other. So knowing one then is workmanlike, knowing two then is spiritlike, knowing three then is spiritlike, and furthermore, bright.

Seeing the colour/complexion [and] knowing the illness is called bright: See the discussion below.

Beater and drum, shadow [or] echo: It's not possible to hit a drum with a beater or drumstick and not produce a sound, or to have an object and not have a shadow, or a sound without an echo; likewise, a change in the roots of a plant must produce a change in the state of the tips or leaves; if the roots become ill, then the leaves will inevitably become ill in turn. In this same way, the state of health or illness of the body must be reflected in the chi, pulse. and complexion; the link between these three diagnostic indicators can't be broken, each must reflect or show something of the state of the others, they "can't get to lose each other".

The idea of a differentiation between three classes or grades of physicians is taken up again a couple of paragraphs later; between that paragraph and this, there are five different sets of statements on the subject.

The first of those in the later paragraph says that those who are good at evaluating the chi, assessing the state of the skin on the yin aspect of the forearm, don't need to relay on the cun, meaning the cunkou, the pulse at the wrist; those who are good at evaluating the cun or pulse don't need to employ diagnosis of the patient's complexion or colour; this implies the superior physician's primary tool is chi diagnosis, for the middling physician it's pulse, for the inferior physician it's complexion.

The initial set in the present paragraph says that being able to know the illness from the complexion is "bright"; knowing it from the pulse is "spiritlike", which presumably is superior to the previous; knowing it from "asking" is "workmanlike"; from the progression, you'd expect this to be the superior again to the previous; the somewhat mundane description "workmanlike" perhaps doesn't at face value suggest that, but there are passages in Neijing where gong1 "worker, workman" is clearly used to mean a superior physician, not an average or mundane one.

Immediately after this, the text restates these three steps as "seeing and knowing it, pressing and getting it, asking and reaching the highest point of it"; in the last of these, "reaching the highest point" is a translation of a single character, ji2 "pinnacle, highest point, utmost, extreme", which can also mean simply "to reach, get to" (some adopt that reading here); this appears to confirm what's implied in the previous statements, that "asking" represents the highest point of achievement, the "workmanlike".

The notion that "asking" about an illness represents the highest point of diagnostic skill is extremely unlikely; and it's curious that "asking" (wen4 "to ask, enquire", or also more broadly but less typically "to examine") doesn't correspond to any of the three diagnostic methods given in the set first discussed above, chi, pulse, and complexion, which are twice reiterated in "the mutual correspondence between colour, pulse and the chi" and "colour, channels/pulse, [and] the shape/body flesh don't get to lose each other", nor is "asking"

diagnosis discussed in the course of the chapter. On this basis, I think that wen4 is almost certainly an error or substitution for that character with the "hand" instead of the "mouth" radical, men2 "to touch, feel, stroke"; there is an instance of this equivalence in Suwen Q11, "enquire (wen4) as to what the illness is", for which Jiayi instead has men2 (Jiayi doesn't include the Huangdi question part of the present passage). With this alteration, these statements are all consistent, with feeling the chi as the highest point in all three cases. I haven't seen this proposed elsewhere.

The second set of statements in the later paragraph gives more direct names to the three classes of physicians, superior, middling, and inferior; they are those who know respectively all, two, or only one of the diagnostic methods; this is not inconsistent with the proposal just made. By contrast, the present paragraph, in the last of the five sets of statements, says that "knowing one then is workmanlike, knowing two then is spiritlike, knowing three then is spiritlike and furthermore, bright"; presuming for the moment that "bright" is the correct designation for the last of these (as the progression suggests it is), this is entirely the opposite of all the other statements. Some suggest that "one, two, three" here are meant in the sense "first, second, third"; viewed this way, with the "first" meaning chi, the "second" pulse, and the "third" complexion, this would be consistent with the proposal to this point. There is only one set of statements in which those three appear in that order, "those who are good at evaluating the chi don't depend on the cun" etc in the later paragraph. It might alternatively be suggested that "first, second, third" refer to these three diagnostic methods in their order of accomplishment, not the order in which they're listed at some place in the text. Also, the later paragraph has "two" and "one" clearly used in a numeric rather than ordinal sense, the middling physician knowing two, the inferior knowing one, which throws some doubt on the ordinal interpretation of the present paragraph.

Huangdi said: I wish to hear all about it. Qibo replied saying: The colour green, its channel/pulse [is] stringy; red, its channel/pulse [is] hooky; yellow, its channel/pulse [is] replacing; white, its channel/pulse [is] hairy; black, its channel/pulse [is] stony. [If you] see the colour and don't get the channel/pulse, instead getting the mutually overcoming channel/pulse, then [it's] death. [If you] get its mutually producing channel/pulse, then the illness will stop.

The colour green: Colours here are used to designate the five goes, green wood liver, red fire heart, yellow earth pancreas-spleen, white metal lungs, black water kidneys.

Stringy: Xian2 means the string of a musical instrument; also translated as "wiry".

Hooky: Gou1, a hook, a barbed object such as a fishhook.

Replacing: See the discussion of this pulse condition in Lingshu 23.

Hairy: Mao2 can mean the fur or feathers of animals, or any sort of hair on the human body; in Neijing it's commonly (although not always) used to mean the fine hair that covers the body, rather than the coarser hair on the head. "Feathery" might arguably be a better translation in this context, the pulse name, given that some early descriptions emphasise the light floating nature of the pulse; eg Suwen 19 "the autumn channel / pulse ... its qi arrives light, empty and floating"; Maijing "floating [and] light, like a slight breeze blowing the feathers (mao2) on a bird's back".

Stony: Shi2 "stone, rock"; Wang instead has jian1 "firm, strong, hard, solid"; Yang likewise says that one edition of the text has that.

The mutually overcoming channel/pulse: The pulse of the overcoming go or season of the illness; for example, in a liver illness, instead of the stringy pulse of wood, the hairy/feathery pulse of autumn/metal is seen. Likewise for the "mutually producing channel/pulse", eg in a liver illness, the stony pulse of water/winter is seen.

Huangdi asked Qibo saying: What are the illness shapes of the transformations that the five zang give birth to? Qibo answered saying: First establish the correspondences of the five colours [and] five channels/pulses, the illness can then be differentiated. Huangdi said: Once colour and channel/pulse are already determined, how is it differentiated? Qibo said: Evaluate the slow and quick, small and big, smooth and rough of the channels/pulse, and the illness tranformations are determined. Huangdi said: How are they evaluated? Qibo answered saying: The channel/pulse quick, the skin of the chi [should] also be quick; the channel/pulse slow, the skin of the chi also slow; the channel/pulse small, the skin of the chi also decreased and little qi; the channel/pulse large, the skin of the chi also bulging and rising; the channel/pulse smooth, the skin of the chi also smooth; the channel/pulse rough, the skin of the chi also rough; all these transformations have slight [and] have deep. So, those who are good at evaluating the chi don't depend on the cun; those who are good at evaluating the channels/pulse don't rely on colour. [If you] can examine [these] together and apply them [you] can be considered a superior workman; the superior workman, ten completes nine. Those who apply two are middling workmen; the middling workman, ten completes seven. Those who apply one are inferior workmen; the inferior workman, ten completes six.

The channel/pulse quick, the skin of the chi [should] also be quick: The characters used throughout this section to designate "slow" and "fast" pulses are huan3 and ji2; huan3 can also mean "relaxed, slack"; ji2 more typically means "urgent, tense, taut"; so both terms are capable of describing either the pulse or the condition of the skin in the chi section.

All these transformations have slight [and] have deep: Wei1 "small, slight, subtle; profound"; shen4 "severe, deep; very, extremely".

Examine [these] together: The last of these two characters is he2 "to join, combine; to meet" (as used for the fifth of the transporters); the first is can1 "to join in, participate; to examine, assess; mixed, various"; the combination of the two is a standard term meaning "to arrange or gather together and examine/assess; to examine or evaluate in an integrated, combined fashion"; refer to the similar use of can1 in "five and three the bans" in Lingshu 68.

Ten completes nine: That is, is successful in nine out of every ten cases; some suggest that quan2 "complete, entire" is a substitute for that character with the "illness" radical added, also quan2, "to heal, cure, recover from an illness", that is, "ten heals/cures nine".

Huangdi said: Permit me to ask: What are the illness shapes of the slow and quick, small and big, smooth and rough of the channels/pulse like? Qibo said: Permit [your] subject to talk about the illness transformations of the five zang. The heart channel/pulse very fast is contracting and slacking; slightly fast is heart pain drawing the back, food not descending.

Very slow is mad laughing; slightly slow is hidden beam located below the heart, travelling up and down, sometimes spitting blood. Very big is gurgling throat obstruction; slightly big is heart bi drawing the back, tears often emerging. Very small is frequent vomiting; slightly small is wasting dan. Very smooth is frequent thirst; slightly smooth is heart shan drawing the navel, small abdomen noises. Very rough is dumbness; slightly rough is blood overflowing, corner jue, ear noises, illness [at] the top of the head.

This is the first of five paragraphs, one for each of the zang, giving the illnesses associated with the six pulse types, fast, slow, big, small, smooth, rough, with each of those six having "slight" and "deep"; the latter, wei1 and shen4, are translated throughout these paragraphs as "slightly" and "very", eg "slightly rough", "very rough". These paragraphs have an unusually dense concentration of difficult passages and terms, particularly the names of illnesses.

Contracting [and] slacking: Chi4 zong4; convulsions, spasms, muscular fits; some sources say that chi4 refers to the contracting or tightening part of the process, zong4 the loosening or slacking; whether or not that's actually the case is unclear.

Heart pain drawing the back: Yin3 means "to guide; to draw, pull, stretch, drag/tug at"; that is, pain centred in the heart region, cardiac pain, that spreads or radiates out towards the back, as if dragging on or tugging, pulling at the back region; this idea of pain "pulling" at an associated region occurs commonly in Neijing.

Food not descending: That is, some sort of difficulty in swallowing or taking food into the stomach (possibly related to the pain radiating between the heart and back?).

Mad laughing: Laughing in a deranged or manic fashion; kuang2 "mad, insane". The broad idea of "madness" is one the modern medical profession eschews in favour of more specific diagnoses; and even when speaking in a general sense it prefers to avoid the pejorative social connotations of traditional words like "madness" and "insanity" by using more technical terms such as psychopathology; and of course the question of just what is and isn't insanity has become a much-contested one in modern legal circles. In this translation, I've preferred to use simple traditional words such as "madness, insanity", under the presumption that they're representative of the thinking of the authors and their period, referring to a fairly obvious loss of what would be regarded, in most civilised environments, as normal cognitive discernment and behavioural control; that loss is perceived as an unhealthy condition, and one that a good physician should attempt to address therapeutically.

Hidden beam: Fu2 "to bend over, lie down; to subside, go down; hidden, concealed, covered"; liang2 "a piece of wood or timber, a roof or bridge beam". "Hidden" or "deep-lying beam" is an illness described in a few different places in Neijing; the descriptions are sufficiently different that some sources consider the various instances refer to three separate illnesses; others regard them as variations of the same basic condition, with the common factor being hardened accumulations or lumps in the abdomen. In this instance, the accumulation is located below the heart; this is the normal explanation of the name, that it's a lump like a "beam" of wood that "lies/is hidden" below the heart. Its position isn't entirely fixed, it "moves up and down"; according to Taisu's commentary this movement up and down puts pressure on and damages the heart, which is why there is sometimes spitting of blood. This is one of a number of such accumulations or lumps described in Neijing; some others are mentioned later in the chapter. Nanjing 56 collects a number of

them and presents them as the "five accumulations" related to the five zang, with "hidden beam" given as the accumulation of the heart; the description of the condition given by Nanjing is the one usually cited, "the accumulation of the heart is called 'hidden beam', [it] rises above the navel, as big as an arm, [and] ascends to below the heart".

Gurgling throat obstruction: Jie4 literally means the sound produced by a constriction or blockage of the throat; some sources translate it that way in this instance, eg "rales" (Oxford "an abnormal sound additional to that of respiration, heard on auscultation of the lungs when these are not in a perfectly healthy condition"); but most place the emphasis on the blockage itself rather than the associated sound. Some consider that the character is equivalent to the same one with the "grass" instead of the "mouth" radical, also jie4, which means "blockage, barrier" (although I've seen no evidence of the existence of that meaning for that character in early times). The "mouth" form of the character occurs later in the chapter (in the list of gallbladder symptoms), where it's duplicated and followed by the demonstrative ran2 "so, thus" etc.

Heart bi: Bi4 is a common illness name in Neijing and Chinese medicine generally; it's commonly translated as "painful obstruction", and very often pertains to the limbs and joints, encompassing conditions such as arthritis, rheumatism, and osteomyalgia; that doesn't appear to be the intention here. There are two separate passages outlining bi of the five zang in Suwen (chapters 10 and 43); the composite picture of heart bi drawn from these is that it's a condition caused by longstanding obstruction (bi) in the channels that hasn't healed, and is then exacerbated by excessive mental strain or exposure to external evils; that causes exhaustion and emptiness of qi and blood, allowing evil to invade the heart and block its qi and obstruct its pathways, resulting in symptoms such as a feeling of oppression in the chest, pain in the cardiac region, becoming easily fearful, dry throat, and gasping asthmatic breathing. Here, as in the "slightly fast" pulse above, heart bi is associated with "drawing the back".

Wasting dan: This illness is specified for the slightly small pulse of all five zang. Xiao1 means "to disappear, vanish, remove, take away"; in Neijing it's used to refer to "wasting", meaning a condition in which both the substance and vitality of the body steadily decreases. The character dan1 can have various pronunciations and meanings. It can be an equivalent for a graphically quite different character, dan3, which is used in the term "yellow dan", basically meaning "jaundice"; it's generally agreed that's not its meaning in the present term. Pronounced dan4, it can mean "illness caused by overwork, fatigue", which again is considered not to be the meaning here. Pronounced tan2, it can mean "wind paralysis, paralysis" (Guangyun "illness [of] wind in the hands and feet"); there don't appear to be any instances in this sense in Neijing. Pronounced dan1, it refers to an illness characterised by "wasting", as explicitly indicated here, typically considered to be the result of an internal heat exhausting the body's fluids and other substances. In relation to some different illnesses ("dan nve/malaria", "pancreas-spleen dan") Wang defines dan1 as simply "heat"; in relation to "wasting dan", in one place he defines it as "hidden heat" (using fu2, as in "hidden beam" above), in another he says it's "damp heat; heat accumulates in the interior, so [it] transforms to become wasting in the middle; the symptom of wasting in the middle [is] often eating, but skinny". Zhicong instead contends that the basic meaning is that of the character with the "illness" radical removed, dan1 "single, alone", referring to "only" yang and heat being involved in the illness. Tamba maintains that the idea of "single, alone" might be plausible in relation to "dan

nve/malaria", but not in relation to "pancreas-spleen" or "gallbladder dan", or "wasting dan", in all of which the idea of "heat" is plausible, but without the involvement of "damp, moist" as Wang suggests. Regardless, the main symptoms of the illness are a morbid thirst that isn't satisfied by drinking, and wasting away of the body even though the person eats a great deal. There is an opinion, prompted by these basic symptoms, that it specifically means diabetes; whether that precise identification is applicable in all cases is debateable; the equivalence seems to be most particularly applicable to pancreas-spleen dan, as described in Suwen 47, which says the illness is caused by the overconsumption of sweet delicacies and fatty foods, the fat causes internal heat, the sweet causes internal fullness that overflows upwards and transforms to become wasting; again, that is not the specific condition involved here.

Heart shan: Shan4 is another class or type of illness for which the definition is both varied and imprecise. One meaning is something protruding or pushing out from the abdominal or thoracic cavity, or out of the proper area that it should be contained within; in this sense it's often translated as "hernia" or "rupture". It can also refer to a condition of acute pain in the abdomen or genitals, with obstruction of both defecation and urination; a number of sources say that it's not just pain in the abdomen but accumulations as well, eg Wang Bing calls them "accumulations/gatherings" of qi; another passage dealing with specifically "heart shan" in Suwen 17 says that associated with it there are "shapes in the small/lower abdomen" and Yang for example says that xing2 "shape, form, body" there means "shan accumulations"; some say that the condition also involves bulging or distension of the abdomen. When applied to the testicles, swelling appears to be regarded as a standard aspect of the condition. All sources agree that "heart shan" doesn't refer to a condition located in or centred around the heart; different suggestions are made for the involvement of the heart and consequent reason for the name; one is that the condition is caused by harm to the heart channel (usually said to be cold harm), possibly also involving the heart's related yang channel, the small intestine, through which there's a direct connection with the abdomen; another is that the basic illness, obstruction, or accumulation is in the abdomen, but it pushes or surges upward to affect the heart; or, there's a feeling that qi is rushing up from the navel to the heart; actually, the text here seems to state the condition in the opposite direction, saying there's "heart shan drawing (pulling at) the navel".

Small abdomen noises: The "small" or "lesser abdomen" means the lower abdomen, the abdomen below the navel. "Noise" means borborygmus, intestinal rumbling, bowel noises.

Dumbness: Inability to speak, mute, voiceless.

Corner jue: Refer to the "contending with yin, death" note in Lingshu 1 regarding the meaning of jue2. Wei2 can mean (among other things) "corner", which is the generally adopted meaning here, referring to the "four corners", the four limbs, "corner jue" thereby referring to the cold, numbness, or loss of or weakened function of the limbs commonly associated with jue. A note from a later editor (uncertain date) in Jiayi gives a different interpretation, saying that wei2 here refers to the yin and yang wei/linking channels, two of the "eight extra channels"; these do occur in Neijing (Suwen 41), but I haven't seen any source that adopts that interpretation. This is the only instance of the term "corner jue" in Neijing.

Ear noises: Tinnitus, ringing in the ears.

Illness [at] the top of the head: The character dian1 means "summit, apex, vertex", or specifically "the top of the head"; with the "illness" radical added it becomes dian1 "madness, insanity; epilepsy" (there's further discussion of this character in the next paragraph); the "illness" character is given in Jiayi, Taisu and Qianjin; most but not all sources ignore those variants, translating the Lingshu version at face value, as "illnesses in the head region" etc, taking the immediately preceding "ear noises" to be an instance of this general class of problem; some instead adopt the Jiayi/Taisu version, translating it as "madness".

The lung channel/pulse very fast is dian illness; slightly fast is hot and cold [in] the lungs, sluggish and indolent, coughing, spitting blood, drawing the yao, the back and the chest, sometimes the nose [has] fleshy growths [and] is not connected. Very slow is much sweating; slightly slow is limpness, fistulas, one-sided wind, sweat emerging from the head on down [that] can't be stopped. Very big is shin swelling; slightly big is lung bi drawing the chest and back, on rising having an aversion to daylight. Very small is draining; slightly small is wasting dan. Very smooth is breath rushing, ascending qi; slightly smooth is blood emerging above and below. Very rough is vomiting blood; slightly rough is rat fistulas located in the neck, limbs, [and] armpit spaces, below not overcoming/bearing above, correspondingly frequent aching.

Dian illness: Dian1 is the "illness" form of the character referred to in the last note to the previous paragraph; it appears to be a Neijing-specific character, with no earlier instances. It's yet another character that's used to refer to a range or number of different disease conditions, both on its own, and coupled with the character used here, ji2 "illness, sickness, disease; fast, quick". Instances of dian1 ji2 are defined as: (1) Madness; for example, in Suwen 45, jue of the yangming channel leads to dian illness, with "... a desire to walk [and] cry out, abdominal fullness, can't get to lie down, face red and hot, absurd sights and absurd words" (ie hallucinations and raving). (2) Epilepsy; for example, Lingshu 22 has an extended discussion of different sorts of "dian" illness, such as bone, sinew or channel "dian" illness; some of the included symptoms include "bent-back and rigid ... violent convulsions ... vomiting lots of foaming saliva ... suddenly falling down". (3) There are also instances of ji2 used in combination with another variation of dian1, using the "mountain" instead of the "illness" radical; that combination is used to mean epileptic, manic/madness conditions, or also head region illnesses. So here, with no supporting text to clarify or provide context for the term, it's not at all clear which of these possibilities is intended; with no clear basis to decide a translation on, I've simply transliterated the term in this instance; most sources instead say that here it means "epilepsy". Zhubing differentiates between dian and another illness, xian2; the latter only has one meaning, "epilepsy"; Zhubing says that in children below the age of ten years the illness is called xian2, in people above ten it's called dian1; the symptoms described (shared by both illnesses) are, the mouth and eyes pull at each other, the eyes turn up and shake, the hands and feet convulse, the spine becomes rigid, the neck turns backwards; this seems a fairly clear description of an epileptic fit; as far as I know, this is the earliest specific association of dian with children; presumably on this basis, it's still commonly defined as "infantile convulsions"; as the Neijing instances show, there's no such age factor involved in the original sense of the character.

Sluggish [and] indolent: Dai4 duo4; both these characters mean "lazy, idle; slack, sluggish"; here generally interpreted as "tired and lacking strength".

Drawing the yao: Yao1 is broadly defined as the region between the ribs and the hips, with a strong focus within that area on the back, not the abdomen; some define it more specifically as the lumbar region, the area centred on the lumbar vertebrae; quite a number of English sources restrict their definition to this region, rendering it as "lower back" or "lumbar"; Chinese definitions (to varying degrees) tend to be less positive about restricting it to the back region. That uncertainty is reinforced by an examination of some of the early non-medical usages; for example, Xunzi (3rd century BC, this chapter perhaps Han) says that a king of the state of Chu was fond of people with a small/fine yao, with the result that there were a lot of hungry people at court (the passage is repeated later in Houhanshu, 3rd-5th centuries AD); it's apparent that yao1 there means what we'd call the waist, the entire belt through the navel or mid-abdomen and lumbar back. I've only made a limited examination of this, too little to form a firm view on it, but ambiguity or uncertainty regarding the extent of the area that yao1 describes is clearly a factor in some instances, so at this point I've left it as a transliteration, yao.

The nose [has] fleshy growths: That is, nasal polyps/polypus, overgrowths of the mucous membranes of the nose, which can lead to obstruction and impairment of breathing ("not connected"). Literally, the text says "breath flesh"; the character xi1 "breath" is regarded as an error or substitute for that character with the "illness" radical added, also xi1, meaning "a polyp, polypus, an abnormal fleshlike outgrowth"; there's an instance of the "illness" radical version of the character in Lingshu 57, also followed by rou4 "flesh", as here, that refers to growths in the intestines; it's the only instance of that form of xi1 in Neijing (and apparently the earliest instance of the character anywhere), and it and the present passage are the only occurrences of either form of xi1 in combination with rou4. The English word "polyp", or more strictly a "polypus", is, according to Oxford, "a general term for tumours of various kinds, arising from a mucous or serous surface"; the earliest citations of the word are all related to the nose, eg 1398 "polipus is a superfluite of flessch growing of the nostrelles"; considering the two Lingshu occurrences, it's entirely possible that the evolution of the Chinese term followed a similar course to the English; that is, its focus was originally on the occurrence of such growths in the nose specifically, which suggests the possibility also that the original idea was what the text here says literally, "breath flesh", ie an abnormal fleshy growth in and obstructing the breathing or nasal passages, a nasal polyp; and that idea was later extended to other parts of the body, with the addition of the "illness" radical to the original xi1 "breath". There is an instance of the "breath" version of the combination in Shuowen, apparently used with the same meaning discussed here.

Limpness: Wei3 "to wilt, become limp" etc, as seen in "limp jue" in Lingshu 2.

Fistulas: Lou4; opinions differ as to exactly what this character means; some sources say abscesses or ulcers, others say fistulas (a passage or opening between two places in the body that shouldn't be connected, or where there should be no passage, that passage or opening often suppurating, purulent); some say it means swellings, tumours, or ulcers on the neck specifically; others say it can mean that, and also haemorrhoids or anal fistulas; the translation "scrofula" is also seen (enlargement of the lymphatic glands). In Chinese texts it's often defined by another term used in Neijing, "rat fistulas", lou4 preceded by shu3 "rat, mouse" (seen later in this paragraph; refer to the note below). In the present

sentence, Maijing and Taisu omit lou4; graphically it's quite similar to the preceding character, wei3 "limp", so it's possible that it's an erroneous interpolation or duplication of some kind; none of the sources treat it as such.

One-sided wind: Feng "wind", preceded by pian1 "inclined, partial, leaning to one side". There's only one other instance of this in Neijing, in Suwen 42; the more common term pian1 ku1 "one-sided withering" is seen in eg Lingshu 23, 75, 77, Suwen 3, 7, 28 etc, meaning hemiplegia, paralysis or loss of function on one side of the body; "one-sided wind" is defined as the same. Maijing and Taisu instead have lou4 feng1 "leaking wind" (there are only two instances of this in the main text of Neijing, both again in Suwen 42), which is defined as a condition where someone encounters wind after drinking alcohol, and that leads to sweating that won't cease, as if the person were "leaking"; that accords with the next symptom in the list, sweating that won't stop, on which basis some consider that "leaking wind" is the correct version of the text.

On rising having an aversion to daylight: I've taken qi3 "to start, rise" to mean "rising from sleep" (as it does for example in the term "rising and retiring", seen eg in Lingshu 66); there's no obvious reflection of the character in any other translation I've seen (for what reason, I don't know), all of them simply giving the general indication "aversion to light". Maijing and Qianjin have a quite different version of this clause, which links it to the previous, "lung bi drawing the chest and back, rising in the yao".

Draining: Xie4 (there are two versions of the character) means water rushing or pouring down, draining out; in Neijing it's the standard term used to mean "diarrhea". Maijing and Qianjin have "supper draining", watery diarrhea with whole undigested food or grains in it (seen in Lingshu 1).

Breath rushing: The first of these two characters is xi1 "breath" (as seen in "fleshy growths" above). The second has a number of different pronunciations, some say ben1, perhaps a majority say fen4; and also a number of meanings. It can mean "big, large"; or "to run, rush, dash"; or "to surge, swell, bulge", in which sense it's seen as a description of the state of the chi earlier in this chapter, "the skin of the chi also bulging (fen4) and rising"; or "the diaphragm", or the region around the diaphragm. Here the general thinking is that it means "rush, dash", and that it refers to a state of rushing or urgent qi, which matches the associated indication of "ascending (upsurging, counterflowing) qi". There are a few other occurrences of this term in Neijing; one in Suwen 7 doesn't give any clear insight into the nature of the condition; in Lingshu 13 it's seen in the descriptions of the disorders of two of the channel sinews, and is associated with rib and chest pain, and spitting blood; in Lingshu 47 it's also associated with rib pain and congestion. In the Nanjing 56 list of the "accumulations" of the five zang (discussed earlier in relation to "hidden beam"), this is the accumulation of the lungs; its associated symptoms include a condition called "overturned cup" (discussed in the next paragraph), located under the right ribs specifically (the same condition under the left ribs is associated with the liver), hot and cold shivering (some say shivering with heat and aversion to cold), gasping, coughing, lung congestion; for the most part, these don't derive from the Neijing passages just listed. A quite different view, based on Yang's commentary, is that ben1/fen4 here doesn't mean "rushing, upsurging" etc, but "the diaphragm" (this may be influenced by the Nanjing "overturned cup" condition, since it's located under the ribs, roughly in the region of the diaphragm).

Blood emerging above and below: Typically taken to mean bleeding from the nose and/or mouth, and the anus and/or genitals.

Rat fistulas: Lou4, as seen in the "slightly slow" pulse earlier in this paragraph, preceded by shu3 "rat, mouse". This term occurs a handful of times in Neijing; it's typically defined as purulent fistulas or openings formed by the rupture of scrofulous sores or swellings, so called because those openings resemble rat or mouse holes; the major exposition of this disorder is in Lingshu 70; refer to the note there. Some comments on the English term "scrofula": the precise meaning of the word has changed over time. In the last century or so it's been particularly associated with swellings of the lymphatic glands of the neck caused by tuberculosis; and "tuberculosis" in turn has been understood as an illness caused by a specific bacterium. But prior to the identification of a microbiological cause, "tuberculosis" meant any illness characterised by the formation of tubercles, rounded swellings or nodules on the body surface; and scrofula referred to glandular swellings in any area of the body, most commonly in, but not limited to, the neck, armpits and groin (areas of the body with some of the highest concentrations of lymph glands); "scrofula" in this translation is intended in its older sense, that is, it doesn't imply the exclusive involvement of a specific bacterial cause, nor is it necessarily limited to the neck, or the lymphatic system.

Below not overcoming/bearing above: Ma proposes that sheng4, typically used in Neijing to mean "overcome, defeat, dominate" (as in the sheng4 "overcoming, controlling" cycle of the five goes, the "ke cycle"), here instead means "to bear, hold up" (a standard meaning); "below doesn't bear above" means the legs are too weak to bear the weight of the body, to hold the body up; as a consequence, there is "frequent aching" in the leg muscles. Yang instead contends that "below and above" means the channels in the upper body are full (there's an implication that this is evidenced by the preceding "rat fistulas" forming on the neck and in the axilla, since those locations are on the pathways of the large intestine and lung channels), and the channels in the lower body are empty, so in five goes terms, a weakened or empty wood "below" (liver and gallbladder) can't bear or withstand the overcoming action of a full metal "above" (lung and large intestine). In the ensuing text, instead of shan4 "to be good at; much, often; frequently; to be prone to, have an inclination for", Taisu has xi3 "joy, happiness", which also means "prone to, inclined towards", or more directly "to like, be fond of"; and instead of suan1 "sore, aching", it has a homonym that can have that same meaning, or also "sour taste, acid"; in keeping with his "metal overcomes wood" reading of the previous clause, Yang takes this to mean that the person likes to eat sour food to strengthen wood and help it withstand the overcoming action of metal.

The liver channel/pulse very fast is vile talking; slightly fast is fat qi below the ribs like an overturned cup. Very slow is frequent vomiting; slightly slow is water lump bi. Very big is internal abscesses, frequent vomiting and nosebleed; slightly big is liver bi, yin shrinking, cough drawing the small abdomen. Very small is drinking a lot; slightly small is wasting dan. Very smooth is tui shan; slightly smooth is losing urine (*incontinence*). Very rough is overflowing drink; slightly rough is convulsions, sinew bi.

Vile talking: E4 "bad, wicked; to dislike, avoid" yan2 "words, to speak, say"; one view of this is that it means speaking abusively or vituperatively, or swearing, profanity, obscenity;

Qianjin instead of e4 has wang4 "rash, absurd"; a note in Jiayi says that one version of the text has that character with the "heart" instead of the "woman" radical, also wang4, "forgetful". A quite different view is that e4 is intended in the sense "to dislike, avoid" (a common usage in Neijing, in this sense pronounced wu4), "dislikes/avoids talking".

Fat qi: Fei2 means "fat" in the same senses seen in English, either "a greasy, oily, fatty substance", or "plump, stout, obese"; this is the only instance of this combination in Neijing; it's typically taken to refer to the ensuing "overturned cup".

Overturned cup: Bei1 "cup, drinking vessel" (still the standard character for this). This is generally taken to mean an accumulation in the region below the ribs, having an upside-down cup shape; as well as "overturned", fu4 can also mean "covered", and some do read it in that sense, "covered cup", referring to the "covering" of the ribs. As discussed earlier, in Nanjing 56, "overturned cup" is associated with two of the "five accumulations"; if it's below the ribs on the right-hand side, it's associated with the accumulation of the lungs, "breath rushing"; if it's on the left side, it's instead associated with the accumulation of the liver, "fat qi". Nanjing adds to its account of the liver condition that the "overturned cup has a 'head' [and] 'foot'" (meaning not clear), and if it goes a long time without healing, then it causes counterflow coughing and a type of nve (malarial illness).

Water lump bi: Jia3 means accumulations or lumps in the abdomen, typically from the solidification of stagnant blood or fluid; often translated as "conglomerations". Ma's view of the condition, which is adopted by a number of sources, refers to the structure of the character, which is composed of the "illness" radical with an old version of a character meaning "false, untrue"; Ma says that this name refers to the fact that these lumps are sometimes obvious and solid, at other times they loosen, scatter and become less defined, the site of the associated pain isn't fixed, hence they give the impression of being "false, illusory, inconstant". In the present case, the preceding shui3 "water, fluid" is typically considered to indicate that the lumps originate in accumulations of fluid, perhaps including blood; a number of sources say the lumps are located below the ribs, on what basis I don't know.

Yin shrinking: "Yin" here means the male genitals, "yin shrinking" is a contraction, shrinking, or retraction of them, perhaps influenced by or associated with the "cough drawing the small abdomen".

Tui shan: See the discussion below.

Overflowing drink: See the discussion below.

Convulsions: Chi4, discussed in earlier in relation to "contracting [and] slacking", considered by some to refer specifically to the contracting or cramping phase of a convulsive movement; here followed by luan2, a general term for spasms or convulsions; Jiayi and Maijing have zong4 instead of luan2, giving "contracting [and] slacking" (which produces no material change in the meaning); Taisu omits "bi" from the ensuing "sinew bi", giving instead "convulsing sinews".

Tui shan: As discussed in the heart paragraph above, shan4 can refer to conditions in which something protrudes out of or beyond its proper region, a hernia, rupture; or also conditions of acute pain in the abdomen or genitals; with suggestions that it might involve some form of accumulation or lumping as well. All sources say that the condition discussed here, tui shan, primarily involves the second of these factors, genital swelling and pain; some maintain it involves the first factor as well (protruding/rupture),

suggesting that it's caused by the intestines breaking through the abdominal cavity in the groin and impinging on the genitals; Yang's commentary involves this idea, as well as the idea of accumulations, saying "there are lumps in the small intestine, [they] surge downwards [causing] yin pain" (genital pain).

One isolated view (I emphasis that this isn't a generally adopted reading) links it to a passage in Lingshu 75 (which doesn't give a name for the illness it's describing) in which dietary or emotional irregularities cause internal overflowing of body fluids, which flow down into the scrotum, blocking the pathways there and leading to swelling of the testicles, as well as impairment of movement in the body generally, and difficulty bending backwards or forwards; the condition is treated using the "sword stone", apparently meaning a stone version of the needle of that name discussed in Lingshu 1, which is described as having "a tip as sharp as a sword, to get large [amounts of] pus"; the Lingshu 75 condition involves releasing fluid buildup rather than pus, but the principle is apparently considered the same.

The character tui2 occurs in three different versions, all with that same pronunciation; the one used here has the "illness" radical with the phonetic element gui4 "precious" inside that; this is the only form used in Lingshu, seen also in chapters 10, 13 and 49; it doesn't occur in Suwen. Another (used a number of times, in Suwen 49 only) has the "illness" radical again with a quite different element inside it, tui2 "to collapse, fall, droop, decline, ruined". The third form is that element itself (that is, the second character less the "illness" radical); there's only one instance of this, in Suwen 7, where it's used in combination with shan4.

Any of the meanings of the "radical-less" tui2 just listed could be considered a reasonable basis for the meaning of the character in this "illness" sense, relating either to the "collapse, prolapse" that some say is the cause of the condition, or to the "hanging, drooping" condition of the scrotum that some say it produces; a less common meaning of the character is "bald, bare", and one source suggests this is the basis of the name, a reference to the tight, shiny nature of the swollen scrotum, like a bald head. Dacidian's definition for tui2 shan4 uses the "radical-less" tui2, which it identifies with "shan qi", a term seen in the next paragraph of the present chapter.

The general (although not universal) practice in English is to transliterate this term (as here) rather than translate it.

Overflowing drink: Yin3 "to drink, a drink", here instead denoting a fluid disorder. There are only three instances of the term "overflow drink" in Neijing, the other two both in Suwen 17, which gives a brief description of the condition, saying that when a person has a violent thirst and drinks a great deal, the fluid can go outside the stomach and intestines and enter into the muscles and skin; the condition is associated with a glossy complexion, and a weak and scattered pulse (in contrast to the "rough" pulse here).

The idea of yin3 as the name of this type of disorder was expanded in Jinkui, which classifies four different types of yin3/drink illness, of which "overflow drink" is one; its description of it says that "[a person] drinks water [and it] flows [and] moves, going to the four limbs; when sweat [should] emerge then sweat doesn't emerge, the body [becomes] painful [and] swollen, this is called 'overflow drink'"; presumably by retrospective association with this, some sources state that the Neijing instances also refer to fluid accumulating in the limbs specifically.

Translations of yin3 in this situation vary, "fluid retention", "stagnancy", or simply "drink". Some, including Wiseman/Boss's, use "rheum" (eg "overflow drink" is rendered as "spillage rheum"); "rheum" means various kinds of secretions from the body's mucous membranes, such as those that are discharged from and gather in the nose, mouth, and eyes (in the eyes for example it dries to form the small encrustations that form in the corners of the eyes during sleep); in old European medical systems an abnormal condition of the rheum was regarded as a common cause of illness.

An association between "drink" disorders and mucus or phlegm is seen in a number of Chinese sources, some of them for example defining "overflow drink" as "phlegm drink", which is one of the four types of Jinkui "drink" disorders referred to earlier. "Phlegm/mucus" is a major concept in modern Chinese medical theory, considered to be a common cause of disease (just as "rheum" was in the European system), but it's a concept that's totally absent from Neijing; the Jinkui "drink" passage in fact appears to be the earliest instance of the character tan2 "phlegm, mucus", and Neijing has no direct equivalent or substitute for it.

Jinkui says that the signs of "phlegm drink" are, a person who is normally solid or big becomes thin, and when water goes into the intestines it makes a sloshing sound; this is obviously different to both its own and Lingshu's descriptions of "overflow drink". Zhubing by contrast says that "phlegm-drink [is] from the qi channels [being] closed [and] blocked, the jinye don't connect, water [and] drink qi stops in the chest [and] the fu, congeals and becomes phlegm"; what Zhubing calls "phlegm-drink" is clearly closer to the Neijing description of "overflow drink" than it is to the Jinkui description of "phlegm-drink". This altered idea of "phlegm drink" appears to have carried into modern times, to the point that "phlegm drink" and "overflow drink" are now regarded as virtually if not actually synonymous; for example, Dacidian's definition says that "phlegm drink" refers to a condition in which there's an excess of untransformed fluid or water in the body, it seeps into and stagnates in some area of the body, where it forms an illness; this is quite close to both Lingshu's and Jinkui's accounts of "overflow drink".

The pancreas-spleen channel/pulse very fast is contracting and slacking (*convulsions*); slightly fast is diaphragm middle, food and drink enters and returns, frothing foam emerging behind. Very slow is limp jue; slightly slow is wind limpness, the four limbs don't function, the heart alert as though without illness. Very big is struck falling; slightly big is shan qi, inside the abdomen [there's] much pus and blood situated outside the intestines and stomach. Very small is cold and heat; slightly small is wasting dan. Very smooth is tui 'long'; slightly smooth is worm poisoning [from] tapeworm or roundworm, abdominal heat. Very rough is intestinal tui; slightly rough is internal tui, much pus and blood descending.

Diaphragm middle: Ge2 "diaphragm" (the "flesh" form of the character), zhong1/zhong4 "middle, centre; to strike, hit". This term is defined by the text that immediately follows it, an illness in which food or drink is regurgitated as soon as it's ingested. Yang's commentary, which I don't find entirely clear, seems to imply that the illness is so-called because it's caused by cold in the pancreas-spleen and stomach spreading to and creating a blockage or obstruction in the throat, which goes through the "middle of the diaphragm"; no other source attempts an explanation of the name. In my view it's not clear, firstly, whether ge2 is meant in the sense of "diaphragm", or the same character

with the "mound" instead of "flesh" radical, also ge2, "separated, not connected"; and secondly, whether zhong1/zhong4 is meant in the sense "middle, centre" or "struck, hit, affected by an evil". Lingshu 68 is a short chapter that discusses a single condition, one that's described the same way as the illness here, "food [and] drink enters and comes back"; it calls the condition "ascending diaphragm" (which is in fact is the name of the chapter); the text goes on to relate the illness to the movement of parasites up and down in the digestive tract. In the present passage, Maijing has "fullness in the pancreas-spleen" instead of "diagphragm middle".

Frothing foam emerging behind: That is, foam or froth in the faeces. The final two characters are wo4 mo4; "foam, froth" is a standard meaning of mo4, not of wo4 "to pour, irrigate, wash, soak, immerse; fertile, rich (land)"; however there are four Neijing instances of this combination (the other three all in the same paragraph of Lingshu 22), all fairly clearly with the meaning "frothing, foaming".

The heart alert as though without illness: "Heart" here means a person's mental faculties, state of mind. Hui4 "wisdom, intelligence" is used in Neijing and subsequent Chinese medical texts to mean a clear alert, or calm comfortable state of mind; that is, even though the body is limp and weak, the person's mind is clear and calm.

Struck falling: See the discussion of this earlier in the chapter.

Shan qi: This is typically regarded as equivalent to the previously discussed "tui shan"; Dacidian's definition of the latter, for example, simply states that it's "shan qi", which it then says is caused by the small intestine protruding through a weak point in the wall of the abdominal cavity, leading to a protrusion in the groin region, or swelling of the testicles, sometimes with acute pain, all of which is consistent with the generally adopted view of tui shan. In this particular instance, a number of sources consider that shan is in fact a error; the basis for this is that the other four zang paragraphs in this section all include the "accumulation" listed in Nanjing 56; "hidden beam" in heart, "breath rushing" lung, "fat qi" liver, and "running piglet" kidney. Nanjing's accumulation for pancreas-spleen is "blockage/lump qi"; the first character of this, pi3, has a moderate graphic similarity to shan4, and Maijing has it instead of shan4 in the present passage. Pi3 is typically defined as either a general blockage in the body, the channels; or an accumulation or lump type of condition in the chest or abdomen; the character doesn't occur in Neijing (there are three instances in the Qidalun chapters). Nanjing describes it as an overturned object in the stomach cavity as big as a plate, with the associated factors being impairment of the limbs, jaundice, the nourishment from food not reaching the body's muscles and flesh; notably, none of these accord with the associated symptom given here, pus and blood in the abdominal cavity.

Inside the abdomen: Maijing and Qianjin omit fu4 "abdomen", and instead of li3 "inside" they have the graphically very similar guo3 "to bind, wrap, bundle"; some sources adopt this reading, that there is not just pus and blood outside the stomach and intestines, but "bindings, bundles, lumps" of pus and blood.

Tui 'long': The second of these two transliterated characters is in inverted commas to indicate that it is a transliteration, not the English word. Tui2, as seen above, refers to swelling of the scrotum or testicles, often with an accompanying pain pulling at the lower abdomen. Long2 refers to various urinary disorder states, such as frequent, painful or blocked urination, or constant "dribbling" urination; some contend that the primary condition here is tui, it gives rise to the secondary condition, 'long'.

Worm poisoning [from] tapeworm or roundworm, abdominal heat: That is, intestinal parasites creating infection and inflammation. "Worm poisoning" uses the common generic term chong2 "insect, bug, worm" with du2 "poison" etc; this is the only instance of the combination in Neijing. Precisely what the next two characters refer to, hui2 he2/xie1, is debatable; the former is an alternative form of a character meaning "roundworm"; the latter is typically defined as he2 "a woodworm", or xie1 "scorpion"; here I've rather arbitrarily used the names of two of the broad classes of parasitic intestinal worms, tapeworms or flatworms, and roundworms; the issue is probably not terribly material; there are two further instances of hui2 in Lingshu 24, none in Suwen; there are no other instances of he2/xie1 in Neijing.

Intestinal tui: The interpretation of tui2 adopted here is quite different to the previous instances in the chapter; Yang says it refers to a condition in which cold qi rushes downwards and strikes the rectum, pushing it out of the body, rectal prolapse; he also says that it could alternatively mean some kind of gynecological disorder, an interpretation adopted in some sources. Yet another view is based on the fact that a couple of editions, instead of tui2 (the "illness/precious" version), have that character with the "water" instead of the "illness" radical, kui4 "to burst, break", or "to ulcerate, fester", taken to mean festering and/or rupture in the intestines.

Internal tui, much pus and blood descending: Here, Jiayi, Maijing, Taisu and Qianjin all have the same substitution for tui2 discussed in the previous sentence, kui4 "to break, rupture; to fester, ulcerate"; in this case, that change is universally considered correct; so, instead of "internal tui", the perceived meaning is internal rupture or ulceration, with accompanying festering, rotting; this leads to the subsequent "descending" of pus and blood, that is, pus and blood in the faeces.

The kidney channel/pulse very fast is bone dian illness; slightly fast is deep jue, running piglet, the feet don't gather, not getting front or back. Very slow is breaking spine; slightly slow is rapid-flow; rapid-flow [means] food doesn't transform, descending the throat [it] returns [and] emerges. Very big is yin limpness; slightly big is stone water, rising at the navel then descending to reach the small abdomen, hanging down, above reaching the stomach cavity; death, not treatable. Very small is rapid-flow draining; slightly small is wasting dan. Very smooth is 'long' tui; slightly smooth is bone limpness, sitting [and] unable to rise, rising, then the eyes see nothing. Very rough is big abscesses (*yong*); slightly rough is no monthly, deep haemorrhoids.

Bone dian illness: As discussed in the lung paragraph earlier in this chapter, dian1 can refer to a range of illnesses, covering mental illness or madness, epilepsy or convulsions, or disorders in the head region; there's little in these (madness and epilepsy in particular) to suggest an obvious connection with the bones. Jiayi, Maijing and Qianjin add wei3 "limpness" after gu3 "bone", giving two separate conditions, "bone limpness [and] dian illness"; a number of sources adopt this reading, with "bone limpness" interpreted as an illness in which the bones and marrow become weak and aching, lose flexibility and the ability to support the limbs. However, although it might seem an unlikely combination or concept, "bone dian illness" is quite specifically discussed in Lingshu 22; that chapter is titled "dian madness", and in one section it discusses three illnesses it calls "bone dian illness", "sinew dian illness", and "channel dian illness"; the symptoms associated with

"bone dian illness" are fullness of the flesh-dividing spaces and acupoints in the jaw region, rigidity of the bones in the same area, sweating, vexation, and foaming at the mouth, a number of which tend to suggest an epileptic condition.

Deep jue: Chen2 "sinking, deep, heavy, severe"; the usual interpretation is that this means a state of serious jue; the main symptoms, based on Yang's commentary, are that the lower limbs are cold and very heavy.

Running piglet: Ben1 "to run, rush, hurry, dash", tun2 "piglet, pig". This is a much-discussed disease description that in fact only occurs this once in Neijing, and even this instance isn't in the equivalent Taisu text; it's typically taken to mean a sensation of qi rushing or dashing from the lower abdomen up towards the diaphragm and chest. Nanjing 56 lists it as the accumulation of the kidneys, and says that it emerges in the lower abdomen and ascends to below the heart, randomly moving up and down in that region like a piglet dashing about; if it's not healed and becomes chronic, it causes counterflow qi and gasping asthmatic breathing, bone limpness (see above), and a general lack of qi.

The feet don't gather: Shou1 "to receive; to gather, harvest" is commonly used in Neijing in the sense of "contracting", referring to the bending and stretching function of the sinews, muscles, joints etc; "not gathering" indicates inability to contract, slackness, limpness, loss of the normal tone that gives strength, that allows force to be applied.

Not getting front or back: That is, blockage or difficulty in both urination and defecation.

Breaking spine: Zhe2 "to turn, twist, bend, break, snap"; that is, a sensation of extreme pain or stress in the spine, as though it is about to break.

Rapid-flow: Dong4 "a fast, rapid flow"; later in the paragraph, xie4 "draining, diarrhea" is added to this, indicating explicity the basic nature of the condition. The typical meaning of the term is, as the name implies, a fast-flowing diarrhea, diarrhea that rushes or pours strongly out of the intestines and anus. Here, the text instead says that "food doesn't transform, descending the throat [it] returns [and] emerges"; that is, food is regurgitated after eating, similar to the "diaphragm middle" condition seen earlier; despite this explicit description, this is an atypical use of the term "rapid-flow" (although it's arguably consistent with another instance in the Yinbai/Taicang section of Lingshu 5).

Yin limpness: That is, impotence; as seen previously, "yin" is a standard euphemism for the anus and genitals; here it specifically refers to the penis, which is "limp", not able to get hard, to get an erection. In modern Chinese medicine, the standard term for this condition is actually stated the opposite way, "yang limpness", because it's limpness of the male/yang reproductive function; consequently, when you consult modern sources you get a definition that George Orwell would have been proud of, that "yin limpness" means "yang limpness"; the term "yang limpness" doesn't occur in Neijing, I don't know where it originates.

Stone water: Shi2 "stone, rock", shui3 "water, liquid". Based on the name and the ensuing description, this is presumed to be a fluid or edematous swelling, beginning in the region of the navel and going down into the lower abdomen. The description "hanging down" is a double-ran2 construction (a repeated character, followed by the adjectival modifier or demonstrative ran2 "so, such, thus"; refer to the discussions of these in chapters 26, 35, 64 etc); opinions on the pronunciation of the repeated character here differ, either chui2 or zhui4; it consists of the "flesh" radical with the character chui2 "to hang down, droop", and the composite character is defined as meaning the same, as is this doubled construction. Some sources state that the reason for the name "stone water" is that the

abdomen is swollen to the point that the skin becomes as hard as a stone, although there's nothing in the text indicate this explicitly, and that description is arguably at odds with the idea of "hanging, drooping"; an alternative possibility is that the lower abdomen is swollen and hanging or drooping downwards like a sack with a large stone inside it. There are differing opinions on whether the "above/ascending reaching the stomach cavity" indication is a standard part of this disorder, one that usually occurs, or a conditional one, one that only occurs in some cases; and consequently whether the "death" prognosis applies to all instances of "stone water", or only to cases in which the condition spreads or extends upwards.

'Long' tui: The same term as seen in the pancreas-spleen paragraph, but in the reverse order.

Bone limpness: This is defined as the bones and marrow becoming weak and aching, losing flexibility and the ability to support the limbs; a passage in Suwen 44 gives the basic elements of this description, relating it to heat lodging in the kidneys. This limpness or weakness is seen in not being able to rise after sitting down; bear in mind that "sitting down" here means sitting at floor level; chairs didn't become common in China till some 500 years or so later, in the Tang dynasty.

Rising, then the eyes see nothing: That is, temporary blurred vision or blindness on standing up. Maijing and Qianjin add that the eyes see "black flowers", Jiayi has the same but with "balls, pellets" instead of "flowers"; that is, visual disturbances, blurred vision ("seeing flowers" is the Chinese equivalent of the English idiom of "seeing stars"). Some sources interpret this as the reason for "not being able to rise"; that is, the person doesn't rise, not because his/her bones are too weak to ably support the action, but because he/she knows from previous experience that loss of vision or wooziness is likely to occur (this isn't a reading I endorse).

No monthly: That is, menstruation doesn't arrive, amenorrhea, menstrual blockage; the text says simply bu4 yue4 "no moon/month"; this is one of only two instances of that combination of characters in Neijing; the context of the other, in Suwen 7, makes it clear what's meant, prefixing it with nv3 zi3 "women".

Deep haemorrhoids: "Deep" here is again chen2 "sinking, deep, heavy, severe", as seen in "deep jue" above; there are different interpretations of it here; one view is that it refers to haemorrhoids that won't heal, a longterm "severe" chronic condition; another is that the haemorrhoids are inside the anus, "deep", not protruding externally.

Huangdi said: The six transformations of illness, how are they needled? Qibo replied saying: All fast [channels/pulses indicate] much cold; slow, much heat; big, much qi [and] little blood; small, blood and qi both small; smooth, yang qi flourishes, there's slight heat; rough, much blood [and] little qi, there's slight cold. So, needling fast, enter deep and stay a long time. Needling slow, enter shallow and quickly bring out the needle in order to depart/remove the heat. Needling big, slightly drain the qi, don't bring out blood. Needling smooth, quickly bring out the needle and insert [it] shallow, in order to drain yang qi and depart/remove heat. Needling rough, [you] must middle the channel, follow its counterflowing and withflowing, and stay a long time; [you] must first press and feel along it; having brought out the needle, quickly press the puncture, don't let blood emerge, in order to harmonise the channel. All small, [then] yin and yang, shape and qi are all insufficient; don't treat using needles, but regulate using sweet medicines.

Needling fast: That is, needling conditions where a fast channel/pulse is present.
Press and feel along it: Xun2 "to follow, go along; venerate, abide by" can also mean "to touch, feel, stroke", and appears to be used that way in quite a few Neijing passages, referring to "feeling along" the forearm chi for diagnosis, or palpating along the course of a channel before needling it, as here; see eg Lingshu 16, Suwen Q2. In the present instance, opinions differ on whether this action is carried out before needling, or before removing the needle.
Quickly press the puncture, don't let blood emerge: Wei3 "wound, sore, bruise" here means the point of needling, the needle puncture or hole. Some consider that the directive not to let out blood is inconsistent with the previous statement that the rough pulse is indicative of much blood and little qi; Jiebin for example says that this means the rough pulse indication is an error, and should instead say "little blood and little qi".

Huangdi said: I've heard that where the qis of the five zang and six fu [and] the streams [and] transporters enter is the meetings. What path do they follow to enter? Having entered where do they connect and pass to? I wish to hear these reasons. Qibo answered saying: These are the separates of the yang channels; [they] enter into the interior [and] connect to the fu. Huangdi said: The streams, transporters and meetings, do they all have names? Qibo replied saying: The streams and transporters govern/treat the main channels externally, the meetings govern/treat the fu internally. Huangdi said: How do you treat the fu internally? Qibo said: Treat them at the meetings. Huangdi said: Do the meetings all/each have names? Qibo answered saying: The stomach meets at Sanli (Zusanli St36). The large intestine meeting enters into Juxu Shanglian (Shangjuxu St37). The small intestine meeting enters into Juxu Xialian (Xiajuxu St39). The three burners meeting enters into Weiyang (Bd39). The bladder meeting enters into Weizhongyang (Weizhong Bd40). The gallbladder meeting enters into Yanglingquan (Gb34). Huangdi said: How are they selected? Qibo replied saying: Selecting Sanli, lower the instep. Selecting Juxu, lift the foot. Selecting Weiyang, bend and stretch and search for it. Weizhong, bend and select it. Yanglingquan, straight upright, the knees together and even, descend to the yang of Weiyang [and] select it. Selecting all the external main channels, lift/draw and stretch and follow them.

The separates of the yang channels: This could alternatively be translated as "these [are where] the yang channels separate to enter into the inside [and] connect to the fu". Since the central topic of the paragraph is the he-meeting acupoints of the yang channels on the legs, including the three lower he-meetings of the arm yang channels, I presume that bie2 "to separate, part; separate, other" here is a reference to the original Lingshu 2 description of the connection between the three burners and their lower he-meeting on the bladder taiyang channel, "the taiyang separate [channel], above the ankle five cun, [it] separates to enter and pass through the calf belly, emerges at Weiyang (Bd39)" etc. Bie2 is also routinely used in Lingshu 10 to refer to the starting points of the "luo" channels, but I don't think there's anything to suggest that these are involved or intended in any way. Instead of "yang channels", Jiayi has "yangming", which isn't anywhere adopted; although in fact the effective difference is reasonably minimal, since two of the lower he-meetings are on the foot yangming stomach.
The streams and transporters govern/treat the main channels externally: "Streams and transporters" appears to be used in a collective or representative manner here, meaning

the four transporters other than the meetings; these are suitable for treating "the main channels externally", whereas the meetings treat "the fu internally"; compare this to "the meetings of the yang main channels" in Lingshu 3.

Yanglingquan, straight upright: It's unclear what the precise intended action is for this acupoint. The final part of the indication is to "descend to the yang of Weiyang", meaning to go downwards from outside Weiyang Bd39, which of itself goes reasonably close to the standard location of Yanglingquan Gb34 (in a standing position). In the preceding text, it's not clear whether "straight upright" refers to a sitting or standing position (keeping in mind that "sitting" at this point in history means on the floor, not a chair); Jiayi and Taisu specifically add li4 "to stand, set upright", regardless of which it's commonly considered that this refers to a squatting or sitting position. It's also not clear what's meant by yu3 "to give, provide; to, at; and, with, the same"; some take it to be a reinforcement or restatement of qi2 "even, level, neat"; others consider it means "to cause, make", "make the knees level", which isn't a standard meaning of the character; I've somewhat arbitrarily translated it as an extension of the "with, and" meaning, "together"; regardless of the particulars, it's generally considered that the intended idea is that the knees should be together, or level.

Selecting all the external main channels: On the basis of the previous differentiation between "the main channels externally" and "the fu internally", this appears to mean, when selecting or locating the four transporters other than the he-meetings. The first character of the ensuing movement indication is yu2, meaning to lift or raise something, or draw something in or out, either or both of which is plausible here (if the latter is taken to mean "flex, move backward and forward, up and down"). The meaning of the final cong2 "to follow" is unclear; one suggestion is that you should "follow" or be guided by the features of the limbs that become evident when "lifting/drawing and stretching" them.

Huangdi said: I wish to hear about the illnesses of the six fu. Qibo replied saying: Face heat [is] foot yangming illness. Fish network blood, hand yangming illness. The channel above both insteps upright [or] sunken is foot yangming illness; this is the stomach channel. Large intestine illness: cutting pain in the intestines and a sloshing sound; [if a person on] a winter day is again affected by cold then [there's] draining (*diarrhea*), pain level with the navel, not able to stand up for a long time, the same symptoms as the stomach; treat Juxu Shanglian (Shangjuxu St37). Stomach illness: the abdomen inflated and swollen, pain level with the stomach cavity [and] heart, ascending [to] the limbs [and] both rib-flanks, diaphragm and throat not connecting, food and drink don't descend; treat Sanli (Zusanli St36). Small intestine illness: small abdomen pain; yao and spine pain drawing at the testicles; sometimes hard pressed behind; level with the ear [and] in front, heat; sometimes severe cold, sometimes severe heat only above/on the shoulder, and heat in the space between the little finger and next finger; or sunken channels; these are its symptoms, the hand taiyang illnesses; treat Juxu Xialian (Xiajuxu St39). Three burners illness: abdominal qi fullness; the small abdomen particularly firm; not getting small relief (*urination*); urgently hard pressed; [if it] overflows then the water stays, then there's swelling; the signs are located on the great luo outside the foot taiyang; the great luo is located in the space between the taiyang and shaoyang; also seen on the channel; treat Weiyang (Bd39). Bladder illness: the small abdomen swollen and painful on one side; use the hand to press it, then [the person] wants small relief (*urination*) and doesn't get to; above the shoulder, heat or sunken channels; and

the foot little toe outer ridge/edge and behind the shin [and] ankle all hot, or sunken channels; treat Weizhongyang (Weizhong Bd40). Gallbladder illness: frequently big breathing; the mouth bitter; vomiting stagnant juice; swirling below the heart; fearful that a person is going to seize you; gurgling blockage in the throat; frequently spitting; on the foot shaoyang root and tip; also look at the sunken-down of the channel, moxa it; cold and hot, treat Yanglingquan (Gb34).

Fish network blood: The small visible channels or blood vessels on the thumbpad, the thenar eminence.

The channel above both insteps upright [or] sunken: One view of shu4 "vertical, upright, erect" here is that it means "protruding"; that is, if the channel is either protruding, bulging, or else sunken, forming a depression, it's a symptom of foot yangming illness; instead of shu4, Jiayi and Taisu have the graphically very similar jian1 "hard, firm, solid", followed by ruo4 "like, as if"; that is, the channel is "hard and as though sunken"; a number of sources prefer this. Another view is that these descriptions refer to the state or quality of the pulse at Chongyang St42 on the instep, not physical displacements of the channel. The rest of the paragraph from this point gives conditions related to the six fu, all of which are treated using the leg yang channel he-meeting acupoints, including the three lower he-meetings; that list is entirely in keeping with the previous text of the chapter; these initial indications related to the foot and hand yangming channels are not, and there's no obvious logic to their placement here.

Cutting pain in the intestines: Qie1 "to cut, slice" is used to describe a pain with that sharp sort of sensation, just as in English.

A sloshing sound: Ming2 "sound, noise", followed by zhuo2 "to wash" repeated; that character doubled is normally defined as meaning "light, bright", but here it means a sloshing sound, as corroborated by a passage in Suwen 37, which uses the same three characters to refer to "a sloshing sound like a bag full of jiang" (the latter being an acetic fermented drink, a staple until some time in the 1st millennium AD).

Again affected by cold: Opinions differ on whether this means being hit by a cold evil on top of an already-existing large intestine illness, or being hit twice or repeatedly by a cold-evil, or by a double-cold evil, during winter. Chong2 "double, again" can also be zhong4 "severe, heavy", so this could say more simply "[on] a winter day, heavily affected by cold" etc.

The same symptoms as the stomach: An odd and essentially unexplained indication; the usual reading, based on Yang's commentary (which I don't find at all convincing), is that, because of the close functional link between the stomach and large intestine in the digestive system, disorders of the large intestine can be treated at its lower meeting, Shangjuxu, which is on the stomach channel (St37). Hou4 "sign, symptom" might alternatively be intended in another of the numerous senses in which it's used in Neijing, "to examine, diagnose" etc.

Ascending [to] the limbs [and] both rib-flanks: Instead of zhi1 "limb", Qianjin, and a citation of Jiayi in Xinjiaozheng, have that character without the "flesh" radical, zhi1 "branch", which can also mean "to prop up, support"; some sources adopt that version of the text, taking it to refer to "propping fullness in the ribs" (refer to the discussion of this concept in relation to the pericardium channel in Lingshu 10), or "blockage, obstruction" in the ribs

(another possible meaning of zhi1), or "extreme fullness" (I'm don't know what this reading is based on).

Diaphragm and throat not connecting: That is, there's an obstruction of some kind in the diaphragm or throat that impedes food and drink being taken into the stomach, causes difficulty in swallowing (disphagia).

Yao and spine pain drawing at the testicles: Kong4, normally "to control", can also mean "to draw a bow", a similar meaning to yin3 "to draw, pull, stretch; guide", the character more usually used for this "drawing, pulling at" idea.

Hard pressed behind: Jiong3 "difficult, awkward, embarrassed, hard-pressed"; this is generally taken to mean some sort of feeling of discomfort, strain, or pressing pain in the lower abdomen, or straining and/or pain related to defecating, or defecating and urinating; it occurs in the next paragraph as well, there related to a condition of blocked urination.

Level with the ear [and] in front: This, the shoulders, and the fingers correspond to the pathway of the small intestine channel, with the exception that it goes along the outer (medial) edge of the little finger, not between the little and ring fingers (which is the pathway of its related yin channel, the heart).

Sunken channels: The channels or blood vessels having a sunken, hollow, or empty appearance (see also the comments in relation to "the channel above both insteps upright [or] sunken" earlier in the chapter); the use of this same idea in the bladder indications later in the paragraph suggest this doesn't mean the channels generally, but the specific channel under discussion, the small intestine (or possibly heart) channel in the region of the little finger (although there's not general agreement on this view).

Urgently hard pressed: Presumably due to the association between the three burners and the bladder, body fluids, and urinary disorders in Lingshu 2, this instance of this idea is generally considered to refer to urination, not defecation; that is, an urgent feeling of wanting to urinate, but not being able to.

[If it] overflows: Typically taken to mean that retention of urine leads to fluid overflowing into the tissues, where it "stays", collects, stagnates, causing swelling and edema; a similar idea was discussed in relation to "overflowing drink" earlier in this chapter.

The great luo outside the foot taiyang: Luo4 appears to be used here in the sense "connecting, linking" rather than "network", apparently referring to the "separate" channel connecting the three burners to the foot taiyang bladder channel, as discussed in Lingshu 2. As discussed earlier, hou4 "sign, symptom" could be read as a verb here, "examine/diagnose on the great luo outside the foot taiyang".

Also seen on the channel: This is generally taken to mean that as well as using the luo or separate channel on the back of the leg to diagnose illnesses of the three burners, you can use the main three burners channel as well. Instead of yi4 "and, also", Maijing has the graphically very similar chi4 "red"; some adopt this, taking it to mean that redness on the back of the leg luo channel is a sign of illness.

Treat Weiyang Bd39: Jiayi has Weizhong Bd40; the consistent use of the respective he-meetings for all the other channels indicates this is incorrect.

Big breathing: This probably means sighing or long exhalations, rather than gasping asthmatic breathing.

The mouth bitter: Generally seen as a sign of the fluid of the gallbladder, bile, coming up into the mouth.

Vomiting stagnant juice: Su4 "to stay, lodge, stop, remain" is taken here to mean stagnant, stale. Zhi1 "juice" generally means water with some other element in it; according to the dictionaries, in Neijing it can mean just water, or the body fluids, or sweat, or sputum, spit, phlegm; exactly what fluid is intended here isn't clear; a common (but not universal) view is that it refers to bile being retched into the mouth, in keeping with the previous "bitter mouth" indication.

Swirling below the heart: Dan4 "the rising and falling of waves, undulation, rippling, tossing"; the character is doubled here; it's generally taken to mean a beating, pulsating, agitated or turbulent sensation, a physical symptom that accompanies the mental trepidation or paranoia of the next clause.

Gurgling blockage in the throat: See the discussion of jie1 in the heart pulse paragraph earlier in the chapter.

On the foot shaoyang root and tip: Jiayi, Maijing, Taisu and Qianjin all have hou4 "sign, symptom" before this, giving an equivalent indication to that seen in the previous channels, "the signs are on the foot shaoyang root and tip"; some instead say it means those places should be needled, which I think is unlikely, given the pattern of the rest of the paragraph. "Root and tip" are terms commonly used for the starting and ending points of the channels; interpretations of what they mean here vary; some consider it means just those two areas (which, from the list in Lingshu 5, means the next-to-little toe, and the region in front of the ear); a number of sources consider the two together mean the entire length of the channel, "from root to tip", from start to end; those that saw the previous clause as a reference to a needling rather than diagnostic area say that it means acupoints anywhere along the length of the channel can be used.

Look at the sunken-down of the channel, moxa it: Anywhere along the channel that has a sunken empty appearance, moxa it.

Cold and hot, treat Yanglingquan: The wording here implies that the Yanglingquan indication applies specifically and only to the immediately preceding "cold and hot"; given that in every other case the he-meeting is indicated to treat all the symptoms listed for the channel, that limitation in this instance seems unlikely. Precisely what's meant by "cold and hot" is unclear.

Huangdi said: Does needling these have a way? Qibo replied saying: Needling these [you] must hit the qi hole, don't hit the flesh and joints. [If you] hit the qi hole then the needle dips into the laneway; [if you] hit the flesh and joints then [there's] skin pain. Supplementing [or] draining contrarily, then the illness becomes more serious. Hit the sinews then the sinews slacken, evil qi doesn't emerge, struggling chaotically together with the true [qi] and not departing, instead turning back inside to stay. Using the needle not carefully, then withflow becomes counterflow.

The needle dips into the laneway: Xiang4 "lane, alley" is here apparently an instance of the same imagery of the channels as "streets, pathways" discussed in relation to the name Sanli in Lingshu 2; there's only one other instance of this character in Neijing, in Lingshu 81, not in a metaphoric sense, "the people don't go and come, gathering [in] the laneways, residing [in] the towns". Ran3, translated here as "dip into", means "to dye something with a pigment or colour", with various meanings derived by extension from that, such as "to contaminate, to influence (negatively), to corrupt, infect, pass on,

transmit (especially illness), encroach on, to get involved or participate in" etc; none of these seem appropriate here. Jiayi instead has you2 "to travel, wander, roam", which is universally regarded as correct, meaning that an acupoint presents a laneway or passage that the needle is free to enter and move or travel through. Ran3 can also mean "to use a brush to write or paint", or from that "to dip (a brush) in (ink)", or by further extension simply "to dip an object into"; I think that idea is quite plausible here, that the needle dips or plunges into the acupoint; the idea of "dipping" in, in fact rather suits the idea stressed in the ensuing text, that the needle should be inserted easily or unopposed into the body's spaces or gaps, not into the solid parts of "the flesh and joints", so arguably, this uncharacteristic character has been specifically chosen to emphasise that point. This is the only instance of ran3 in Neijing.

Instead turning back inside to stay: The final character in this is zhuo2 "to stick, adhere, stay close to" (a meaning some prefer here), or "to reside, stay, lodge, remain"; Taisu instead has bing4 "illness", which some adopt; that is, it turns back internally to become illness (which is in any case implied).

End of Lingshu 4

Lingshu 5: Roots and ends

Qibo said: Heaven and earth affect each other, cold and warm move each other. The way of yin and yang, which is little, which much? Yin's way is even, yang's way odd. Emerging in spring and summer, yin qi is little, yang qi much; yin and yang are not balanced, [so] which to supplement, which to drain? Emerging in autumn and winter, yang qi is little, yin qi much; yin qi flourishes and yang qi declines; so stems and leaves wither, moisture and rain descend and return; yin and yang are mutually shifting, [so] which to drain, which to supplement? Strange evils leave the main channels in insuperable numbers; if you don't understand root and end of the five zang and six fu, they break the bar, wreck the hinge, open the door and go; yin and yang are greatly lost and can't be regained. The profound essentials of the nine needles are in the ends and beginnings; so if you can understand end and beginning, one word and it ends; if you don't understand end and beginning, the needle way is entirely cut off.

Qibo said: There's no division here, as there normally is, between a question and a reply. Jiayi has "Huangdi" instead of Qibo, but again without a question/answer division. Despite the absence of markers showing it, there does in fact appear to be a division between an initial question and ensuing answer, the latter beginning with "strange evils strike the main-channels".

Yin's way is even, yang's way odd: Even numbers are associated with yin, odd numbers with yang.

Strange evils leave the main channels in insuperable numbers: Typically taken to mean that evils invade the channels then chaotically overflow them into the muscles, flesh, zangfu etc. Li2 "to leave, depart, go" can also mean "to violate, go against; to go or pass through; encounter, meet; suffer, sustain (hardship or injury)"; (in this last sense, the character used here was later replaced by a graphically quite dissimilar one without the

accompanying ambiguities); some prefer this reading, that the channels sustain, suffer from or are struck by numberless evils.

Which to drain, which to supplement: The point of these questions seems to be, if yin and yang are naturally and properly imbalanced through the course of the seasons, how do you tell what is an improper balance that should be treated? How exactly the ensuing text answers this question isn't clear.

Root and end: There are two common characters in Chinese that mean "root", ben3 (as used in the title of Lingshu 2), and that used here, gen1; both can mean "root" in the physical sense of the part of a plant that lies in the ground, or in a figurative sense, the beginning, source, origin, foundation of something. Jie2 means "to tie, knot" or by extension of that "to congeal" (it's used in that sense later in this chapter), or by further extension "to conclude, finish, end", which is the intended sense here; it can also mean "to put forth fruit or seeds" (an obvious extension of the "end, finish" idea), so this combination is sometimes translated as "roots and fruits"; these same two characters form the title of the chapter.

They break the bar, wreck the hinge, open the door and go: See the discussion of this below.

The profound essentials of the nine needles are in the ends and beginnings: This is reminiscent of "begin with one and end with nine" at the beginning of Lingshu 1, but the intent is in fact quite different, the "ends and beginnings" in question being those listed throughout the chapter, the acupoints at the different ends of the channels. "End" here is not jie2, as in the chapter title, "root and end" (for which "end" is a relatively uncommon or extended meaning; see above), but the more usual zhong1 "end, finish", the opposite of and common partner to the other character used here, shi3 "to begin, start; beginning".

One word and it ends: That is, you only need to know those things and the issue is settled; compare "those who know their essentials, one word and [it's] finished" in Lingshu 1.

The evils that leave or strike the channels in countless numbers "break the bar, wreck the hinge, open the door and go". The three objects in these clauses are: guan1 "gate, barrier, pass, key point; to shut, close"; shu1 "pivot, hinge, axle" (as in eg Lingshu "spirit pivot"); and he2 "to shut, close"; exactly what these signify is the subject of much debate.

There are four notably significant factors in relation to the question: firstly, in the coming paragraphs of this chapter, these three elements are identified with specific ones of the three yang and three yin channels. Secondly, in those paragraphs one of the three terms changes, guan1 "barrier, gate" is replaced by kai1, which means precisely the opposite, "to open, opening". Thirdly, there's another chapter of Neijing that has this same set of terms, Suwen 6; like the later paragraphs in this chapter, it also uses kai1 "open" instead of guan1 "barrier". And fourthly, the Taisu version of the text of both this chapter and Suwen 6 uses guan1 "barrier" throughout, as in this paragraph, rather than kai1 "open" as used in Suwen 6 and the later paragraphs of this chapter.

Looking firstly at the terms as they're used in this paragraph and throughout Taisu (guan1, shu1 and he2), the generally accepted reading is that they are the constituent parts of a larger structure. Guan1 means the bar that goes across a door to lock it, as seen on large old-fashioned doors, a heavy wooden or metal bar or plank slotted into or sitting in some sort of holder on the door frames so that it lies horizontally behind the leaves of the door and prevents them from swinging open. Shu1 means the pivot or hinge that a door hangs

and swings on. He2 means the door itself, the panel or leaf of the door. These are all standard meanings of these characters.

With guan1 "barrier" changed to kai1 開 "open", as it is later in this chapter, and in Suwen 6, the three terms no longer represent three constituent parts of the structure of a door. Instead, there's an "opening" kai1, replacing the previous guan1 "doorbar"; a "closing" he2, the same character used previously to mean the "door panel/leaf", but now interpreted in another of its standard senses, "to close", matching the "opening" of kai1; and a "pivot, hinge" shu1, retaining the same meaning as in the previous set.

Kai1 "opening" is in fact used in this present paragraph, along with guan "barrier, doorbar", but it's generally interpreted as a verb, describing the action of the third of the set, the he2 "doorleaf/closing", not a noun that's part of the set, "[evils] break the doorbar, wreck the hinge, open (kai1) the door and go". In this translation, the first six characters are regarded as a regular progression of a verb followed by a noun. But, on the basis of the kai1 he2 shu1 "opening, closing and pivot" set of characters in the ensuing text, some sources take a different view, that guan1 in the opening "break the barrier/doorbar", represents the full set or structure of the three parts of the barrier, not an individual one of the three; and of the four following characters, only the first is a verb, bai4 "to lose, defeat, ruin", the following three, including kai1, are all nouns, the three parts of the barrier; so, instead of "[they] break the doorbar, wreck the hinge, open the door and go", this sentence says "[they] break the barrier" (guan1, the composite or general barrier or function), wreck the hinge, the opening [and] the closing (shu1 kai1 he2, the individual parts of the barrier), and go"; Ma's comments, for example, are all based around this view.

The contexts in which these terms are used in this chapter and in Suwen 6 are different; here, there's a discussion of evils attacking the channels, then breaking through the "door/barrier" structures or functions into the body, where they cause harm. In the following paragraphs, that emphasis is continued; for each of the three (opening, closing, pivot), in both the yang and yin channels, it's specified what illnesses occur if those structures or functions are "broken", in all six cases using the character zhe2 "to bend, break, snap"; that is, if the opening breaks then X illness results, if the closing breaks then Y illness results, if the pivot breaks then Z illness results. So, in this chapter, the picture presented is very much one of defensive barriers; those defensive structures are under constant attack, and can be broken; if they are broken, the result is illness; that picture remains basically the same regardless of whether the guan1 "doorbar" or kai1 "opening" interpretation of the set of three parts is adopted.

The context in Suwen 6 is quite different; there's no discussion of evils attacking the body, or attacking these structures, or of these structures "breaking", or of illnesses resulting from such breakage or damage. Like the later paragraphs of this chapter, it gives a listing of the "root" points of the different channels; and, also like this chapter, says which of the channels correspond to which of the structures or functions, eg "taiyang is the opening" etc (more on this later). At the end of the entire list (at the very end of the chapter, in fact) it finishes by saying (paraphrasing loosely) that yin and yang constantly move without stopping, their movement accumulates to constitute the circulating of the channel system that transmits nourishment to the body, and qi on the inside and shape on the outside thereby complete each other. It appears that these closing comments have contributed significantly to the context in which the "opening, closing, pivot" concept is generally

interpreted, with an emphasis on the ideas of movement, circulation, the transmission of nourishment, and the movement or connection between the inside and outside regions of the body. That "normal functioning" rather than "defensive" view of the three joint terms is also considerably facilitated by the fact that most of the text of this chapter, and all of Suwen 6, uses kai1 instead of guan1, thereby not constituting a clear "door/barrier" image. The Taisu version of the present chapter instead uses guan1 consistently, but it was lost from sometime around the 11th century (Song) until the 19th, and so didn't contribute to debate on the issue; in any case, Yang's commentaries in Taisu also demonstrate a clear preference for the functional rather than defensive view, as discussed below.

So, despite the quite different setting in Lingshu 5, the principles from Suwen 6, focused on the performance of normal or proper internal functions, dominate most discussion and understanding of the "opening, closing, pivot" concept, and the idea of them forming defensive layers or having defensive functions is mentioned much less commonly. For example, Jiebin's Leijing is, like Taisu, a reordered version of the text of both Lingshu and Suwen, with passages with similar content from different parts of the original text placed together. Of the two chapters involved here, Zhang deals with Suwen 6 first, and says eg that in the yang channels, the "opening" is related to yang qi opening to the outside, the "closing" is related to storing qi internally, and the "hinge, pivot" is the intermediate position, from which qi can either go out or in; he then puts the Lingshu 5 text in the ensuing chapter, and in relation to the "opening, closing, pivot", he simply says that the principles of those have already been discussed in the preceding (Suwen 6) chapter, ignoring the quite different emphasis of the Lingshu 5 text on evils attacking, structures breaking, and the implied defensive functions.

The evidence for the guan1 "doorbar" version isn't entirely from the rediscovered text of Taisu; Suwen 6 includes a note from Xinjiaozheng which quotes from the next paragraph of the present chapter of Lingshu; that citation says, as Taisu, that "taiyang is the barrier/doorbar" (guan1), not "the opening" (kai1) as the present Lingshu and also Suwen 6 have; Xinjiaozheng also notes that Jiayi at that time also had guan1, whereas the now extant version of Jiayi has kai1, the same as Suwen 6 and extant Lingshu. Xiao Yanping, author of the first major edited edition of Taisu in 1924, adds to this that, whereas the standard editions of Suwen, Lingshu and Jiayi all have kai1 "open", the hand-copied versions of those texts in Japan instead have a character that is graphically almost identical to kai1, but is in fact a simplified or shorthand version of guan1.

In his notes to the Suwen 6 passage in Taisu, Yang Shangshan makes the "door" analogy explicit, saying that the three terms used are the three parts of a door; the first is the doorbar (guan1), which, he says, governs "prohibiting, stopping", that is, it is the key element in the "blocking, stopping, preventing access" action of the door; the second is the door panel or leaf, the body of the door (he2), which governs closing, shutting; and the third is the door hinge or pivot (shu1), which governs the turning and movement of the door. As stated earlier, this "door" imagery is lost once guan1 is replaced by kai1.

The ensuing text in the present chapter, and the text of Suwen 6, both give specific associations between the channels and the three structures or functions; they are exactly the same in both chapters. In the yang channels, taiyang is the "opening" kai1, yangming is the "closing" he2, and shaoyang is the "pivot" shu1. In the yin channels, taiyin is the opening, jueyin the closing, shaoyin the pivot. The normal interpretation of these is that

the "openings" represent the outside or external member of the three, governing "opening, issuing to the outside"; the "closings" represent the inside or internal member, governing "closing,sealing, storing on the inside"; the "pivots" represent the middle or intermediate position, governing movement or interchange between inside and outside; although, as far as I know, these positions aren't anywhere stated explicitly, they are obviously reasonable interpretations. Note that that arrangement matches the order in which they're listed in this initial paragraph of Lingshu 5, "[they] break the doorbar, wreck the hinge, open the door and go"; in other words, this opening sentence gives an exact picture of the path or progression that evils have to follow if they want to break through the channels and enter deeper into the body, to the zang and fu.

There's also a partial or imperfect correspondence between this arrangement and the physical layout of the channels on the body. On the arm, the yang channels progress from the taiyang small intestine on the little-finger or ulnar edge of the arm and hand, to the shaoyang three burners in the middle, to the yangming large intestine on the inside, the index finger, that is, taiyang shaoyang yangming, opening pivot closing, outer centre inner. The arrangement of the leg yang channels is the same, from taiyang bladder on the outside of the foot, to shaoyang gallbladder, then yangming stomach. That is, all the yang channels match the three parts of the system presented in this chapter.

The yin channels do not. For example, on the hand, the progression goes from lung on the outside, to pericardium, to heart; taiyin jueyin shaoyin, opening closing pivot. On the upper leg, the arrangement is the same, pancreas-spleen liver kidney, taiyin jueyin shaoyin, opening closing pivot; that changes on the foot to liver pancreas-spleen kidney, jueyin taiyin shaoyin, closing opening pivot. In either case, shaoyin, the "hinge, pivot" is inside both taiyin and jueyin, the "opening" and "closing". I have no suggestions as to whether there's any significance to this is, or what that significance might be, whether there's meant to be any relationship between this system and the layout of the channels, whether the correspondence of the yang channels is purely by chance, or whether the arrangement of the yin channels is deliberately different, and if so, on what basis.

Despite this lack of full agreement with the physical layout of the channels, this chapter's three-part arrangement is nevertheless regarded as the (or at least "a") functional arrangement of the channels.

As noted earlier, Yang's notes to the Suwen 6 passage make the "three parts of a door" idea explicit; but it's interesting to look at what he also says there. After saying that the first part is the doorbar, which governs "prohibiting, stopping", Yang says that the bladder (taiyang, the "opening" or "doorbar") governs stopping fluids flowing to the pores. Then the stomach (yangming, the "closing" or "door leaf/panel") governs stopping or resting the movement of true qi (in the sense of making sure it doesn't drain or scatter chaotically), but at the same time ensuring that it doesn't completely stop moving and stagnate; Yang sees this as being a "closing, shutting" or "door, door panel" function. The third part is the pivot, which governs turning and movement; here Yang says that the gallbladder (shaoyang, the "pivot") governs the sinews, which link to the bones and generate movement. So, while he clearly points out the idea of the parts of the door, he also makes it very clear that he sees the door as something that serves moving and storing functions, rather than defensive ones. There's nothing different in his notes to the passages from the current chapter that suggest otherwise, despite the factors in that text that suggest a defensive function, and also despite his own inherently "defensive"

description of the first or outer element of the door, the "doorbar", which he says governs "prohibiting, stopping".

In his notes to Suwen 6, Wang says that the "opening" is the foundation of movement and stillness; the "closing" has the power of firmly prohibiting, or securely preventing; and the pivot governs the subtleties, or the "profound, subtle" function of moving and turning.

As this discussion demonstrates, this is a reasonably difficult subject, and a decent investigation of it would require considerably more study; however, what's given here does give a decent basic view of the essential elements of the issue, where they're derived from, and why they are seen the way they are; and also why, in my view, this three-part system should be seen, not just as something that governs the movement of normal or proper elements or functions of the body, but also as defensive layers that evils must proceed through in order to invade the deeper levels of the body, the zang and fu. It's notable that, from what little I know of it, there appears to be a strong element of that idea in the six channels system used in Shanghanlun.

The idea that evils strike the body constantly, or "in insurmountable numbers" as it says here, but normally they can't succeed in invading and damaging it, is also seen eg in Suwen 3, "though there are great winds and severe poisons, they cannot do harm"; it's notable how strongly the picture presented in these passages matches that of the modern idea of the immune system, in which elements of the blood and lymph systems are constantly warding off potential disease-causing agents.

The taiyang roots at Zhiyin (Bd67), ends at Mingmen; Mingmen, the eyes. The yangming roots at Lidui (St45), ends at Sangda; Sangda clamps the ears. The shaoyang roots at Qiaoyin (Zuqiaoyin Gb44), ends at Chuanglong; Chuanglong, in the ears. Taiyang is the opening, yangming is the closing, shaoyang is the pivot. So, the opening breaks, then the flesh and joints are disordered and violent illnesses arise; therefore, for violent illnesses, treat the taiyang, examining excess and deficiency. "Disordered" means the skin and flesh are stagnant, withered, and weak. The closing breaks, then qi has no place to stop and limp illnesses arise; so for limp illnesses, treat the yangming, examining excess and deficiency. "Having no place to stop" means true qi stops and stagnates, evil qi takes residence there. The pivot breaks, then the bones shake and are not steady on the ground, so for bone-shaking treat the shaoyang, examining excess and deficiency. "Bone shaking" means the joints are slack and not gathering; what's called "bone shaking", shaking is the reason. [You] should exhaust the roots.

The following set of root and end acupoints involves the leg channels only.

Zhiyin Bd67: All the "root" or beginning acupoints in this paragraph and the following yin channels paragraph are the jing-well of the channel.

Mingmen: Ming4 "life, fate", men2 "gate, door", "life gate". This doesn't refer to the acupoint that now has that name, Mingmen Du4 (first seen in Jiayi). Nor is it in any way related to later "mingmen, life gate" theories of the kidneys, kidney fire etc (first seen in Nanjing), even though some do suggest such a connection; Zhicong for example comments that the taiyang "is water [and] fire, the origin of life", apparently referring to theories of the joint water/fire nature of the kidneys, and the bladder by association. There's a comment following the name Mingmen, as there is for all three of the end points in this paragraph, in this case saying "life gate (mingmen) [is] the eyes"; this is generally

interpreted to mean that the eyes are considered, as the English idiom puts it, the "windows of the soul"; that is, they are a key reflection or representation of a person's life. This association between the eyes and the bladder channel is usually taken to mean that the acupoint in question is Jingming Bd1, at the inner corner or canthus of the eye (as apparently first suggested by Ma). None of the three ending points in this paragraph has a known main or alternative acupoint name. The three added comments following those names are regarded by some sources as later notes or additions, not part of the original text; they're not in Taisu, and there aren't corresponding comments in the ensuing yin channels paragraph.

Sangda clamps the ears. Sang3 "forehead", da4 "big, great", "big forehead"; qian2 "tongs, pliers, pincers; to grip, grasp, pinch, clamp". Probably the most common view of this, as suggested by eg Ma, is that it refers to Touwei St8, at the "corner" of the forehead; one source proposes that the name refers to the "big junction" of the two hairlines (the horizontal frontal, and the vertical temple), that position "gripping, clamping" the head from both sides, in the region above the ears; the latter in fact aren't in particularly close proximity, but as mentioned earlier, some sources don't regard the "clamp" comment as part of the original text, and so don't consider a dieagreement with it to be a serious impediment to any interpretation of the location. Another viwe, as suggested by eg Zhicong, is that sang3 refers not to the forehead but to the region of the nasopharynx, the opening at the back of the upper mouth or palate; it is used in combination with another character in the term hang2 sang3 to (apparently) mean that location on a few occasions in Neijing, and that combination of characters is used in the Jiayi version of the present text, with da4 "big" omitted. An obvious problem with this interpretation is that this seems highly unlikely to be regarded as the location of an acupoint or a region that can be needled; also, it's not directly related to the pathway of the stomach channel; and, if the added comment is taken into account, there's no immediate connection between that location and the ears. Yet another suggestion, as seen in eg Jiebin, is that this is Daying St5, on the mandible or lower jawbone, roughly midway between the point of the chin and the angle of the jaw below the ear; this acupoint shares the character da4 "big" with Sangda; Jiebin says that Daying is "[above] the neck and sang3" (presumably interpreting the latter as "the back of the throat") and "beside/to the side of the ears", which again seems a fairly unlikely reading of this added comment. There is a similar listing of these "root and end" points in Lingshu 52; the locations it gives for the end points of the foot taiyang and shaoyang channels are the same as those given in this paragraph, but for this channel, the foot yangming stomach, it gives Renying St9, on the side of the neck, which it describes as being "[on] the jaw (jia2), flanking the nasopharynx (hang2 sang3)", a description that involves similar difficulties to the previous "pharynx" interpretations, and also, at face value seems more like a description of the location of Daying St5 than Renying St9; the second character in both those names is the same, ying2, and the first characters, ren2 and da4 could readily be mistaken or confused for each other.

Chuanglong, in the ears: Chuang1 "window", long2 is an equivalent for that character with the "bamboo" instead of the "grass" radical, long2 "cage, coop"; "window cage", which is "in the ears", or "the middle of the ears". Most take this to mean Tinggong Sm19, which is located directly in front of the centre of the ear; this identification is, again, apparently first made by Ma. Chuanglong is listed in Jiayi as an alternative name for Tianchuang Sm16, but despite that, none of the modern sources suggest that it's the location intended

here, although Ma Shi himself does note this fact, and poses this possibility, pointing out that, while both the other yang channels end on acupoints associated with their own channels, two of the yin channels in the next paragraph end on a channel other than their own (both on the ren channel in fact); Ma doesn't make this same point in regard to the principal acupoint he suggests, Tinggong Sm19, which is also not on the related channel; rather, he points to the fact that Tinggong is listed in Jiayi as an intersection or meeting acupoint of the hand and foot shaoyang and hand taiyang channels (three burners, gallbladder, small intestine), that is, he regards it as being on or related or connected to the gallbladder channel. I haven't seen any source that makes what seems to be the obvious alternate suggestion, that the acupoint in question is Tinghui Gb2, also located directly in front of the ear, only a very short distance below Tinggong Sm19.

The opening breaks, then the flesh and joints are disordered: The "opening" is taiyang, bladder. Some translations consider that jie2 "joints" here means the joins and spaces within the flesh, not the skeletal joints. Du2 "ditch, drain" is here apparently used in another standard sense, "to disorder, confuse; chaos".

The bones shake and are not steady on the ground: That is, the body is too weak to stand or walk in a firm steady fashion; instead, it rocks, shakes, totters. Yao2, the name of a type of plant, is here used as an equivalent for that character with the "hand" radical instead of xi4/ji4 "to tie" etc, yao2 "to shake, rock" etc. In the later comment, "what's called 'bone shaking', shaking is the reason", the first instance of "shaking" is the uncommon xi4/ji4 character (the four instances in this paragraph are the only ones in Neijing), the second is the common "hand" character, giving a meaningful clarification in the original text that seems a senseless repetition in translation. This comment in particular adds weight to the contention made by some, that the "means, what's meant by" comments added at the end of each channel section in this paragraph are later annotations.

The joints are slack and not gathering: That is, not bending and stretching as they should; see the note on shou1 in regard to "the feet don't gather" in Lingshu 4.

[You] should exhaust the roots: The verb in this is qiong2 "poor, impoverished, exhausted"; Taisu has a graphically similar character, qiao4 "opening, orifice"; Jiayi has a character that's graphically very similar to qiao4, he2, which in turn is a complex variant of a simpler character of that pronunciation meaning "to investigate, consider"; although Taisu has qiao4 "opening, orifice", the pronunciation it offers for that character is he2, suggesting that in fact it also originally had the complex form of he2 "to investigate"; this suggests strongly that Lingshu's qiong2 and Taisu's qiao4 are both errors, and the intended character is Jiayi's he2, "[you] should/must examine the roots". In the context of the chapter, this presumably means you should consider these illnesses in the light of the roots and ends of the channels. Again, there's some doubt as to whether this is part of the original text, or a later comment.

The taiyin roots at Yinbai (Sp1), ends at Taicang. The shaoyin roots at Yongquan (Kd1), ends at Lianquan (Rn23). The jueyin roots at Dadun (Lr1), ends at Yuying, ends at Danzhong (Rn17). Taiyin is the opening, jueyin is the closing, shaoyin is the pivot. So, the opening breaks, then the granaries have nothing to transport, [leading to] diaphragm rapid-flow; [so for] diaphragm rapid-flow, treat the taiyin, examining excess and deficiency; so if the opening breaks, qi is insufficient and gives birth to illness. The closing breaks, qi is cut off and there's frequent sorrow; [so for] sorrow, treat the jueyin, examining excess and deficiency.

The pivot breaks, then the channels have knotted places and don't connect; [so for] not connecting, treat the shaoyin, examining excess and deficiency; [when] there are knots, treat all the insufficiencies.

Taicang: Tai4 "great, big", cang1 "granary, warehouse", "great granary"; Jiayi gives this as an alternative name for Zhongwan Rn12. All three of the end acupoints in this paragraph are on the front midline ren channel. In this instance, there is a significant connection with the relevant channel, the foot taiyin pancreas-spleen, since Zhongwan is the mu acupoint (a category not dealt with systematically in Neijing) of its yang partner, the stomach.

Yuying: Yu4 "jade", ying1 "flower; outstanding, heroic; essence" etc; "jade flower/essence"; Jiayi gives this as an alternative name for Yutang Rn18.

Ends at Danzhong: After the usual "end", using jie2 as in the chapter title, there's an added "ending", instead using zhong1 "end", as discussed in relation to "the profound essentials of the nine needles" earlier in the chapter; there's no obvious reason for this added clause in this instance, nor have I seen an explanation offered for it. Opinions differ on whether "danzhong" here is the name of the acupoint (Danzhong Rn17, just a little below the previous "end", Yutang Rn18.), or a region of the body; refer to the notes in the three burners pathway in Lingshu 10.

The granaries have nothing to transport: The two characters cang1 lin3 both individually meaning a granary, somewhere grain is stored, and the same in combination; this image relates to the pancreas-spleen's association with the stomach, the source of nourishment.

Diaphragm rapidflow: The latter (dong4) typically means "fast-flowing diarrhea"; the two characters are everywhere considered to be two separate conditions, or at least two distinctly separate parts of the same condition, diarrhea in the lower body, and some form of blockage or disruption of the diaphragm in the upper body, perhaps a blockage that makes swallowing food difficult. Notably, the "rapidflow" instance in Lingshu 4 is entirely consistent with this last idea, referring not to diarrhea, but to food being regurgitated as soon as it's eaten, raising the distinct possibility that these two characters don't refer to separate conditions, they refer to that same single idea.

The closing breaks, qi is cut off: Instead of jue2 "cut off, exhaust", Jiayi and Taisu have chi2 "slow; relax, slacken, limp".

The channels have knotted places and don't connect: Jie2, the character used throughout the chapter to refer to the channel "ends", is here instead apparently used to mean "tie, knot, congeal" (a more common and standard meaning than "end"); that is, the channels are congealed, having knots, obstructions impeding their smooth flow, so they "don't connect" (tong1).

Treat all the insufficiencies: The meaning of this clause is unclear; Jiayi and Taisu omit "not sufficient, insufficiency", giving the more directly comprehensible "[when] there are knots, treat [them] all".

The foot taiyang roots at Zhiyin (Bd67), flows to Jinggu (Bd64), flows into Kunlun (Bd60), enters at Tianzhu (Bd10), Feiyang (Bd58). The foot shaoyang roots at Qiaoyin (Zuqiaoyin Gb44), flows to Qiuxu (Gb40), flows into Yangfu (Bb38), enters at Tianrong (Sm17), Guangming (Gb37). The foot yangming roots at Lidui (St45), flows to Chongyang (St42), flows into Xialing (Zusanli St36), enters at Renying (St9), Fenglong (St40). The hand taiyang roots at Shaoze (Sm1), flows to Yanggu (Sm5), flows into Shaohai (Xiaohai Sm8), enters at Tianchuang

(Sm16), Zhizheng (Sm7). The hand shaoyang roots at Guanchong (Tb1), flows to Yangchi (Tb4), flows into Zhigou (Tb6), enters at Tianyou (Tb16), Waiguan (Tb5). The hand yangming roots at Shangyang (Cn1), flows to Hegu (Cn4), flows into Yangxi (Cn5), enters at Futu (Cn18), Pianli (Cn6). These are what are called the twelve main channels. Flourishing networks, [you] should treat them all.

See the discussion below regarding the overall pattern of this list.
The foot shaoyang ... enters at Tianrong (Sm17): See the discussion of this below.
The hand taiyang ... flows into Shaohai: Shaohai Ht3 "small/lesser sea" is clearly an error or equivalence for the semantically identical and graphically almost so Xiaohai Sm8 "small sea"; the comments made below are predicated on this substitution.
Flourishing networks, [you] should treat them all: As with the ending statement of the previous paragraph, it's not clear what's meant by this, and no obvious correlation between it and the preceding text.

The text here proceeds to a completely different set of acupoints, with more acupoints on each channel, and involving only the six yang channels; the only similarities to the preceding set of acupoints are, firstly, that both sets begin with the jing-well acupoints; and secondly, that both involve acupoints in the upper part of the body (unlike, for instance, the transporter listings in Lingshu 2), fitting the title of the chapter, "roots and ends". Like Lingshu 2, consistent words are used to refer to the nature or quality of the flow of the channel at the four different steps involved; they are gen1 "root" (as in the chapter title), liu2 "flow", zhu4 "pour, flow", and ru4 "enter"; the last three of these are also used in Lingshu 2, although the acupoints associated with them in that chapter are different to those given here.
There is a mostly regular pattern to the acupoints involved. The first stage, where the channel "roots", is the jing-well acupoint; the second stage, where the channel "flows" (liu2), is the yuan; the third stage, where the channel "pours, flows" (zhu4) is the jing-throughpass. The fourth and final stage, where the channel "enters", has two acupoints in each case; the first, the "end" or upper body acupoint, is the "heaven" or tian acupoint, as also listed in Lingshu 2; the second is the luo or linking acupoint, as listed in Lingshu 10. There are three deviations from or anomalies to this pattern; in the second stage, the hand taiyang small intestine has Yanggu Sm5, which is the jing-throughpass, not the yuan; in the third stage, the hand taiyang small intestine channel (again) has Xiaohai Sm8, and the foot yangming stomach has Xialing, meaning Zusanli St36, both of which are the he-meeting, not the jing-throughpass.
Leaving aside the fact that the tian, which are all obviously much further along the course of the channel, are listed before the luo in the final "joint" step, these are all, like the five transporters, located sequentially along the pathway, with the single exception of one step on the three burners channels, the jing-throughpass Zhigou Tb6 is further from the extremity than the luo Waiguan Tb5.
The systematic correspondences between this system and three systems found in other chapters of Lingshu, the five transporters, the tian acupoints, and the luo acupoints, suggests strongly that this list is a compilation from and therefore later than all those systems.

Lingshu 2 assigns Tianrong Sm17 to the foot shaoyang gallbladder, not the now standard hand taiyang small intestine, and also gives a location for it that's consistent with the standard location of Tianrong. The present passage likewise assigns Tianrong to the foot shaoyang.

Jiayi's principal description of Tianrong instead says that it's a hand shaoyang three burners acupoint; in its transcription of the present passage, Jiayi has a note added (date unknown) saying that Tianrong is suspected to be an error.

Yang stays with the Neijing view, but in a slightly altered fashion, saying that Tianrong is on the foot shaoyang "proper" channel, that is, what's more commonly called the gallbladder "separate" or "divergent" channel, which Lingshu 11 says goes from the heart upward on either side of the throat, then to the chin and cheek etc.

Waitai Miyao, a large general medical work with an acumoxa section included (Tang 8th century) appears to be the first source to state that Tianrong is on the hand taiyang small intestine. That opinion is subsequently mirrored in two major works on the locations of the acupoints and pathways of the channels, Tongren (11th century Song) and Shisijing Fahui (14th century Yuan), and it remains the standard opinion.

In relation to the discrepancy between what Lingshu says and what was by then the standard view, Ma, author of the earliest dedicated Lingshu commentary (late 16th century Ming), consistently (here and in Lingshu 2) adopts the view that the text should say Tianchong (Gb9) instead of Tianrong (refer to the note on this in Lingshu 2).

Jiebin (Ming early 17th century), in Lingshu 2, at first says there seems to be an error, because Tianrong is on the hand taiyang, not foot shaoyang; then after noting that the location indicated for the foot shaoyang acupoint a little later on does agree with the location of Tianrong, says that the duplication suggests it's not just an error in the text, so the ancients must have regarded it as a foot shaoyang acupoint; in the Lingshu 5 foot shaoyang "root and end" listing he seems to have forgotten that comment, and simply says that Tianrong is an error, and like Ma says that it should say Tianchong (Gb9).

In my view, the Lingshu evidence is substantial, leaving little likelihood that there's an error involved; that is, it seems quite clear that Tianrong was initially considered to be a foot shaoyang gallbladder acupoint. The evidence on the topic is sufficient to make the issue of Tianrong's channel assignment far from a dead subject in the standard sources, some of which express the same view, that Tianrong should be assigned to the foot shaoyang (gallbladder) channel, and that its current assignment is possibly the result of a sequence of errors, from foot shaoyang to hand shaoyang in Jiayi, then to hand taiyang in Waitai.

One day and one night [has] fifty circulations in order to circulate/nourish the essence of the five zang. Not corresponding to this number is called deranged life. What's meant by fifty circulations is the five zang all receive qi. Grasp the channel mouth and count their arrival. Fifty movements and not one stoppage, the five zang all receive qi; forty movements, one stoppage, one zang is without qi; thirty movements, one stoppage, two zang are without qi; twenty movements, one stoppage, three zang are without qi; ten movements, one stoppage, four zang are without qi; not fully ten movements, one stoppage, the five zang are without qi. Giving the short time, the essentials are in the end and beginning. What's called "fifty movements and not one stoppage" is taken to be the standard to know the time of the five zang. Giving the short time, suddenly quick, suddenly slow.

One day and one night [has] fifty circulations: This refers to the theory that in the course of a day, qi and blood go through fifty complete circuits of the channel system, as seen in eg Lingshu 18, and notably Lingshu 15, which is titled "Fifty circulations", and goes into mathematical detail about the correlation between the circulation, the breath, and the length of the channels.

To circulate/nourish the essence of the five zang: See the discussion of ying2 in Lingshu 15.

Deranged life: Kuang2 "madness, insanity", here used to refer instead to physical derangement or disorder.

Grasp the channel mouth: Take the pulse at the wrist, the qikou, "channel mouth", and "count their arrival", count the beats.

Fifty movements and not one stoppage: Whereas the earlier sentences talk about "fifty circulations", which occupy a full day, this refers to a much shorter period, fifty beats of the pulse. "Stoppage" is dai4, seen as the name of a pulse type in Lingshu 4, with the present passage referenced in the accompanying discussion. As stated there, most but not all sources in this instance take it to mean a stoppage, and even though "to stop" isn't a normal meaning of it, the context does strongly suggest that idea. It's also clear that that reading has been commonly adopted from the earliest times; Nanjing, Maijing and Qianjin for example have zhi3 "stop, halt" instead of dai4. Jiebin instead takse a broader view of the possibilities, more consistent with the standard meanings of dai4 "to replace, alternate, change", saying that it refer to any of a number of abnormal alterations in the pulse, sudden weakening, speeding up, slowing down, or briefly stopping then restarting. So, if, in the course of fifty beats of the pulse, there's no break or stoppage in the pulse (or some other form of disturbance, depending on the adopted reading of dai4), this means the movement of the channels is regular and normal, which in turn means all of the zang are being properly supplied with qi, being nourished by the channel flow.

One stoppage, one zang is without qi: The text here doesn't specify which of the zang are affected by the different numbers of stoppages; but the question is taken up in Nanjing 11, which says the kidneys are the zang that don't receive qi, the first to become exhausted (at the endpoint of an argument whose meaning isn't entirely clear, the key idea apparently being that the kidneys are the most yin of the zang, so they are the last to receive the circulation, and the first to be affected when there's any shortcoming in the process). The general idea embodied in the single step given in Nanjing is taken up by Yang, who extrapolates from that to associate a specific zang with each step, in accordance with the yinyang within yinyang categorisations given in Lingshu 1, which he says go "from far to near, becoming shorter with [each] step"; the kidneys are the most yin, yin within yin, so they are the first of the zang to be without qi; the liver, yang within yin, is next; then the pancreas-spleen, reaching-yin within yin; then the heart, yin within yang; and finally the lungs, yang within yang. I'm not at all convinced that any of this speculation is justified, that the intention of the original text is that specific organs are harmed or deprived in a consistent specific sequence of this kind.

Giving the short time: The first character in this is yu3 "to give, provide", which is generally regarded as an error or substitution, either for the homonym yu3, again meaning "to give", but also meaning "to call, name; to mean, signify" (Yang has this character in his commentary, as does an instance of this construction in Lingshu 9); or for the original character with the "page" radical added, yu4 "to prepare, before, in advance", here signifying "to know in advance, to know beforehand, to predict". The final two characters

are duan3 "short (length, or period of time)"; and qi1 "time, moment, period". The typical reading of this combination is that it means being able to recognize illness that will soon result in death, to tell when death is imminent; the same combination is repeated a little later.

The essentials are in the end and beginning: One view of this is that "end and beginning" refers to Lingshu 9, which has that title. Some sources take exception to that, saying that the things discussed in that chapter don't relate to what's been discussed to this point in this paragraph; that is both true, and not; Lingshu 9 focuses on pulse diagnosis methods, but doesn't have anything relating to the "fifty circulations" or "forty movements and one stoppage" sorts of ideas; on the other hand, it does have what this particular sentence apparently refers to, "giving/predicting the short time"; the final section of the chapter is a listing of the symptoms of imminent death in the six channels, eg the taiyang channel ending is shown by the eyes turning over, convulsions, a white complexion etc; in this light, the "chapter name" reading is clearly plausible. However, most sources don't agree with this view, instead taking "ends and beginnings" as a reference to the topic of the title of this chapter, the roots and ends of the channels; that is, a knowledge of that subject is the essential thing to look to in determining or dealing with the state of a person's health, in particular when assessing serious illness leading to imminent death.

The time of the five zang: "Time" here is again qi1 "time, moment, period", as in "giving the short time". One view of this is that it refers to the lifespan of a person, as determined by the health of the zang and shown by the regularity of the pulse; that is, fifty beats without an interruption suggests a normal "time/period" of the five zang, a normal lifespan, there's no factor present that indicates a shortened "time", a short life, or a short period left to live, imminent death. Another interpretation is that "the time/period of the five zang" means a day, the time taken for a full fifty circulations of the body, which, as the text says, ensures nourishment for the five zang; in other words, measuring the fifty pulse beats can be used to deduce the pace of the circulation, how long it will take to complete a circulation, and whether that pace is regular, in accordance with the designated standard of fifty a day.

Suddenly quick, suddenly slow: That is, erratic sudden changes in the pace of the pulse. There's no obvious correlation between this and the rest of the paragraph; there are discussions of "suddenly quick and suddenly slow" (using exactly the characters used here) as an indicator of imminent death in three different chapters of Suwen, 18, 19 and 20; for example, Suwen 18: "[when] a person [has] one exhalation [and] the channel [has] above four movements [it's] called 'death'; [when] the channel [is] cut off [and] not arriving [it's] called 'death'; suddenly slow [and] suddenly quick [is] called 'death'"; it may be that this sentence is a later added comment, pointing out a similarity or correlation between the present paragraph and those Suwen chapters.

Huangdi said: "Counterflowing, withflowing, the five bodies" discusses the small and big of a person's bones and joints, the firm and fragile of the flesh, the thick and thin of the skin, clear and muddy of the blood, smooth and rough of qi, long and short of the channels, much and less of the blood, the numbers of the main and network channels, I already understand these. These are all [to do with] the plaincloth-clothes common man people. Kings, dukes and great men, blood-eating gentlemen, [their] bodies are soft and fragile, [their] muscles and flesh are soft and weak, [their] blood and qi are swift and fierce, smooth and easy; the

slow and fast, shallow and deep, much and little of needling them, can it be the same? Qibo answered saying: The flavours of fat and fine grains, beans and bean leaves, how can they be the same? [If] qi is smooth then [it] emerges quickly, [if] qi is rough then [it] emerges slowly; [if] qi is swift then the needle is small and enters shallow; [if] qi is rough then the needle is big and enters deep; deep, then [you] want to leave [it]; shallow, then [you] want to quickly [remove it]. Looking at it according to this, needling the plaincloth-clothes, go deep and leave it; needling great people, fine, to slow it; this is all because [their] qi is swift and fierce, smooth and easy.

Counterflowing, withflowing, the five bodies: The usual interpretation of this is that it refers to the different types of bodies people have, abnormal and normal physiques or constitutions, with different conditions of big, small, clear, muddy, smooth, rough etc. A minority suggest instead that, as with "ends and beginnings" in the previous paragraph, this is the name of a previous text, which is consistent with the use of yan2 "words, to speak, says" after this, and Huangdi's later statement that he "already understands these". One suggestion is that this is a variant or altered version of the title of Lingshu 38, "counterflow and withflow, fat and thin"; that chapter is a reasonably short one, with two main sections; firstly, a discussion of treating people of different body types or sizes; then a discussion of the counterflow and withflow of the channels, leading into a description of the chong channel; all of which is quite consistent with the proposition that the present text refers to that chapter.

The plaincloth-clothes common man people: Bu4 "plain cloth; to spread"; yi1 "clothing"; this is a standard term meaning the common people, the people whose clothes are made from plain unadorned fabric. It's followed by a second standard term with the same meaning, pi3 fu1, the second character of which means "man, workman"; it's not entirely clear what sense pi3 is intended in; one Han dynasty commentary says it means "match, mate, spouse" (a standard sense), here meaning a husband; pi3 is also used for a measure of a length of cloth, but I haven't seen any suggestion that there's a relationship between that and the prior "cloth-clothes" term; this is the only occurrence of pi3 in Neijing.

Blood-eating gentlemen: The "plaincloth-clothes common people" are contrasted with "kings, dukes [and] great men", that is, nobles and high officials, wealthy people; here also called "blood eating gentlemen", that is, wealthy people who habitually eat meat, food with blood in it. Xue4 "blood" shi2 "food; to eat" originally meant "blood food", food (or blood) offered in sacrifice to the spirits, and one source maintains that in the Neijing era it was still restricted to that meaning, suggesting that "blood" is therefore an error for rou4 "flesh, meat"; the question is quite academic, it's entirely clear from the context what the intended meaning is.

Their bodies are soft and fragile: Rou2 "soft, supple, gentle" cui4 "fragile, brittle, easily harmed or broken"; Taisu has two quite different characters, kong1 xu1 "hollow [and] empty".

Fat and fine grains: Gao1 "fat, fatty" (as seen in "gaohuang" in Lingshu 1). Liang2 "beam, bridge" (as seen in "hidden beam" in Lingshu 4) is here used as an equivalent for that character with the "rice" instead of the "wood" radical (the two characters are graphically very similar), which means "millet", or specifically a fine or good type or grade of millet, or by extension of that, fine foods generally, which appears to be the intention here. It's interesting how well the division presented here, between the wealthy eating fatty and

starchy foods and the poor eating coarse vegetables, still matches the food preferences of modern affluent societies; that is, where they can afford it, people everywhere seem to prefer a diet composed primarily of fatty foods, particularly meat, and starch, eg the iconic "everybody loves 'em" foods of our times, pizzas and hamburgers; I might add that what little time I've spent in China showed that, in the major cities at least, their present-day eating habits are just the same; whenever you walk into any sort of restaurant, you're confronted by a virtually unbroken expanse of people eating meat, rice, noodles and other pastries eg jiaozi, baozi, to the point that getting a reasonable dose of a variety of vegetables into your diet can take some work for the casual visitor, particularly when, even if you specifically ask for a serving of vegetables, that commonly elicits a plate that's primarily mushrooms, rather than something that's had an association with chlorophyll somewhere in its life history.

Beans [and] bean leaves: Shu1 refers to beans generally; this is the only occurrence of the character in Neijing. See the note to "bean leaves salty" in Lingshu 56 regarding huo4.

[If] qi is smooth then [it] emerges quickly: See the discussion below.

Fine, to slow it: See the discussion below.

This paragraph gives a rationale for applying different treatment to common and wealthy people, on the basis that their diets and lifestyles give different qualities to their bodies, both in the more solid components, the muscles, sinews, bones, skin, and in the more fluid and intangible, blood and qi. The bodies of well-to-do people are softer and more refined, less coarse and hard than those of the common people, and their qi is smoother, swifter and (by implication) more superficial; this smoother swifter qi emerges quickly; that is, when the needle enters, qi quickly responds and exits the body; so in needling these people, you should use finer needles, needle to a shallow level, and only leave the needle in for a short time. The qi of common people is coarser and slower, so it responds and emerges slowly; so, when needling them, you should use larger needles (to make a larger hole or pathway for qi to exit through), needle to a deeper level, and leave the needle in for a while.

In this description, I've presumed that the "it" in "[if] qi is smooth then it emerges quickly, [if] it is rough then it emerges slowly" is the body's qi. However, this isn't the usual interpretation; instead, it's everywhere taken to refer to a needling action, removing the needle quickly or slowly; in effect, the readings are the same, with quick removal applied in the case of gentlemen, slow removal in the case of commoners; but I think it misses that point that this is not just a description of what to do, it's the basis or rationale for performing those actions.

At the end of the paragraph, a brief precis of the two actions is given, "needling the plaincloth-clothes, go deep and leave it; needling great people, fine, to slow it". As I see it, this last statement means "[use a] fine [needle], in order to slow it". This isn't at all the standard interpretation; rather, it's again taken to mian that the needle should be either inserted or removed slowly. However, slow removal is contrary to the explicitly stated principle that for gentlemen needling should be shallow, with a quick removal; and although nothing is directly stated on the subject, there's no reason to think that a slow insertion is any more appropriate. I think the more logical idea is that a fine needle is used "in order to, so as to" slow the escape of the fast qi of wealthy people, since it's "swift and

fierce, smooth and easy", and consequently would escape too quickly, easily and copiously if a larger needle was used.

Note that the focus appears to be entirely on qi emerging from or exiting the body, not entering.

Huangdi said: What is the counterflowing and withflowing of body/shape qi like? Qibo said: Body qi insufficient, illness qi having surplus, this is evil overcoming; urgently drain it. Body qi having surplus, illness qi insufficient, urgently supplement it. Body qi insufficient, illness qi insufficient, this is yin and yang qi both insufficient, [you] can't needle it. [If you] needle it then [there's] double/heavy insufficiency; double/heavy insufficiency, then yin and yang are both used up, blood and qi are both exhausted, the five zang are hollow and empty, the sinews, the bones and marrow wither, the old are cut off and extinguished, the young/strong don't recover. Body qi having surplus, illness qi having surplus, this is called 'yin and yang both have surplus'; urgently drain the evil, regulate the empty and full. So it's said: having surplus, drain it; insufficient, supplement it; this is its meaning.

This is yin and yang qi both insufficient: Body qi, presumably meaning proper qi, and illness qi are here apparently regarded in some way as a yin-yang pairing, a very unusual characterisation.

Yang says that if shape qi is deficient and illness qi is surplus, draining means the evil should be drained, and proper qi should be filled, although the text only refers explicitly to draining evil. If shape qi is surplus and illness qi deficient, the very curious directive to fill/supplement is given because, once proper qi is filled or supplemented, the illness will (supposedly) leave or be removed. In relation to this situation, Ma says (most unconvincingly) that the insufficiency of illness qi is in fact an indication that proper qi is declining, so filling should be applied. Jiebin says that when shape qi is deficient and illness qi surplus, this means the body appears on the outside to be deficient, but internally there is an excess, indicating that evil is overcoming, so it should be drained; conversely, when shape qi is surplus and illness qi deficient, that really means that the body appears on the outside to be surplus, but internally there is a deficicney, so it should be filled (again, far from convincing). In short, this is a passage that, to my mind, very definitely requires explanation, it makes no obvious sense; and no decent explanation is anywhere provided.

So it's said: Needling, not understanding counterflow and withflow, [then] true and evil contend with each other; full and supplementing it, then yin and yang four overflow, the intestines and stomach full and swollen, liver and lungs internally distended, yin and yang confound each other. Empty and draining it, then the main channels are hollow and empty, blood and qi are used up and withered, the intestines and stomach folded and creased, the skin thin and attached, the body hair and cou[li] broken off and scorched, giving the death time. So it's said: the essentials of using the needle are in understanding regulating yin and yang. Regulate yin and yang, essence qi is then full, uniting shape and qi, causing the spirit to store internally. So it's said: the superior worker balances qi, the mediocre worker disorders the channels, the inferior worker cuts off qi and endangers life. So it's said: the inferior workman cannot be incautious, [he] must examine the illnesses of the transformations of the five zang, the correspondences of the five channels/pulse, the full and empty of the main and network channels, the soft/supple or coarse of the skin, and afterwards, treat it.

Yin and yang four overflow: "Four" here means "on all four sides", that is, "everwhere, all"

The intestines and stomach folded and creased: The second-last character of this, she4, means "convinced", or "fearful", both obviously inapplicable here; it's generally regarded as an equivalent for that character with the "person" radical omitted (as seen in Suwen 62), or with the "hand" radical instead (which is what Jiayi has); there are various pronunciations given for these, she4, zhe4, zhe2, che4, nie4; and numerous meanings, particularly for the "hand" radical version, eg "to grasp, grip; stable, quiet; to fold, crease, pleat"; the latter is also a possible meaning of the final character in the clause, and is adopted for this character or both characters in a number of sources, extended to mean "wrinkled", or by further extension "limp, slack, flabby, weak". The final character, pi4, means "to open, begin; punishment; to do wrong"; this last sense is adopted by some sources to mean that there's "evil" or illness qi present; in combination with the "pleated" reading of she4, this means the intestines and stomach are "slack, weak, lacking strength" and "filled/blocked with evil qi"; another view is that pi4 is a substitute for the same character with the "clothes" radical addedm bi4, also meaning "fold, crease, pleat", extending the "folded, wrinkled, slack" idea. There's one other instance of this combination, in Suwen 62 (using the radical-less version of she4), in a discussion of harm caused by cold and damp, causing damage to the skin, muscles and flesh, and draining of qi, resulting in emptiness; that emptiness is then further described by these two characters, followed by the words "qi [is] insufficient"; that explicit indication means that, regardless of the difficulties involved in identifying precisely how the characters are intended, the basic indication is a state of insufficiency, weakness. Note that the "pleating, folding" idea makes more obvious sense in the Suwen context, referring to the skin and flesh, than it does in the current passage, involving the internal organs, the intestines and stomach.

The skin thin and attached: Zhuo2 "to adhere, attach, stick to", generally taken to mean the patient is extremely thin and emaciated, to the point that the skin is practically "sticking, attached" directly to the bones, with no intervening layer of flesh or muscle.

The body hair and cou[li] broken off and scorched: Yao1 "to die young" can also mean "to break, snap", read here as meaning that the hair is dying or breaking off. Jiao1, as used in "the three burners", here has the "flesh" radical added, but is considered to have the same meanings as the character without that addition, "to warm, heat, scorch, burn", or by extension "withered, dry". That is, the hair and the skin (represented by the couli, here probably specifically meaning the pores in the skin) are in poor condition, the hair broken or dying, the skin dry and withered.

Giving the death time: That is, these are signs of imminent death; this is precisely the same construction as "giving the short time" earlier in the chapter, with si3 "death" replacing duan3 "short, brief".

Essence qi is then full: Guang is a common character, generally meaning "light, radiance, brightness", but it can also mean "full, brimming".

The superior worker balances qi: Ping2 could alternatively be read as "pacifies, harmonises".

The mediocre worker disorders the channels: Some maintain that luan4 "disorder, chaos" here means exactly the opposite, "to govern, order, treat", which is a standard, although much less common meaning; that is, the superior workman balances qi, whereas the mediocre workman "treats" or "orders" the channels (not a reading I endorse).

The inferior workman cannot be incautious: Why it should be the "inferior workman" who needs to be cautious is questionable; Jiayi omits "inferior workman", giving simply "[you] cannot be incautious" etc, which makes more obvious sense.
The correspondences of the five channels/pulses: This seems to imply comparing the state of the pulse with the other manifestations of an illness.
The soft/supple or coarse of the skin: Probably referring specifically or principally to the skin of the chi, the forearm.

End of Lingshu 5

Lingshu 6: Long life and early death, hard and soft

Huangdi asked Shaoshi saying: I've heard that a person's life has hard, has soft, has weak, has strong, has short, has long, has yin, has yang; I wish to hear its method. Shaoshi replied saying: There is yin within yin, there is yang within yang. Examine and understand yin and yang, [then] needling has method; get where the illness begins, [then] needling has principles. Carefully assess the illness origin, its mutual correspondence with the season/time, internally meeting with the five zang and six fu, externally meeting with the sinews, bones and skin. Therefore, inside has yin and yang, outside also has yin and yang. On the inside, the five zang are yin, the six fu are yang; on the outside, the sinews and bones are yin, the skin is yang. So it's said: illness in the yin yin, needle the yin streams and transporters; illness in the yang yang, needle the yang meetings; illness in yang yin, needle the yin throughpasses; illness in yin yang, needle the network/luo channels.

This is the first dialogue in the book in which Huangdi has a partner other than Qibo, in this case Shaoshi; shao3 "little, lesser" as in eg shaoyang lesser yang; shi1, now normally meaning "teacher", in ancient times used as the title for various types of government or military officers; the combination of these two characters could mean a high official, a senior member of government, a retired or emeritus official or scholar, or an official in charge of music; any of these but the last could be intended in the present context. The various sources say of this person that he was an official or a famous physician in Huangdi's time, which actually means there's absolutely no real information on his identity, as is basically the case with Qibo as well.
I wish to hear its method: Fang1 "square, region; prescription; technique, method"; used again a little later in "then needling has method", in this context basically synonymous with li3 "reason, principle" in "then needling has principles".
Carefully assess the illness origin: Du4 "to measure; to assess"; duan1 "end, extremity", here more likely meaning "beginning, origin" (a standard meaning).
Illness in the yin yin: See the discussion below.
Needle the network/luo channels: Before luo4, Jiayi adds "yang"; see the discussion below.

What's translated here as "yin yin ... yin yang" etc in each case consists of those two characters separated by the particle zhi1, a very common character (the most common in Neijing) with numerous meanings, but in a construction such as this typically indicating a possessive relationship, with the preceding character usually the possessor, the following character the possessed (similar to an apostrophe-s in English); that is, yin1 zhi1 yang2

normally signifies "yin's yang, the yang of yin, yang within yin"; however, zhi1 can also indicate the reverse relationship, and there's uncertainty and disagreeement as to which is intended here, which is why the ambiguous translation "yin yin" etc has been used.

The four different places treated are the ying-streams and shu-transporters on the yin channels (for yin yin), the yang channel he-meetings (for yang yang), the yin-channel jing-throughpasses (for yin yang), and the luo channels (for yang yin); luo4 could mean either the superficial network channels generally, or the specific ones listed in Lingshu 10, the luo-linking channels and acupoints; Jiayi adds "yang" (that is, yang channels) before luo4, which is consistent with the fact that two of the other three are explicitly prefaced with yin, one with yang.

Ma takes a compound view of this set of indications, relating each situation to two different locations, suggesting that he takes zhi1 to mean "with, and" (a standard although not particularly common meaning); in each case he relates the first yin/yang character to the yin region of the body, the second to the yang; so yin yin indicates illness in the zang (yin internally) and/or the sinews and bones (yin externally); yang yang indicates illness in the fu (yang internally) and/or the skin (yang externally); yang yin is the fu (yang internally) and/or the sinews and bones (yin externally); yin yang is the zang (yin internally) and/or the skin (yang externally). Tamba rejects this reading, and I concur with that.

Zhicong has a "half" version of sorts of this double-element idea. He adopts the typical possessive reading of zhi1, taking eg yang zhi1 yin to mean "yang's yin, yin within yang"; then he relates the two "within yin" instances to the yin or internal locations only, the zang and fu; whereas the two "within yang" instances involve those two again, and the external locations as well. So, yin yin means the five zang; yin yang the six fu; yang yang involves the skin, and the fu (external and internal yang); yang yin involves the sinews and bones, and the zang (external and internal yin).

Jiebin adopts the reverse reading of the zhi1 relationship, taking the second element to be the primary. So (in deep to superficial order), (1) "yin yin" is "yin within yin", illness in the zang, needle the ying-stream and shu-transporters on the yin channels; (2) "yang yin" is "yang within yin", illness in the fu, needle the jing-throughpasses on the yin channels; (3) "yin yang" is "yin within yang", illness in the sinews and bones, needle the network/luo channels; (4) "yang yang" is yang within yang, illness in the skin, needle the he-meetings on the yang channels. Jiebin gives rationales for the use of these acupoints in these situations; at the ying-streams and shu-transporters, channel qi is weak, yin in nature; at the jing-throughpass qi is strong, yang in nature; the luo/network channels are floating and superficial and in the yang region; the he-meetings prevent (evil) entering deep (that is, off the limbs into the trunk and head).

I think this arrangement is entirely correct, the explanation partly so. The implication in Jiebin's statements regarding the ying-stream and the jing-throughpass is that the channel and acupoints closer to the extremities are more yin (or at least are used to treat more yin conditions), those closer to the "passes", the elbows and knees, are more yang; that perception is consistent with the principle stated or implied in Lingshu 3, in "treating ... the meetings of the yang main channels ... treating the transporters of the four extremities" etc, that the four transporters other than the he-meetings are considered suitable for treating yin illness, the he-meetings are used for treating yang illness.

If the arrangement of regions, body zones, and acupoints given in the previous paragraph of these notes is looked at in the light of the "sequence along the channels" idea, then as

listed there from 1 to 4 it is an entirely regular progression, in several aspects. Firstly, in the yinyang regions, yin within yin, yang within yin, yin within yang, yang within yang. Secondly, in the channels treated, 1 and 2 yin, 3 and 4 yang (if Jiayi's addition of "yang" to the luo clause is adopted). Thirdly, in the body zones, zang, fu, sinews and bones, skin. Fourthly, in the acupoints, ying-stream and shu-transporter, jing-throughpass, luo-linking, he-meeting. In my view, the regularity of this arrangement leaves little doubt that it's correct.

Note the concordance between this implied progression of acupoints on the channel with the set of acupoints seen in the second part of Lingshu 5, which likewise proceeds in regular order along the channel, jing-well, yuan; jing-throughpass, luo-linking; the inclusion and sequence of these last two in particular agrees with the present passage.

Jiebin says that the luo are "floating and shallow, in the yang region", then adds Pianli Cn6 as an example, showing an "each way" approach, taking luo4 in both of its typical senses, the network channels, and also the luo-linking acupoints; the progression outlined here demonstrates that the "network" reading isn't intended, what's referred to is specifically the luo-linking channels and their associated acupoints.

In fact, the luo-linking acupoints are closer to the elbows and knees only on the yang channels; for the yin channels, the opposite is the case (there are two exceptions, the three burners and liver channels); that suggests (as does the simple pairing of two yin and two yang situations) that Jiayi's addition of "yang" for the luo-linking situation is correct.

Jiebin's comment regarding the luo, "floating and shallow, in the yang region", refers only to yang characteristics, whereas the related position also involves yin, yin within yang. Likewise, for the jing-throughpass he says that the channel qi there is strong and yang in nature, which again refers only to yang characteristics, whereas the position involved is yang within yin. This implies that, despite his adoption of this overall arrangement, employing the "reverse" reading of the connector zhi1, he hasn't fully perceived that the basis for it is simply and only the sequence of the acupoints on the channel.

In short, in my view, this passage is a specific interpretation of what is in essence a very simple principle: to treat yin, go towards the extremities (and prefer the yin channels); to treat yang, go towards the passes (and prefer the yang channels). In the source translations, there's no single or majority interpretation, they variously adopt the Jiebin reading, or the "double location" idea of Ma/Zhicong, some adopt the luo-linking interpretation, others the "network channels", the four body regions are arranged in different sequences etc.

So it's said: illness in yang is called wind, illness in yin is called bi; yin and yang both ill is called wind bi. Illness having shape and no pain [is] of the yang type; without shape and having pain [is] of the yin type. Without shape and having pain, the yang is whole and yin harmed; urgently treat yin, don't assault yang. Having shape and no pain, the yin is whole and yang harmed; urgently treat yang, don't assault yin. Yin and yang both moved, sometimes having shape, sometimes without shape, and in addition vexed heart, is called yin overcoming yang; this means neither external nor internal, its shape is not long-lasting.

Without shape and having pain (etc): Jiayi has some significant differences in this and the ensuing parallel sentence. After "yin harmed", instead of "treat yin" it has the opposite, "treat yang"; likewise, after "yang harmed", instead of "treat yang" it has "treat yin"; in

each case, Jiayi has a note from a later editor saying that his version of Lingshu is the same as the extant Lingshu text, the opposite of Jiayi. Another later note says that instead of wan2 "whole, complete" in "the yang/yin is whole", the commentator's version of Lingshu in both cases had huan3 "slow, slack" eg "its yang is slack/sluggish and yin harmed"; or, interpreting the character zhi1 at the end of this sentence as a pronoun rather than an "empty" or basically meaningless particle, "its yang is slack and yin [has] harmed it", a significantly different idea; in both respects, the Lingshu text makes more obvious sense than these variations, and none of the sources adopt any of the possibilities presented by them.

Yin and yang both moved: Dong4 "to move" in this situation is typically taken to mean "agitated, disturbed, having abnormal movement, having illness"; an alternative opinion is that it means "pain".

Sometimes having shape, sometimes without shape: Some take zha4 to mean "suddenly" rather than "sometimes"; the difference seems reasonably academic, the key idea in either reading being that it's a condition that switches between having and not having shape, that is, between yin and yang. In a condition where both yin and yang are disordered or ill, the alternation between having and not having shape, and the description as neither outer or inner, are both obviously appropriate; on the other hand, it's not obvious why this is regarded "yin overcoming yang" (see the next note for one proposed explanation).

Its shape is not long-lasting: One view is that this means the illness won't last long, it's uncertain in nature, fluctuating between yin and yang, and can't properly establish itself, so it soon dissipates. Another view is quite the opposite; because the illness is in both yin and yang, it's difficult to treat; this is something like the idea seen in Lingshu 4, that needling treatment shouldn't be used in small pulse conditions, since they have a deficiency of both blood and qi; or the same indication in Lingshu 5 when both shape and illness qi are insufficient; here, with illness in both yin and yang, there's again no basis for needling to work or build on, so "the shape won't last long", that is, the illness will soon lead to death. Yet aanother suggestion is that, because illness tends to invade from the outside into the body, then as it gradually becomes more internal the "shape" phase of it is no longer seen; this is also considered to explain what's meant by "yin overcoming yang", the yang phase decreases as the yin phase strengthens.

The theme of this paragraph is the difference between illness in yang, and illness in yin. Illness in yang, which is called "wind", has shape and no pain; such an illness indicates that yang has been harmed, but yin is still whole or complete, so yang should be treated, yin should be left undisturbed. Conversely, illness in yin, which is called "bi", has pain and no shape; such an illness indicates that yin has been harmed, but yang is still whole or complete, so yin should be treated, yang should be left undisturbed.

Most sources regard the statement that "illness having shape and no pain [is] of the yang type" as simply or basically meaning that illness in the external region is yang; because they're in the external region, these illnesses are visible, they have perceivable transformations of shape, visible changes in the body. As opposed to illnesses in the internal region; because they're internal, there's no way of seeing such illnesses, of visibly perceiving their transformations; they can only be discerned through the presence of pain.

Similarly, illness in yang is called "wind", because the external regions are typically subject to the invasion of external evils, of which "wind" is used here as a representative; while illness in the internal regions is typically a disruption or blockage of the circulation in the channels, or of the tissues fed by the circulation, the sinews, bones, joints etc, for which "bi", painful obstruction, is used here as a general or representative term.

One source objects to the interpretation of yang illness having shape and no pain as simply meaning illness in the external or yang region, and yin illness having pain and no disturbance of shape as simply meaning illness in the interior or yin region, saying these are oversimplifications of the more precise underlying principles, that injury to shape in any location is basically yang in nature, and injury to qi, producing pain rather than an initial physical change, is basically yin in nature, no matter where it occurs.

Another source gives a slightly different angle on the basic topic, saying that illness with shape changes but no pain pertains to the yang "channels", illness with pain and no shape change pertains to the yin "channels"; it's unclear whether it means by this that these channels govern or are used to treat those types of illness (which is a fairly straightforward proposal), or whether they're caused by disorders or harms to those particular channels (which is more contentious).

Huangdi asked Bogao saying: I've heard of the before and after of shape and qi illnesses, the external and internal correspondences, what are they? Bogao replied saying: Wind and cold harm the shape; worry and anger harm qi. Qi harms the zang, then [there's] illness [in] the zang; cold harms the shape, then the shape responds; wind harms the sinews and channels, the sinews and channels then respond. These are the mutual correspondences of shape and qi, outside and inside. Huangdi said: How are they needled? Bogao replied saying: An illness [of] nine days, three needlings and [it] stops; an illness [of] one month, ten needlings and [it] stops; more or less, far or near, according to these adjust the duration. Bi that doesn't leave the body, look at the blood networks, fully bring out their blood. Huangdi said: The outside and inside of illness, difficult and easy to treat, what is that like? Bogao replied saying: The shape first ill and not yet entered into the zang, needle it half the days; the zang first ill and the shape then responds, needle it double the days. These are the correspondences of outer and inner, difficult and easy.

Huangdi asked Bogao: The chapter now moves to yet another interlocutor. Bo2 means "uncle; noble, earl" (the same character used in the name Qibo); gao1 "high". As with Shaoshi at the beginning of this chapter, or also Qibo, there's no evidence at all of this person prior to Neijing, so again the sources simply say that he was a famous physician or a minister of the time of Huangdi.

Wind harms the sinews and channels: It might be proposed that the final two characters refer to a single entity, "the sinew channels", although that is in fact the reverse of the term actually used in the chapter dealing with those structures, "the channel sinews" in Lingshu 13, and that reading is nowhere adopted.

More or less, far or near, according to these adjust the duration: Shuai1 "to decline, weaken, weak" is used in a different sense and pronunciation here, cui1 "to decrease according to a fixed pattern" (here translated as "adjust"); that is, use the stated numbers to calculate the treatment times required for other illness durations.

Needle it half the days: An illness that begins externally and hasn't yet progressed to the interior is relatively light, so it needs only half the previously specified needlings; likewise, an illness that begins in the zang and progresses to the outside is serious, and requires twice the normal needlings. In my view, this implies a three-part division; the normal situation, requiring the normal amount of needling, is one in which illness begins externally and proceeds to the interior; if such an illness hasn't yet gone to the interior, then only half the needling is needed; if instead the illness begins in the interior and proceeds to the outside, then double the needling is needed. The normal view of this however is quite different (in my opinion rather perversely so), seeing only a two-part division; illness originating in the external region requires only half the normal needling; whereas illness originating in the internal region requires double the "reduced, half" number of needlings, that is, the original or normal amount.

Huangdi asked Bogao saying: I've heard that the shape/body has relaxed and tense, qi has flourishing and declining, the bones have big and small, the flesh has firm and weak, the skin has thick and thin; how do these establish long life or early death? Bogao replied saying: If shape and qi match each other, then there's long life; if they don't match each other then there's an early death. If the skin and flesh bind each other then there's long life, if they don't bind each other then there's early death. If the blood, qi, the main and network channels surpass the shape then there's long life; if they don't surpass the shape then there's an early death.

Relaxed and tense: Or, "slow and quick"; see the note on huan3 and ji2 in relation to "the channel/pulse quick, the skin of the chi [should] also be quick" in Lingshu 4.

Firm and weak: This is the same pair of characters seen in "the firm and fragile of the flesh" in Lingshu 5; the first in jian1 "hard, firm, solid"; the second, cui4, means "fragile, brittle, soft, easily harmed or broken", but its usage in Neijing suggests the broader notion of simply "soft, weak" is often intended rather than the more specific, "fragile, brittle".

If shape and qi match each other: Ren4 typically means "to take on a load", physically or figuratively, to accept a responsibility, to take on a task or position; it can also mean "to match, balance, suit, correspond", which is the interpretation adopted here; that is, if the shape and qi aspects or parts of the body are balanced, in suitable relationship to one another, then it's a sign of good health and longlife.

The skin and flesh bind each other: Guo3 means "fruit, nut", and by extension of that "to finish, complete, achieve" something; it can also be a substitute for that character with the "clothes" radical added, also pronounced guo3, "to bind, wrap, bundle". One view of this is that it means the skin and flesh "encompass, wrap, surround and protect" each other; another (apparently based around the idea of "fruiting, completing") is that the skin and flesh should be mutually "flourishing"; some contend that guo3 here means "balanced, harmonious, matched", the same basic idea as ren4 in the previous sentence; that isn't a normal sense of the character, or an obvious extension of any standard meaning.

The blood, qi, the main and network channels surpass the shape: This is generally taken to mean that there should be a prevalence of blood and qi over shape or form; Jiebin for example says the blood, qi and the channels are the internal root of the body, the shape or form is like the leaves and branches externally; if the root is stronger than the branches,

it's a sign of health and longevity; if the leaves and branches are stronger than the root, it's a sign of failing health, diminished life. This idea is strictly speaking contradictory to the principle that "shape and qi [should] match each other", but it's explicitly corroborated later in the chapter, "[in] a normal/balanced person, if qi overcomes shape, [then there's] longlife".

Huangdi said: What's meant by relaxed and tense of the shape/body? Bogao replied saying: If the shape is full and the skin relaxed then [there's] long life; if the shape is full and the skin tense then [there's] early death. [If] the shape is full and the channels/pulse firm and big, [it's] withflowing; [if] the shape is full and the channels small and weak, qi is declining, [if] it's declining then [there's] danger. If the shape is full and the cheekbones don't arise, the bones are small; the bones small, then early death. [If] the shape is full and the large bundles of flesh are firm and have divisions, the flesh is firm; the flesh firm, then long life; [if] the shape is full and the large flesh is without divisions and grain [and] not firm [then] the flesh is fragile; the flesh fragile, then early death. This is the life and fate of heaven. So, establish the shape, determine qi, and perceive long life [or] early death. [You] must clearly understand this; establish the shape, determine qi, then afterwards, when attending an ill person, [you can] decide death and life.

The bones are small: Jiayi instead has "the kidneys are small".
Without divisions and grain: Fen1 "to divide, division; part"; li3 "grain, striations; reason, principle"; both of these form part of a common term used to refer to the gaps or divisions in the body's flesh (which is what's referred to here), fen1 in "the dividing spaces" or "the flesh divisions", li3 in "couli".

Huangdi said: I've heard that long life and early death, nothing measures them. Bogao replied saying: The wall and base poor, [their] height not reaching the ground, [then] not fully thirty and death. Those that have a cause adding illness, [then] not reaching twenty and death.

The wall and base poor: Qiang2 "wall"; ji1 "base, foundation"; bei1 "low, poor, modest, humble, inferior"), "their height not reaching the ground", di4, typically used in Neijing to mean "earth", the opposite of tian1 "heaven", here instead meaning "the ground". The "wall and base" are variously interpreted as the facial bones, or the jaw specifically, or the ears; and the "ground, earth" is the muscles and flesh of the face, or some specific region of the face. This appears to relate to a system of facial categorisation and diagnosis seen in eg Lingshu 37, 49, 54, also suggested in the "hanging yang" and "two guards/defences" in Lingshu 1. Refer to the note to the latter, and also the discussion of the "mingtang", "bright hall", at the end of Lingshu 37.
A cause adding illness: That is, if a person has the signs of a weak constitution, a "low base and walls", and in addition contracts a significant illness, then life expectancy is reduced even further.

Huangdi said: How is the mutual overcoming of shape and qi used to establish long life or early death? Bogao replied saying: An ordinary/balanced person and qi overcomes shape,

long life. Ill, and the shape and the flesh cast off, qi overcomes shape, death. Shape overcomes qi, danger.

Huangdi said: I've heard that needling has three transformations. What's meant by the three transformations? Bogao replied saying: There is needling ying/encircling [qi], there is needling wei/defensive [qi], there is needling cold bi that stays in the main channels. Huangdi said: How are the three transformations needled? Bogao replied saying: Needling ying, bring out blood; needling wei, bring out qi; needling cold bi, input heat. Huangdi said: The illnesses caused by ying, wei and cold bi, what are they like? Bogao replied saying: Illness born from ying: cold and hot, little qi, blood travelling up and down. Illness born from wei: qi pain, sometimes coming sometimes going, stagnant fullness and rushing sounds, wind [and] cold guesting in the middle of the intestines and stomach. Illness caused by cold bi stays and doesn't depart, sometimes painful and the skin unfeeling/numb. Huangdi said: How do [you] needle cold bi to input heat? Bogao replied saying: Needling the plaincloth-clothes, use fire-quenching needling; [for] great people, use medicinal pressing.

There's no good explanation of why "cold bi" represents a third category here, along with the body's two basic qi categories, ying2 encircling/nutritive and wei4 defensive.

Bring out blood ... qi ... input heat: Most translations seem to regard releasing blood, releasing qi, and inputting heat as the effects or outcomes of the different needlings, rather than the methods by which the required effect is achieved, although the latter seems to me as or more plausible, and the final sentence of this chapter explicitly defines "inputting heat" as such.

Little qi: Some take this to mean difficulty breathing, shortness of breath, rather than a general qi deficiency.

Stagnant fullness: Fu2 kai4 (there are different opinions regarding these tones). Fu2 is defined as "stagnant" in either a mental/emotional or physical sense, or "to go against, be contrary to, disobey" (pronounced bei4), or "angry" (pronounced fei4; the citation given for this sense in Dacidian is from a much later date, Qing). Kai4 can also mean "angry", or "full, fullness", or (pronounced xi4) "to sigh". Various readings of this combination are adopted, anger, emotional stagnation or oppression, sighing, general or abdominal stagnation or fullness. The classical commentators tend toward seeing it as a mental or emotional state, eg Ma "anger", Jiebin "gloomy/depressed and angry, with sighing"; Yang is an exception, saying it means "fullness of qi". Some of the modern sources state specifically that it's abdominal stagnation; others are either ambiguous, with non-specific translations such as "oppression and fullness", or like the classical commentators, tend to the mental/emotional reading. See the next note.

Rushing sounds: Ben1 xiang3; the second of these means "sound, noise, voice", or it can be a substitute for the graphically and phonetically similar xiang4 "direction, tendency, towards"; Jiayi has a simplified version of that alternate character, and presumably some sources see it this way, since they don't include any notion of "sound, noise". The preceding character is ben1/fen4, as discussed in relation to "breath rushing" in Lingshu 4. Basically all sources consider that these two characters refer to an abdominal condition; some take it to mean abdominal swelling or distension alone, others say swelling with associated abdominal noises, borborygmus, others say just abdominal noises, a rushing movement in the abdomen causing noises. One source takes a different approach to also

arrive at the "abdominal noises" reading, saying that ben1 is a substitute for that character with the "drum" instead of the "shell" radical, fen2 "a large drum, a military drum"; so these two characters mean "like the sound of a big drum", that is, strong or loud abdominal noises. There are two other instances of this two-character term in Neijing; Lingshu 10, in the symptoms of disorders of the stomach channel, describes a manic condition in which a person "climbs high and sings, takes off his clothes and walks about", then this term, followed by "abdominal distension"; Lingshu 66, describing a condition of illness in the stomach and intestines, begins with this term, then again has "abdominal distension"; the close association with abdominal distension in these two passages is no doubt the reason why there's general consensus on the broad meaning of the term. It might also be considered that, through the same process of association, a physical rather than mental/emotional interpretation should be preferred for the two previous characters, fu2 kai4; that same conclusion might also be suggested by the placement of this clause, in the wei4 "defensive" illness section, along with "qi pain", and "wind [and] cold" residing in the "intestines and stomach", all yang indicators that arguably favour a physical rather than mental/emotional reading.

The plaincloth-clothes: The common people, seen previously in Lingshu 5.

Fire-quenching needling: Huo3 "fire", followed by cui4, which means to temper heated metal by quenching or plunging it in water to cool it; this character can also occur with the "water" rather than the "fire" radical, pronunciation and meaning the same. The basic reading of this is that it means to insert a needle that's been heated in some way; there's not a great deal of discussion about exactly how this is done; one source suggests directly heating in a flame; an alternative reading (not seen) might be to place heated moxa on the needle while it's in the body. Some sources eg Jiebin regard it as a reference to a technique that was first used around his time (the early 17th century, late Ming), heating points on the body using medicated moxa rolls, that is, moxa with various kinds of herbs or medicines added in, compressed and rolled into cigar or candle shaped rolls); these were rather misleadingly referred to as various types of "needle", using names such as "thunder fire spirit needle", or "taiyi/great oneness spirit needle"; I presume this reading is anachronistic.

Huangdi said: How is medicinal pressing done? Bogao replied saying: Use twenty sheng of pure liquor, one sheng of Shu pepper, dried ginger one jin, cinnamon heart one jin. Chew all four types, steep in the liquor. Use one jin of cotton wadding/floss, four zhang of fine white cloth, combine in the liquor. Place the liquor in a horse dung fire, cover and seal with mud, don't allow it to drain, five days and five nights. Take out the cloth and cotton wadding, dry it in the sun, when dry repeat the steeping to exhaust the juice; each steeping must complete the cycle of a day, then take it out and dry it. Once dry then use the dregs and the cotton wadding, fold the cloth to make folded cloths, six to seven chi long, making six to seven cloths. Then use fresh/green mulberry charcoal to roast the cloths. Use them to press the place where the cold bi has been needled, making the heat enter to reach the place of the illness. When cold, again roast the cloth; press thirty times and stop. When sweat emerges, use the cloth to wipe the body, again thirty times and stop. Get up and walk inside, without encountering wind. At each needling you must press. Done like this, the illness will stop. This is what's meant by inputting heat.

A number of ancient measures are used in this paragraph. A jin is approximately 250 grams (9 ounces). A sheng is about 200 millilitres (7 fluid ounces). A chi (the name of the forearm diagnostic location; refer to the note in Lingshu 2) is about 23 centimetres (9 inches); a zhang is ten times that, about 2.3 metres (7 ft 6 in). These equivalences are taken from Wilkinson's "Chinese History: A Manual", and relate to the presumed date of the text, the Qin-Han period c 2nd century BC to 2nd century AD.

Medicinal pressing: Yao4 "medicine, herb"; yun4 "to press cloth, to iron", pronounced wei4 when referring to the medical or therapeutic practice of "pressing" something onto the body, applying hot compresses; the citations in Dacidian and Dazidian suggest the medical meaning predates the general; often translated as "hot ironing".

Pure liquor: This refers to a fermented or brewed wine of some kind, it predates distilling.

Shu pepper: Shu is the ancient name of the western part of the central-western province of Sichuan; Shu pepper is Sichuan pepper, a plant native to China, not biologically related to ordinary pepper.

Cinnamon heart: The spice cinnamon is taken from the bark of the tree, "cinnamon heart" is defined as what's taken from the inner rather than outer layers of the bark. Jiayi has "one sheng" as the measure for both the ginger and cinnamon.

Chew all four types: Since there are only three other ingredients, this apparently means some wine should be included in the chewing. According to some, this procedure of masticating ingredients was a common herbal or medical preparation method.

Cotton wadding/floss: The combination mian2 xu4 mean cotton or silk that's still in a loose unwoven state, like a fibrous ball, floss, or wadding.

Fine white cloth: Xi4 "fine, thin"; bu4 typically means plain cloth, as in the term "plaincloth-clothes" (see Lingshu 5); bai2 "white" is probably used in another standard sense, "plain, undyed, undecorated".

A horse dung fire: Yun4 is typically defined as a fire that has smoke but not flame, suggesting that dried dung is being used here like a charcoal.

Seal with mud: Tu2 means "to spread, smear" something, or also "mud"; whether it specifically means the latter, or "smearing" on some other form of sealing is unclear.

The cycle of a day: Ri4 "sun, day" is here preceded by zui4 "a cycle, to complete a full cycle" or "a full day and night", and qi2 "it", an unusual construction that's generally agreed to mean a full day and night.

Fold the cloth to make folded cloths: "Cloth" is bu4, as commented on previously. "Cloths" is jin1, which means a piece of cloth cut to a certain size for a specific use, eg a napkin, kerchief, scarf.

Fresh/green mulberry charcoal: Sheng1 "life, living; to be born" appears to be used here to mean "fresh, green"; it's typically not obviously represented in translation, and is nowhere commented on.

Roast the cloths: Zhi4 "to bake, roast, toast".

End of Lingshu 6

Lingshu 7: Managing the needles

Of all the essentials of needling, managing the needles is the most marvellous. The suitability of the needles, each has that which it does. Long and short, big and small, each has that which it performs/carries out. If you don't get/attain their use, you cannot move the illness. The illness shallow, the needle deep, [this] internally harms the good flesh, the skin becomes abscessed. The illness deep, the needle shallow, the illness qi doesn't drain, the limbs become greatly purulent. The illness small, the needle large, qi drains very/too severely, the illness must become calamitous. The illness big, the needle small, [evil] qi doesn't drain, returning again to become harmful/do damage. [These are examples of] losing the suitability of the needles, the large draining, the small not moving. I've already discussed their errors, allow me to discuss what they do.

The suitability of the needles, each has that which it does: Some suggest that yi2 "suitable, fit" and wei2 "to be, do" (each the last character of the clause in the original text) have been incorrectly interchanged, and this should read "the use of the needles, each has that which is suitable".

The limbs become greatly purulent: Zhi1 "branch, support" doesn't make any obvious sense here, either in its direct sense, or when regarded (as it most plausibly and typically is) as a substitute for the same character with the "flesh" radical added, zhi1 "limb, legs and arms" (a common substitution in Neijing); there's no obvious reason why the indicated situation should result in illness or purulence in the limbs specifically. Jiayi and Taisu instead have fan3 "turn over, reverse; on the contrary, instead", which is generally regarded as correct, giving a more plausible sentence: "[If] the illness [is] deep [and] the needle [is] shallow, the illness qi doesn't drain, instead becoming great pus."

The illness small: "Small" is taken by some to mean affecting only a small area, others regard it as meaning superficial and/or mild.

The illness must become calamitous: The final character of this is hai4 "to harm, injure", here apparently intended in the (standard) sense "disaster, calamity".

The large draining, the small not moving: That is, a large needle excessively draining qi from a "small" or slight illness, a small needle inadequately moving qi in a "big" or serious illness.

Illness in the skin without a constant place, treat using the sharp-point needle at the place of the illness; if the skin is white, don't treat. Illness in the dividing spaces of the flesh, treat using the round needle at the place of the illness. Illness in the main and network channels, chronic bi, treat using the sharp-sided needle. Illness in the channels, little qi, which should be supplemented, treat with the arrow-tip needle, at the transporters in the jing-well and ying-stream region. Illness that is very purulent, treat using the sword needle. Bi illness, qi violently emerging, treat using the round sharp needle. Bi illness, qi pain and not departing, treat using the long hair needle. Illness in the middle, treat using the long needle. Illness, water swelling, unable to connect the joints, treat using the big needle. Illness in the five zang with a fixed residence, treat using the sharp-sided needle, draining at the transporters in the jing-well and ying-stream regions; treat according to the four seasons.

There are ten indications given here, with two entries for the sharp-sided needle, one in the third position, and one at the end; Jiayi and Taisu both omit the first of those, and on this basis it's generally thought that it's a later addition, interpolated after the final entry had been displaced for some reason from its correct position (based on the listings in Lingshu 1 and 78), the fourth in the sequence.

If the skin is white, don't treat: Typically taken to mean that the affected location should have a reddish discoloration.

At the transporters in the jing-well and ying-stream region: The wording of this makes it unclear whether all five transporters are intended, or specifically the jing-well and stream, or those and the shu-transporter, likewise in the last sentence of this paragraph.

Illness that is very purulent: Jiayi has "pus and blood".

Qi violently emerging: Or, violent qi emerging.

Unable to connect the joints: That is, the joints aren't open, unobstructed, free-moving.

Illness in the five zang with a fixed residence: The final character is gu4, "solid, firm, strong, secure"; this is the same character used in the previous sharp-sided needle sentence to mean "chronic" (gu4 "longstanding illness"), but with the "illness" radical removed. There are only three instances of the "illness" radical character in Neijing (and apparently none prior to Neijing), the other two being in the sharp-sided needle passages in Lingshu 1 and 78; given that concordance, it's very probably the intended character here as well, giving "illness residing longterm in the five zang".

All needlings, there are nine, to correspond to the nine transformations. The first is called transporter needling; transporter needling, needle all the throughpasses, streams, transporters, the zang transporters. The second is called distant distant path needling; distant path needling, the illness is located above, treat it below, needle the fu transporters. The third is called main channel needling; main channel needling, needle the knotted network main channel regions of the great channels. The fourth is called network needling; network needling, needle the blood channels of the small networks. The fifth is called dividing needling; dividing needling, needle the spaces dividing the flesh. The sixth is called great draining needling; great draining needling, needle great purulence using the sword needle. The seventh is called hair needling; hair needling, needle floating bi in the skin. The eighth is called huge needling; huge needling, left treat right, right treat left. The ninth is called quenching needling; quenching needling, when needling burn/heat the needle, then treat bi.

To correspond to the nine transformations: In many editions, the character preceding "correspond to" is ri4 "day, sun", generally considered to be an error for yi3 (translated here as "to, in order to") because of the similarity of the two in ancient script; Jiayi has yi3.

There are considerable differences of opinion regarding these nine methods.

1. Transporter needling: either needling all/any of the five transporters, or specifically the ying-stream and shu-transporter, or those plus the beishu, either of both zang and fu, or of the zang only (my inclination is to the first of these readings).

2. Distant path needling: some say needling the three leg yang channels only, or specifically the six lower meeting acupoints; others say simply needling the lower region for illness in the upper part of the body (I'm inclined to the more general reading; I'm also not

convinced that this is meant to be applied to treating lower for upper only, rather than extrapolating that to mean treating upper for lower as well, in the manner specifically applied for left/right in "huge needling" below). One source notes that "distant" isn't included in the Jiayi version of this name, and contends that "path" is intended in the sense "guide, draw", meaning qi is drawn or guided rather than accessed at the point of the illness.

3. *Main channel needling: knotted gatherings in the main and network channels impeding/obstructing free flow, or the main channels in the deeper layers underlying points on the skin that are hard or painful to the touch, or places where the main and network/luo channels intersect or connect, or "tie and divide".*
4. *Network needling: universally agreed to be letting blood from the superficial small channels in the upper layers of the skin, although some limit these to specific locations, such as Quze Pc3, Weizhong Bd40, Yuji Lu10, Rangu Kd2 etc, rather than just anywhere.*
5. *Dividing needling: mostly taken to be needling directly into the muscles and flesh, or the "dividing spaces" in them; one source contends that the "divisions" are not those inside the flesh and muscles, but the junctures between red and white flesh visible on the body surface.*
6. *Great draining needling: universally taken to mean using the specified needle to lance purulent sores on the body surface, releasing pus, and possibly also blood and fluid. This is the only point for which a particular needle is specified, and some regard that as evidence that that stipulation is a later addition, although the nature of the procedure might arguably justify its inclusion in the original text.*
7. *Hair needling: universally agreed to be shallow needling for bi in the superficial region; the name is typically taken to refer to the body hairs in the superficial region.*
8. *Huge needling: the specific nature of the description given leads to general agreement on the simple principle of treating left for right and vice versa. The simple character used in the name (ju4 "large, great, huge") is commonly thought to be a substitution for that character with the "arrow" radical added, which means a carpenter's square, an image used in Neijing and elsewhere to mean regular and logical principles, the principle here being simply that described, left for right etc. Personally I don't find that somewhat indirect idea very likely in this list; if the "foot" radical is instead added to the original character it gives another meaning "separate, leave, be away or apart from", which seems much more applicable to the procedure, and in keeping with eg the "distant path" naming seen earlier; however, I've not seen this idea suggested elsewhere. Some sources use the name "opposite" needling, which appears to be descriptive rather than a translation of the actual character.*
9. *Quenching needling: regarded by all as a technique involving a heated needle, typically taken to mean heating the needle before inserting, typically with a superficial insertion specified to avoid deep damage; some alternatively take it to refer to the practice of lighting moxa on the head of a needle after insertion. Few comment directly on the meaning of the name, cui4, whose principal meaning is, after heating metal, to plunge it into liquid to quickly cool or temper it, an image that seems directly applicable to the procedure of heating a needle then plunging it into the body, hence the translation used here, "quenching"; this is the same character used towards the end of the previous chapter.*

All needling has twelve standards to correspond to the twelve main channels. The first is called coordinated needling; coordinated needling, use the hand directly on the heart and back, directly on the painful place, one needling in front, one needling behind to treat heart bi; needling this, side needling. The second is called repeated needling; repeated needling needles pain without a constant place, travelling up and down; insert directly, don't raise the needle, use the left hand to follow the place of the pain and press it, then take out the needle; repeat the needling. The third is called spreading needling; spreading needling, directly side needle it, lift it to front and back to spread out tense sinews, to treat sinew bi. The fourth is called joint needling; joint needling, directly insert one, side insert two, in order to treat cold qi small and deep; otherwise called triple needling; triple needling treats bi qi small and deep. The fifth is called scattered needling; scattered needling, insert one principal, side insert four, and float them, in order to treat broad and large cold qi. The sixth is called direct needle needling; direct needle needling, draw the skin then needle it, in order to treat superficial cold qi. The seventh is called transporting needling; transporting needling, insert directly, take out directly, slightly bring out the needle, then deepen it, in order to treat qi flourishing and hot. The eighth is called short needling; short needling needles bone bi, slightly shake and deepen it, sending the needle to the site of the bone, raising and lowering to massage the bone. The ninth is called floating needling; floating needling, side insert and float it, to treat tense muscles and cold. The tenth is called yin needling; yin needling, left and right both needle it, to treat cold jue in the centre; [for] cold jue in the middle, [treat] the shaoyin behind the ankle. The eleventh is called side needle needling; side needle needling, direct needle and side needle, one each, to treat bi that stays and resides a long time. The twelfth is called assisting needling; assisting needling, insert directly, take out directly, quickly bring out the needle and shallow it, bring out blood; this is called treating abscess swellings.

The first ... side needling: "Side" is almost universally regarded as meaning a slanted needle insertion, to avoid harming the zang in the chest.

The second ... repeat the needling: One view is that the repeated needling should be at a new painful spot; another says that the needle should be lifted to below the skin and reinserted.

The third: Although not directly stated, it's typically considered that this method in some way involves more than one needle, eg one on either side of the tense sinew/tendon.

The fourth ... small and deep: Some take "small" to mean affecting a small area; others, on a small scale, or light, not severe.

The seventh ... slightly bring out the needle: The first character of this is xi1 "few, not many, sparse, scattered"; some consider it and shen1 "deep, deepen" to be errors for "quick" and "shallow"; Taisu maintains that xi1 here (and in another instance in Lingshu 9) means "slow", which is not at all a standard meaning. The following character, fa1 "to issue, emit", could be taken to mean either inserting or removing the needle. These possibilities lead to diverse readings of the sentence, such as, use fewer acupoints, or a small number of needles, or rapid insertion and withdrawal of the needle, or slightly or slowly remove the needle before reinserting it deeper.

The tenth ... the shaoyin behind the ankle: That is, Taixi Kd3; some regard this as an illustrative example of the kind or treatment method to be applied; others see it as the specific and only indication.

The twelfth ... quickly bring out the needle: Shu4 "number; skill, art", also shuo4 "frequent" or "quick"; followed again by fa1 "issue, emit" (see the note to the seventh method above), there are again different reading that can be applied; fa1 is generally taken to mean "insert" the needle, shu4/shuo4 with that indicating that numerous or scattered needle insertions should be made.

As with the previous paragraph, there are numerous difficulties and differences of opinion in this, notably in the interpretation of the meanings of the names of the twelve methods.

"All needling has twelve standards". The final character in this, jie2, has a multiplicity of meanings, such as "law, principle, standard, key factor, way, method, item, thing, matter" etc, represented in this paragraph by translations such as "methods, needling manipulations, twelve parts, programs".

1. Coordinated needling: ou3 "to wed, mate; to coordinate, cooperate, assist; an even number", translated as eg "corresponding, paired, even"; this is typically taken to refer to the matching or coordinating of needles front and back.

2. Repeated needling: bao4 "to retaliate, report; repeatedly, back and forth", translated as eg "repeated, reciprocal, declarative, retributive"; the "repetition" of the needling is stated in the description.

3. Spreading needling: hui1 "grand, vast, broad, extensive", typically translated as "broad, extended, expansive, magnified"; the translation I've used is something of an extension of this basic idea, one that is recorded in later eras, but adopted regardless, because it's quite clearly used in that sense at the end of the description, "to spread out (ie relax, stop from tensing, twitching) tense sinews".

4. Joint needling: qi2 is a character with many possible meanings eg "in good order, even, level, equal, the same, alike, normal, regular, together, all, complete, ready, gather, assemble, in array, side by side" etc, translated as eg "uniform, balanced, simultaneous". The more informed sources instead regard qi2 as an error for can1 "coexist, participate, join" (ie joint needling, this is in any case a reasonable translation of qi2 "together") because of the graphic similarity of the ancient forms of the characters. A number of these meanings suit the procedure described, eg "together, gather, side by side".

5. Scattered needling: yang2 "to raise, wave, spread, winnow (to throw grain into the air so the chaff blows away from the kernel)", translated as "elevated, scattered", presumably a reference to the "scattering" of a number of needles around a single point. Many consider the name is an error for the yang of yinyang (which is the character used in the 11th century Xinjiaozheng citation of the Jiayi version of this text), so-called because "floating" or superficial needling is indicated; this reading also matches the later instance of "yin needling".

6. Direct needling: zhi2 "straight, not bent or crooked, honest, just, vertical, perpendicular, level with, facing", translated as eg "direct, straight". Some contend that it's a graphic error for a character meaning "sideways", meaning the skin is pinched in order to make a lateral insertion into it, not perpendicular; such an action isn't expressly stated, but it is consistent with both the pinching and the superficial indications, and there's nothing in the idea of "vertical, straight, direct" that seems particularly apt to the description given.

7. Transporting needling: shu1 "to tranport, transmit"; this is one of the versions of the character used to name the "transporter" acupoints on the lower limbs; translated as eg "transmitted needling". One source also cites an ancient definition of it as "draining", and

another uses the translation "dredging", both of which seem more apt to the actual action and function indicated.

8. Short needling: duan3 "short, brief, lacking, deficiency", translated as eg "short, gradual, slow-paced"; some consider it's an error for shu4 "vertical, perpendicular" due to the similarity of the ancient characters; none of these seems particularly suited to the action and function given (perhaps "stopping short" of the bones?).

9. Floating needling: fu2 "floating, superficial", translated as eg "floating, superficial, shallow"; both the meaning of the name and its suitability to the description are clear.

10. Yin needling: this is the yin of yinyang, universally rendered simply as such; the name is typically taken to refer to needling an acupoint on a yin channel (Taixi Kd3); an alternative suggestion is that it's because this method treats cold jue.

11. Side needle needling: bang4 "side, to the side, near, adjacent, adjunct, accompany, other, slant, deflect", translated as eg "adjacent, to the side"; the meaning and suitability of this are clear. Some sources contend that the duplication of "needle" in the name (the only such instance in the list) is a mistaken later addition.

12. Assisting needling: zan4 "to assist, support, guide, participate, inform, praise" translated as eg "assisting, supplemental"; if the typical reading of the method is adopted, that it involves numerous needlings, the idea of "assisting, supplementing" isn't inappropriate; one source alternatively says zan4 means "to drill, bore".

Bang4 "side, slanting", the name of the eleventh method, is used a number of times throughout the passage (in methods 1, 3, 4, 5, 9, and 11), consistently involving some ambiguity as to whether it's intended to mean a needle placed to the side of something, or a slanting rather than perpendicular insertion, or both.

Likewise zhi2 "straight, direct, perpendicular", the name of the sixth method, is used frequently (in methods 1, 2, 3, 4, 6, 7, 11, and 12), and it similarly involves uncertaintly as to whether the needle is to be inserted directly on to a position (rather than to the side), or is a straight, perpendicular insertion.

Where the channels reside is deep and unseen; needling them, insert the needle slightly and remain a long time in order to reach (*or transmit, gather*) the hole's channel qi. Shallow channels, don't needle; press and cut off the channel, then needle it; don't cause essence to emerge; only bring out the evil qi. What's meant by "three needlings then grain qi emerges": First, shallow needle, going through the skin to bring out yang evil. Needle again/further, then yin evil emerges, a little more deep, going through the skin to reach the muscles and the flesh, not yet entering the space of the flesh divisions. After entering the space of the flesh divisions, then grain qi emerges. So, "Needling Method" says: first needle shallow to expel evil qi and arrive blood and qi, then needle deep to reach yin qi evils, finally needle to the utmost depth to descend grain qi; this is its meaning. So, using the needle, not understanding what the year adds, the flourishing and declining of qi, where emptiness and fullness arise, you can't be a superior workman.

Where the channels reside is deep and unseen: Most regard this as a conditional statement, that is, the following procedures should be followed if the channels are deep and unseen; the alternative reading, which I prefer, is that this is an unqualified statement on the nature of the channels, explaining why the following applies.

Insert the needle slightly and leave/stay a long time: Some translate wei1 "small, subtle, slight" as "lightly, gently", but I think the context suggests the key point is the depth of needling, not its speed or force.

In order to reach the hole's channel qi: Kong1 "hollow, empty", here taken to mean "a hole", that is, an acupoint. Zhi4 can mean "to send, transmit; to summon, gather", or (as an equivalent for that character without the "strike" radical, also zhi4) "to reach, get to"; some take this to mean simply reaching or moving the channel qi, others say it means getting a needle reaction, getting qi.

Then grain qi emerges: That is, there are three depths of the skin and flesh, the most superficial just below the skin, then the muscles and flesh, then the flesh divisions or spaces. Some take "grain qi emerges" to mean accessing or moving/circulating grain or nutritive qi, or eliciting a response from it, some even regard "grain qi" here as meaning a needle response, rather than encircling/nutritive qi; similar considerations apply to "descend grain qi" later in the passage.

Arrive blood and qi: Lai2 "to come, arrive" appears to be used in a transitive sense not normal to the equivalent words in English, to cause to arrive, to make something come.

What the year adds: This is almost universally regarded as a reference to the interplay of the main and guest qis in the wuyun liuqi or "stems and branches" system, as outlined in the interpolated Qidalun or "seven great treatises" chapters of Suwen. Refer to the note to "can the years adding be known" in Lingshu 64, where "the year adding" appears to refer to a banned or prohibited year or period.

All needlings, there are five, corresponding to the five zang. The first is called half needling; half needling, insert shallow and quickly take out the needle, don't allow the needle to harm the flesh, as though pulling out a hair, to treat skin qi; this is the lung correspondence. The second is called leopard spot needling; leopard spot needling, left and right, front and back, the intention is for the needle to middle/strike the channel, to treat the blood of the main and network channels; this is the heart correspondence. The third is called joint needling; joint needling, directly needle left and right of all the sinews (*see the note below*), to treat sinew bi; be careful not to bring out blood; this is the liver correspondence; also called chasm needling; one name, joyful needling (*see the note below*). The fourth is called joining valley needling; joining valley needling, left and right chicken foot the needle in the space of the flesh divisions (*see note below*) to treat muscle bi; this is the pancreas-spleen correspondence. The fifth is called transporting needling (*see the "joyful needling" note below*); transporting needling, directly enter, directly emerge, insert deep to reach the bone to treat bone bi; this is the kidney correspondence.

The third is called joint needling: Guan1 "barrier, pass; joint", meaning "bone/body joint", not the "together, combined" meaning of qi2 in "joint needling" in the previous twelve methods

The correspondences in the paragraph are standard five goes: lungs skin, heart jingluo/channels, liver sinews, pancreas-spleen muscles/flesh, kidneys bones.

All the sinews: The relation between the sinews and joints is typically and quite reasonably taken to be that the former attach at the latter. For that reason, jin4, the character translated here as "all" (a standard although not typical meaning), is often regarded as

meaning the "ends" of the sinews, the section near the attachment with the bones; "end, finish" is a standard and common meaning of jin4, but as a verb, not as a noun in the sense suggested here, for which I've seen no other instance cited.

Chasm needling: No explanation is offered for the relation of this name to this needling method. In Jiayi, this comment is placed after the name of the next method, which offers a more plausible correlation, "chasm, deep, abyss" offering a correspondence to the idea of the "valleys", and of needling into "spaces, divisions, gaps", and also to the idea seen in the previous paragraph that the "space of the flesh divisions" is a relatively deep one.

Joyful needling: Likewise, no reasonable explanation is offered for this name; in Jiayi, it again is placed after the name of the next method. One source suggests that it in fact relates to the fifth method, transporting needle, and is an error for the ancient form of shu4 "vertical, perpendicular", the same character that it's suggested has been mistakenly altered in "short needling" in the previous twelve method system; likewise, it's suggested that the name of the fifth method here, shu1 "transporting", is a rhyming error for shu4 "vertical". The "short" and "transporting" methods are notably similar, both involving deep insertion to the bone, and "vertical" needling is a not-implausible description of both, certainly more understandable than either "transporting/transporter" or most particularly "short". The character actually used in the present text is most typically used as an interrogative marker, pronounced qi3; alternatively, pronounced kai3, it can mean "joyful, happy"; some variation of this name is typically used in English translations, really for no good reason other than that none of the more common meanings of the character readily lend themselves to a simple English equivalent.

"Joining/meeting valley" is the name of Hegu Cn4, but in this case the context of the passage makes it clear that the name is a more general one, it doesn't refer to that specific acupoint; no source suggests otherwise.

Chicken foot: This is universally taken to mean that three needlings should be made, a central one, and one to each side of it, in imitation of the shape of a chicken's foot or claw; opinions differ regarding whether separate needles or only one should be used, and, in the case of a single needle, whether it should be completely taken out before reinserting, or only withdrawn to a shallow level.

End of Lingshu 7

Lingshu 8: Root [in] spirit

Huangdi asked Qibo saying: The method of all needling must first root in spirit. Blood, channels, ying, qi, essence, spirit, these are what the five zang store. When there's wantonness and dissipation they leave the zang, then essence is lost, hun and po fly up, will and thought are blurred and disordered, wisdom and planning leave the body. What is the reason for this, heaven's fault, or man's transgression? What's meant by virtue, qi, life, essence, spirit, hun, po, heart, thought, will, idea, wisdom and planning? Permit me to ask about their principles. Qibo answered saying: Heaven in me is virtue, earth in me is qi; virtue flows, qi spreads, and there's life. So the coming/arrival of life is called essence; two essences adding to each other is called spirit; following the spirit going and coming is called hun; joining essence and emerging and entering is called po; that which is responsible for affairs is called heart; the heart has that which it supposes, called thought; what the thought

retains is called will; based on the will, then stored and transformed, is called idea; based on idea, then distantly anticipating, is called planning; based on planning, then dealing with affairs, is called wisdom.

Blood channels ying qi essence shen: Translations consistently contend that these six should in some way be reduced to five, to agree with the number of the zang. Some maintain that spirit is an interpolation, with the others forming a plausible set of correspondences, blood liver, channels heart, ying (nutritive qi) pancreas-spleen, qi lungs, essence kidneys. Another approach is to regard ying qi as one entity. Despite the plausibility of both these contentions, I don't think there's sufficient cause to definitively support any such reduction of the list.

Heaven's fault: Opinions differ on whether this question means, is it a fault or lacking of heaven, or, is heaven actively punishing man?

Heaven in me is virtue: De2 "virtue" is widely regarded as referring to the world that heaven bestows on man, the climates of the seasons and the basic elements of the environment such as sunlight and rain, rather than something that resides internally or personally in a person. And "qi" is correspondingly taken to mean the qi of the foods that are taken from that environment, which then sustain human life. In keeping with this, "heaven/earth in me", which is a very direct translation of the characters involved, is more typically seen as referring to what heaven "gives" a person, rather than what's "in" him/her. My feeling is that these interpretations are mistaken.

The character de2 here means "virtue" in the archaic sense of the word. To explain: The English word "virtue" comes from the Latin "virtus", which basically means "manliness, valour", then by extension "worth, goodness", or also "virtue, moral excellence". The evolution of the English word mirrors that of the Latin; at an early date it meant the power, force or deeds of something divine or supernatural, or on a human level "physical strength, force, energy". This sense has been virtually obsolete for centuries (the only notable point of survival being in the phrase "by virtue of", in which "virtue" doesn't mean "goodness, righteousness", but "by the power or efficacy of ...", hence "by the authority of, because of"). The normal surviving sense in English is "moral goodness, righteousness, observance of moral laws or standards of right conduct; avoidance of wrong-doing or vice". The meanings of the character de2 in ancient Chinese share this same dichotomy. In Confucian works in particular, it tends to have the meaning or at least overtone of "moral goodness, righteousness, rectitude". However, in Daoist or Huanglao works the opposite is true; it typically means a primal rather than moral quality, the strength, power, capacity, or worth inherent in something, as for example in the alternate title of the text Laozi, Daodejing "The Classic [of] the Way [and] Virtue". Suggestions for translations for de2 in this sense include "character, quality, nature, strength, worth, capacity, good, integrity, mettle" etc. I've chosen to use the standard translation "virtue", but I stress that in Neijing this is generally meant in the archaic, not the modern or moral sense.

Qi spreads: Bo2 " thin, slight, small; near, close, to depend on; to issue, spread"; here more typically taken to mean "attach", or "interact".

Two essences adding to each other: Jing1 "essence". Bo2 (the character discussed in the previous note, with the "hand" instead of the "grass" and "water" radicals) "to catch, seize; to grapple, struggle; to be near, adhere to, add to"; here more typically translated

as "grapple with, strike, interact with each other", or alternatively "seize each other"; universally and correctly taken to refer to the reproductive joining of man and woman.

Two essences add to each other: As well as the clear implication of male-female reproductive interaction in this clause, there's an illness condition later in the chapter in which "essence" clearly means "sperm", "essence sometimes descending of itself". That use of "essence" is in fact relatively rare in Neijing, it's more typically intended in a more general sense, something akin to and often difficult to precisely differentiate from spirit or qi. Some translations consistently render jing1 throughout this chapter, or even throughout the whole work, as "seminal/reproductive essence" or the like, which is greatly mistaken.

Hun and po are often translated or explained as the "ethereal soul" and "corporeal soul" respectively. The issue of their natures and the relationship between the two is in fact a rather complex and difficult one, but put briefly, while the broad categorization of hun as yang and po as yin may be a reasonable representation of the broad thinking of the time (it's not indisputably so), it's difficult to find a concrete contemporary basis for the common attribution of mental and emotional aspects of the human makeup to the hun, and physical aspects to the po; that characterisation is more probably representative of later retrospective analysis; the work typically cited in support or illustration of it is the Zuozhuan commentary of the Tang (7th century AD) author Kong Yingda. More significantly, hun and po in fact play no discernibly meaningful part in Neijing theory, displaying no clear identity independent of and separate to that of shen/spirit or jing/essence, or the two zang in which they're stored, the liver and lungs. It should also be noted that the typical contention of modern Chinese works, that shen has only a material or rational meaning in Neijing, not a metaphysical or spiritual one, is largely (although to my mind by no means entirely) substantiated throughout this passage.

The heart has that which it supposes, called thought: The heart was perceived as the seat or centre of consciousness and mental faculties and activities, and that aspect of its meaning is prominent in this passage.

The precise translations of the various "thought" related words or characters in this passage are unavoidably arbitrary to a significant degree, and shouldn't be accepted fixedly; yi4, si1 and lv4 could all readily be translated as "thought" or something of the kind, and the respective translations used here, "thought", "idea" and "planning" (each a standard meaning of the respective character), are very much influenced by context; likewise yi4 "suppose" more typically means "to remember, recollect, conjecture"; also, zhi4 "will" in this instance clearly means something quite unlike what's generally intended by that word. The words chosen for the translation are based on the perception, widely although not universally accepted in relation to this passage, that the key idea of its final progression is that (1) the heart/mind has a conceptual impulse of some kind; (2) that initial impulse is then capable of taking a fixed or persisting form; (3) it can then be refined or transformed from its original form; (4) it can then be applied in an abstract or "distant" way, typically to planning for future events or actions; (5) the end result of this process of forming an abstract but practically applicable knowledge from the original impulse/s of thought is "wisdom". The ensuing text then shows, or gives concrete examples of, what's meant by this, when wisdom is applied to the issue of "nourishing life": firstly, a person can and should recognize that the year has a cycle of seasons, and that there are ways to act that are suitable to those different times in order to maintain the body's health, and so he/she should plan and act accordingly, rather than merely reacting impulsively as and

when events occur; likewise for the human emotions, a person can know that these should not be unbridled but should be regulated in order to maintain the body's health, and so he/she should plan and act accordingly. There are a wide range of different words chosen to translate the different steps in this "thought/wisdom" line, the specifics of which I suggest are largely immaterial, provided the broad idea of the intended progression is clearly conveyed.

Therefore, the wise, nourishing life, must follow the four seasons and suit cold and summer heat, harmonise joy and anger and peacefully reside in place, regulate yin and yang and regulate hard and soft. Like this, then perverse evils don't arrive, long life, a long time seeing. Therefore, fear and apprehension, thinking and planning then harm the spirit; the spirit harmed, then fear and dread flow wantonly and don't stop. As a result of melancholy and sorrow moving the centre, [it] is exhausted and cut off and life is lost. [As a result of] joy and pleasure, the spirit is fearful, scatters and doesn't store. [As a result of] worry and anxiety, qi is shut in and stopped up and doesn't move. [As a result of] great anger, [a person becomes] confused and bewildered and ungoverned. [As a result of] fear and dread, the spirit wavers/vascillates fearfully and doesn't store.

In the second and fifth of these six emotional disturbances, the subject of the second clause, the thing that's affected by the emotional disorder, isn't stated. In the first, third, and sixth, the thing affected is the spirit; and given that it is the stated subject of the chapter, it might be reasonable to conclude that it's also what's intended in the unstated cases, and some texts do so; however, the instance of qi as the affected thing in the fourth case makes such a conclusion doubtful.

A long time seeing: This is a phrase originating in Laozi; the exact meaning of shi4 "to look, see" is debated, but the idea is in any case simply "long life, longevity".

Fear and dread flow wantonly: Many texts regard the "wanton flow" as discharge of sexual fluids, to my mind without sufficiently good reason.

Ungoverned: Bu4 zhi4 "not regulated/ordered, ungoverned" here is universally taken to mean the person in some way loses self control, rather than that the illness itself is beyond control or untreatable.

Heart: Fear and apprehension, thinking and planning, then the spirit is harmed; the spirit harmed, then fear and dread, losing oneself, destroying the muscle-masses and shedding the flesh, the hair withered, the colour deathly, death in winter. Pancreas-spleen: Worry and anxiety and not dispelling then the thought is harmed; the thought harmed, then blurring and disorder (*of the state of mind*), the four limbs don't raise, the hair withered, colour deathly, death in spring. Liver: Melancholy and sorrow moving the centre then the hun is harmed; the hun harmed, then madness, forgetting, not bright; not bright, then not proper and appropriate, a person's yin (*the penis, or penis and scrotum*) contracts/shrinks and the sinews convulse, both rib-flanks, the bones don't raise, the hair withered, the colour deathly, death in autumn. Lungs: Joy and pleasure without limit then the po is harmed; the po harmed, then madness; madness, the thought not retaining people, skin leathery and scorched, the hair withered, colour deathly, death in summer. Kidney: Great anger and not stopping then the will is harmed; the will harmed, then frequently forgetting his/her previous words, the yao/lumbar spine unable to bend forward or back, to bend or stretch,

the hair withered, colour deathly, death in the last month of summer. Fear and dread and not dispelling, then essence is harmed; essence harmed, then the bones ache, limp jue, essence sometimes descending of itself. Therefore, the five zang govern storing essence, they cannot be harmed; harmed, then they lose their storing and yin is empty; yin empty, then without qi; without qi, then death. Therefore, using the needle, observe and examine the condition of the ill person in order to know the state of preservation or loss, getting or losing, of essence, spirit, hun and po. The five being harmed, the needle can't be used to treat it.

Heart ... losing oneself: Zi4 "self" shi1 "to lose, miss, error"; generally taken to mean loss of the ability to control one's body or actions due to fear.
The colour wan: Yao1 "to die young"; that is, an unhealthy complexion, dark and lacking lustre; the two symptoms "hair withered" and "colour deathly" are stated for all five zang.
Pancreas-spleen ... not dispelling: That is, the condition continues unrelieved or unabated.
Liver ... not bright: Literally "no essence", jing1 here typically taken to mean "bright", meaning loss of normal mental brightness, alertness, or astuteness; Jiayi instead has "the essence doesn't store", which could be taken to mean a general loss of essence, or could be read in the "seminal emission" sense seen in the kidney section, below.
Liver ... not proper and appropriate: That is, losing the normal sense of what actions are and aren't proper or appropriate to a situation, inability to behave properly.
Liver ... both rib-flanks, the bones don't raise: An unusual indication, perhaps meaning bilateral difficulty or pain in the normal course of the ribs expanding with breathing.
Lungs ... the thought not retaining people: Cun2 "to keep, retain, store"; that is, showing no recognition of people one knows, not recognizing family and friends.
Kidney ... frequently forgetting his/her previous words: A person not remembering what he/she has recently said.
Essence sometimes descending of itself: That is, involuntary seminal emission, jing1 "essence" here meaning "semen".

The "thought" words in this passage shouldn't necessary be translated in the same way as those in the original "thought" line at the beginning of the chapter; other than "thinking and planning" in the first section, which do appear to correspond to the previous usage, only two of those terms are used here, yi4 and zhi4, and not as part of that same system, instead as things that are stored by the five zang, along with shen, hun and po.
The indicated death times all correspond to the ke or overcoming cycle of the five goes: damage to heart, fire, results in death in winter, water; pancreas-spleen earth — spring wood; liver wood — autumn metal; lungs metal — summer fire; kidney water — late summer earth.
The harming emotions (leaving aside "thinking and planning" in the first) are also ke cycle relationships, except that worry and anger are interchanged: fear (water) harms shen (fire); worry (earth, in standard five goes this should instead be anger-wood) harms yi (earth); sorrow (metal) harms hun (wood); joy (fire) harms po (metal); anger (wood, in standard five goes this should instead be worry-earth) harms zhi (water).

The liver stores the blood, the blood houses the hun; liver qi empty, then fear; full, then anger. The pancreas-spleen stores ying/nutrition, ying houses yi/thought; pancreas-spleen qi

empty, then the four limbs don't function, the five zang are unsettled; full, then the abdomen distends/swells, the regular (*menstruation*) and defecation are not free-moving. The heart stores the channels, the channels house the spirit/shen; heart qi empty, then sorrow; full, then ceaseless laughter. The lungs store qi, qi houses the po; lung qi empty, then the nose is blocked and not free-moving, little qi; full, then gasping rasping breathing, chest fullness, facing upward to breathe. The kidneys store essence, essence houses the will/zhi; kidney qi empty, then jue; full, then distension, the five zang unsettled. You must examine the illness shapes/forms of the five zang in order to know/understand the emptiness or fullness of qi, and carefully regulate it.

The regular and defecation: Instead of jing1 "regular" etc (the character used to refer to the body's "warp" or "main" channels), here taken to mean "menstruation", Jiayi, Maijing, Qianjin and Wang all have that character with the "water" instead of the "silk" radical, also pronounced jing1, which is principally the name of a specific river; Wang contends that it can mean "defecation", others say there's no solid basis for that contention, although Dacidian for one accepts it. Various combinations of menstruation, urination and defecation are seen in the translations. See the note to "regular excretion not free-moving" in Suwen Q6.

Free-moving: The characters bu4 li4 technically or literally mean not "sharp, bright, beneficial, advantageous, successful"; in Neijing this term is commonly used to refer to a situation where something is not operating smoothly and unimpededly as it should, most typically where movement is impeded, either a gross or external movement, such as that of the joints, or a contained or internal movement, something passing through a passage, as in the nose, the channels, or urination and defecation.

Heart qi empty, then sorrow: Instead of bei1 "sorrow", Jiayi has "sorrow [and] worry", Maijing and Qianjin has "sorrow not stopping" (ceaseless sorrow); Xinjiaozheng says Taisu has you1 "worry"; extant Taisu is as Lingshu.

Little qi: This can refer either to a general qi deficiency, or specifically shortness of breath, gasping, asthma; given the context, the latter is preferred in this instance by most translations; see the similar note in Lingshu 6.

Kidney qi empty, then jue: Jue2 is generally considered here to principally refer to coldness and weakness of the limbs.

Then distension: A number of sources specify lower abdominal swelling here, on what basis I don't know.

The five zang unsettled: Some regard this as the beginning of the next sentence, rather than an extension of the kidney full symptoms.

End of Lingshu 8

Lingshu 9: End and beginning

The way of all needling completes with end and beginning. To clearly understand end and beginning, the five zang are the main principle, [and] yin and yang are determined. Yin governs the zang, yang governs the fu; yang receives qi at the four tips/ends (*the four limbs*), yin receives qi at the five zang. Therefore, draining, meet it; supplementing, follow it. Understand meeting, understand following, and qi can be made harmonious. The method of

harmonising qi, [you] must thoroughly understand yin and yang. The five zang are yin, the six fu are yang. Passing this on to later ages, use blood to make an oath. Respect it, prosper; neglect it, death; without the way, acting privately, must result in heavenly calamity; carefully respect heaven's way. Permit [me] to discuss end and beginning. End and beginning, the main channels are the main principle. Grasp the maikou and renying to know yin and yang having excess and insufficiency, balanced and not balanced, [then] heaven's way is complete. What's meant by a balanced person is, not ill; not ill, [then] the maikou and renying correspond to the four seasons, above and below correspond to each other, and both go and come. The channels/pulses of the six main channels don't knot and move; the cold and hot of root and tip guard each other's function; shape and flesh, blood and qi must match each other; this is called a balanced person. Those with less qi, the maikou and renying are both small/smaller, and don't match the chi and cun. [If it's] like this, then yin and yang are both insufficient; [if you] supplement yang, then yin is exhausted; drain yin, then yang is cast off. [Illness] like this can be dealt with using sweet medicines; you can't drink extreme prescriptions. [Illness] like this, don't moxa, it won't stop/heal; as a result of draining it, then qi of the five zang is ruined.

Completes with end and beginning: "Completes with" means ends with, doesn't go beyond. Some see this as referring to the beginning and end of the circulation of the channels, that is, the circulation reaches its end and immediately returns to the beginning, a ring without end; others consider it to be the name of a text that discusses the principles referred to, perhaps Lingshu 5, titled "Roots and Ends" (neither character the same as those used here), which discusses different systems of the root and finishing points of the channels; "end beginning" can mean the complete course of something from beginning to end, so another suggestion is that it refers to a full and complete exposition of the principles of needling, rather than something literally involving ends and beginnings.

Yin and yang are determined: Most texts regard this slightly unusual phrase as meaning that if you understand the five zang, then the relationships between the yin and yang channels can be understood also; an alternative suggestion is that the "five zang" clause is an interpolation, and the sentence should say that "to clearly understand end and beginning, yin and yang determine [them]". Note that the text below gives a (technically) different statement of what the "main principle" of ends and beginnings is, the main channels, not the five zang, nor yin and yang.

Draining meet it, supplementing follow it: This is a reference to the "meeting, following" principles seen in the "small needle" passage at the beginning of Lingshu 1; in that passage there's considerable debate about what's meant by these terms, but here, for some reason, there's general agreement that they mean pointing the needle with or against the direction of flow of channel qi to perform draining and supplementing respectively; one text alternatively says this means turning (ie rotating) the needle in or against the channel flow, a suggestion that's probably anachronistic.

Use blood to make an oath: This is a reference to the practice of smearing the mouth with blood from sacrificial meat when taking a solemn oath or vow. This section is missing from the Jiayi version of the text, and some consequently regard it as an interpolation (it might alternatively be seen as something the compiler of Jiayi could well be inclined to leave out, as unnecessarily florid and lacking in concrete information).

Respect it, prosper; neglect it, death: Opinions vary regarding whether what will prosper or die/fail is the practice or principles of acumoxa itself, or the practitioner, or his patients. The ensuing "heavenly calamity" reached by "acting privately/selfishly" "without the way" (that is, needling rashly using one's own ideas, not following the proper principles) is on the other hand universally regarded as meaning a bad outcome for the person needled.

Carefully respect heaven's way: All sources join this phrase to the ensuing rather than preceding text, meaning, the principles of end and beginning will be discussed while respecting or in a spirit of respect for the "way of heaven" (typically taken to mean the laws of nature and/or yinyang etc); I think it's more plausible to see it as related to, an opposite of, the previous "heaven's calamity" reaching by acting "without the way".

A balanced person: Ping2 ren2 ("balanced, peaceful, ordinary", "person") is now a common word meaning an ordinary, average or normal person, and English translations typically render it that way; however, this term appears not to have come into common use till after the time of Neijing (it may actually originate in Neijing), and likewise the use of ping2 in the "normal, ordinary" sense was relatively limited at the time; and while the concept of being balanced, not having illness, carries with it some inherent degree of the notion of "normal, ordinary", I think the emphasis here is on the "balance", not "ordinary, normal", as seen in the discussions of the various pulses etc matching each other.

Above and below respond to each other, and both go and come: "Above and below" means the renying pulse on the neck (above) and the maikou pulse on the wrist (below); they "respond to each other" and "go and come" by varying appropriately to the yinyang state of the day and the year, the yang stronger in spring and summer and daytime, yin stronger in autumn and winter and night etc.

The six main channels don't knot and move: "Six" means taiyang, shaoyang etc, on both arm and leg; that is, this actually refers to all twelve main channels. Jie2 "knot, tie, congeal" is variously taken to mean a knotted, a rough, or an interrupted, intermittent pulse; some regard "move" as being a separate disordered pulse, a restless or agitated pulse, others take it to mean simply the movement of the channels, that is, they "don't have a knotted movement".

The cold and hot of root and tip guard each other's function: A similar idea to "above and below respond to each other"; as the seasons etc change, root and tip (probably meaning the two pulses) respond appropriately, giving way to each other as they should instead of usurping the other's position.

Not matching the chi and cun: Some say this means the chi and cun positions of the pulse at the wrist, but there is in fact considerable uncertainty as to whether those pulse positions existed in Neijing times. A more commonly adopted reading is that the chi means the yin face (anterior) of the forearm; the principle of examining and matching the state of the skin of that region to the pulse is seen throughout Neijing; the corollary of this reading is that cun is an error or mistaken interpolation, since the cun and maikou pulses are the one and same thing, so the idea of matching them is nonsensical. Another reading is that chi and cun don't mean pulses but are intended in their original sense of units of linear measure, inch and foot/cubit, symbolising the regular standards that the maikou and renying should accord with.

[You] can't drink extreme prescriptions: Typically taken to mean that strong or harsh medicines or large doses can't be applied. The Taisu version of the text adds the character

yu4 "to heal" after "not", giving an entirely different meaning, that if sweet medicines are applied but the illness doesn't heal, then strong medicines can be used.

Don't moxa, it won't stop: That is, moxibustion shouldn't be used to treat this type of condition. Some (beginning with the commentary in Taisu, although not the main text) take jiu3 "moxa" as an error for its homonym "a long time", meaning that if you don't persist with treatment without stopping for a good while then the illness won't heal; and if, on the basis of lack of improvement, you change course and instead drain, then the consequences are disastrous, as the next clause states; presumably on the basis of this reading, one source suggests that the previously mentioned "sweet medicines" are slow-acting prescriptions, the "extreme" prescriptions are fast acting.

The renying once flourishing, the illness is in the foot shaoyang (*gallbladder*); once flourishing and agitated, the illness is in the hand shaoyang (*three burners*). The renying twice flourishing, the illness is in the foot taiyang (*bladder*); twice flourishing and agitated, the illness is in the hand taiyang (*small intestine*). The renying three flourishing, the illness is in the foot yangming (*stomach*); three flourishing and agitated, the illness is in the hand yangming (*large intestine*). The renying four flourishing, and big and rapid, its name is called overflowing yang; overflowing yang is external restriction. The maikou once flourishing, the illness is in the foot jueyin (*liver*); once flourishing and agitated, it's in the hand heart master (*pericardium*). The maikou twice flourishing, the illness is in the foot shaoyin (*kidney*); twice flourishing and agitated, in the hand shaoyin (*heart*). The maikou three flourishing, the illness is in the foot taiyin (*pancreas-spleen*); three flourishing and agitated, in the hand taiyin (*lung*). The maikou four flourishing and big and rapid, its name is called overflowing yin; overflowing yin is inner barrier; inner barrier, not connecting, death, not treatable. The renying and taiyin maikou both flourishing fourfold and above, it's name is called barrier restriction; barrier restriction gives a short time.

The renying once flourishing: This passage uses a traditional comparison or multiplication system where "one flourishing" or "one times" means once as big again, that is, twice as big; for all the measures stated, to reach the standard Western equivalent, add one and multiply by that number, that is, "once flourishing" means twice as big, "twice flourishing" three times as big, "three flourishing" four times as big etc. "Threefold" and "fourfold" (which use a different character for the same idea, the character still used in modern China, both in this calculation method, and also in a directly mathematical multiplication system in the Western manner) are the same; that is, in mathematical terms they mean four and five times as big respectively.

Agitated: In some way restless, disturbed; one comment on this (eg Zhang Jiebin) is that it's evidence of a yang state, which is why treatment moves from the leg channels (yin) to the hand (yang).

External restriction: Ge2 is a character with a great number of meanings, including eg "to fight, grapple, rush, surge, resist, withstand, detain, restrict, confine", any of which could be seen as the intended meaning here. Opinions on the mechanism of the disorder vary; one view is that with yang overflourishing yin is confined inside and can't reach to the outside and interact with yang; or precisely the opposite, that yin is forced to the outside and restricted there; one says yang is incapable of moving in. After this, a parallel passage in Lingshu 48 adds "death, not treatable".

Internal barrier: This name mirrors that of the previous gross excess condition, "external restriction"; here again there are differences of opinion on whether yang is locked outside, or inside, in either case, again resulting in no proper interplay and interaction between the two.

Barrier restriction: This is a combination of the previous two names, external restriction and internal barrier, implying a combination of those two conditions, reflecting the fact that both yin and yang are excess.

Gives a short time: Indicates there's only a short time to death, predicts an imminent death; see the note to "giving the short time" in Lingshu 5.

The renying once flourishing, drain the foot shaoyang (*gallbladder*) and supplement the foot jueyin (*liver*), two draining, one supplementing; treat it once daily; you must feel and examine it; [if it's] slack, treat it above; [once] qi [is] harmonised, then stop. The renying twice flourishing, drain the foot taiyang (*bladder*), supplement the foot shaoyin (*kidney*), two draining, one supplementing; treat it once each two days; you must feel and examine it; slack, treat it above; qi harmonised, then stop. The renying three flourishing, drain the foot yangming (*stomach*) and supplement the foot taiyin (*pancreas-spleen*), two draining, one supplementing; treat it twice daily; you must feel and examine it; slack, treat it above; qi harmonised, then stop. The maikou once flourishing, drain the foot jueyin (*liver*) and supplement the foot shaoyang (*gallbladder*), two supplementing, one draining; treat it once daily; you must feel and examine it; slack, then treat above; qi harmonised, then stop. The maikou twice flourishing, drain the foot shaoyin (*kidney*) and supplement the foot taiyang (*bladder*), two supplementing, one draining; treat it once each two days; you must feel and examine it; slack, treat it above; qi harmonised, then stop. The maikou three flourishing, drain the foot taiyin (*pancreas-spleen*) and supplement the foot yangming (*stomach*), two supplementing, one draining; treat it twice daily; you must feel and examine it; slack, then treat it above; qi harmonised, then stop. Why it's treated twice daily - the taiyang governs the stomach, [which has] a great wealth of grain qi, so it can be treated twice daily. The renying and maikou both flourishing threefold and above, its name is called yin and yang both overflowing; like this, not opening, then the blood channels are stopped, are closed off and obstructed, qi has no place to move, flowing wantonly in the interior, the five zang are harmed internally; [illness] like this, as a result of moxaing it, then it transforms, changes, and becomes another illness.

Two draining, one supplementing: This indicates that in some way twice as much draining treatment is to be applied as supplementing (and likewise for all the following instances). One suggestion is that twice as many acupoints (or simply two) should be used for one as the other; another is that the time for the draining treatment should be twice as long.

Slack: Shu1 "sparse, slack" is interpreted at face value by some commentators (Zhang Jiebin), meaning needling is directed at relaxing, reducing tension or urgency. The form of shu1 used is an atypical one that's graphically close to zao4 "agitated, restless", the character used earlier in the passage in a similar position in each situation; the Taisu version of the text has zao4, not shu1, and many sources consider that's the correct and intended character; I agree with that view; I've left the translation as the Lingshu text has it at face value, but I think in fact this and all subsequent instances of "slack" in this section should say "agitated".

Treat it above: The typical, and I think correct, reading of this is that, as previously in the passage, if there's an agitated pulse (refer to the previous note), treatment moves from the leg channels (below) to the hand (above). There are other readings; one is that "upper" in some way indicates that acupoints distant or distal to the condition or situation should be used; another is that "up, above" belongs in the next clause, not this, meaning when qi "ascends" and is harmonious then treatment stops; I think the "treat above" reading is much more likely than either of these.

Twice daily: In both cases where this is indicated the foot taiyin pancreas-spleen and yangming stomach channels are involved, and the comment is commonly made that treatment can be applied with this frequency because of the plentifulness of the qi of water and grains in the stomach.

Qi harmonious, then stop: "Qi harmonious/harmonized" is generally thought to mean specifically that the two pulses, renying and maikou, are harmonised to each other, rather than simply a broad indication that the body's qi should be harmonious.

Taiyang governs the stomach: Jiayi and Taisu both have taiyin instead, and that is generally considered correct, indicating the foot taiyin pancreas-spleen, the yin partner of the stomach; some commentators (Ma Shi, Zhang Zhicong) contend it should directly say "yangming" (foot yangming stomach); the result is in any case effectively the same.

Like this, not opening: Some see this as a description of the situation, that there's congestion and blockage, a lack of open passage and circulation; alternatively it's taken to mean that if action isn't taken to open up any congestion and blockage, then the ensuing occurs.

The way of all needling, [when] qi is harmonised then stop. Supplement yin, drain yang, [then] the voice qi is clearer, the ears and eyes sharp and bright. Go counter to this and blood and qi don't move. What's meant by "qi arrives and there is effect/effectiveness": Draining, then emptier; [in this] emptiness the channel (*pulse*) is as big as before but not hard; [if it's] as hard as before, [then] although briefly [the patient] says [he/she is] better, the illness has not yet departed. Supplementing, then fuller; [in this] fullness the channel (*pulse*) is as big as before but harder; [if it's] as before but not hard, [then] although briefly [the patient] says [he/she is] better, the illness has not yet departed. So, supplementing, then full; draining, then empty. Although the pain doesn't follow the needle, the illness must decline and depart. [You] must firstly thoroughly understand the illnesses produced by the twelve main channels, and afterwards [this] can get passed on to end and beginning. So, yin and yang don't mutually move/shift, empty and full don't mutually deviate; treat the main channels. All needling relies on three needlings to reach grain qi. Perverse evils wildly join, yin and yang change residence, counterflow and withflow reverse each other, deep and shallow take different places, the four seasons aren't got, stagnant gathering, wanton overflowing; [you] must needle and remove [these disorders]. So, one needling then yang evils emerge; needle further then yin evils emerge; three needlings then grain qi arrives; grain qi arrives then stop. What's meant by "grain qi arrives" [is] already supplemented, and fullness; already drained and emptiness; therefore it's known that grain qi has arrived. [If] evil qi alone departs, yin and yang can not yet be regulated, but the illness is healed. Therefore it's said, supplementing, then fullness; draining, then emptiness. Although the pain doesn't follow the needle, the illness must decline and depart.

Supplement yin, drain yang: A common reading of this is that "yin" means the body's proper qi, which typically needs assisting, supplementing; "yang" means evils invading into the yang region, which have to be removed, drained. Another view is that it's a poetic construction which actually means either yin or yang should be either supplemented or drained depending on the circumstance.

The voice clearer, ears and eyes sharp and bright: These are generally regarded as signs of treatment being successful, the body being returned to a healthy state.

Qi arrives and there is effectiveness: See the comments on needle sensation, "getting qi", in the "one needling" note below.

Draining, then emptier: That is, draining should create a state that is empty relative to the state before needling. The pulse is as big as before, but not as hard. If it is still as hard, it means that, even if the patient for a time experiences some relief, the treatment has not been effective, and the illness has not left the body. The same pattern is followed in the ensuing "supplementing" section, the pulse is unchanged in size but becomes firmer; if it isn't firmer, treatment hasn't been effective. In this first instance of "[the patient] says [he/she is] better", the text in fact has "as before", not "better"; the Taisu text has "better", as does the parallel clause in the ensuing "supplementing" section, and the sense of the passage suggests that's clearly correct.

Supplementing then full, drain then empty: As throughout the passage, full and empty are positive relative states here, "fuller" and "emptier", corrections towards the norm made through treatment, not absolute negative states of fullness and emptiness.

Although the pain doesn't follow the needle: That is, even though there's not immediate and complete relief as soon as the needle is taken out, if treatment has properly taken effect, the illness will over a period of time abate and stop. Jiayi has "illness" instead of "pain", and adds "and decrease" after "needle".

This can be passed on to end and beginning: As earlier in the chapter, there are varying opinions on what "end and beginning" means here - a comprehensive analysis of the full state of the body, a text whose meaning can be understood, or a teaching that can be passed on to others once you understand it yourself etc.

Yin and yang don't mutually move: There are varying readings of this; if you want to avoid creating disorder in yin and yang, full and empty, then select acupoints on the appropriate channel; or, don't confuse yin and yang, full and empty when selecting what channel to needle; or, yin and yang don't transform each other, empty and full symptoms don't reverse each other; or, the yin and yang channels all have their locations which don't move, and fullness and emptiness don't alter this; etc.

All needling relies on: The character used here is a rather unusual one that could be read in a number of ways, "take note of", "rely, depend on", "belong to, be in the category of", "correct, proper, appropriate"; it would seem in any case largely immaterial.

Perverse evils wildly join: Typically taken to mean evil qi becomes randomly and chaotically mixed with the body's proper qi.

Deep and shallow take different places: Typically taken to mean the deep and shallow relationships of the pulse become disordered.

The four seasons aren't got: The channel qi and pulse don't properly respond to and match the seasons.

One needling then yang evils emerge: Another statement of the same basic idea seen previously in the "three needlings then grain qi emerges" section of Lingshu 7. In the

current passage, superficial needling serves to remove external yang evils, needling to the middle level removes yin evils, and the deepest level (which is again the "flesh divisions", as in Lingshu 7) reaches "grain qi", the body's proper qi. Although it's not directly stated anywhere in the passage, "grain qi arrives, then stop" is widely considered to mean that a needling sensation is felt, "getting qi", and that is the sign that needling has taken effect and should then be stopped.

Then you know that grain qi has arrived: That is, if the signs discussed earlier are seen, a relative fullness when supplementing, shown by a firming of the pulse, or a relative emptiness when draining, shown by a softening of the pulse, then you know grain qi has been reached or affected, and treatment has taken effect.

[If] evil qi only departs: That is, needling to a superficial level and removing an evil doesn't have the same effect as "reaching grain qi", so the body's yin and yang is still not balanced, but because the evil has been removed the illness will stop, and by implication yin and yang will then correct themselves.

But the illness is healed: This clause includes zhi1 "to know, understand", and some translate it as such in various ways eg "you can know that illness has healed / is going to heal"; another view is that here it means "evident, visible", so "signs of improvement are seen"; however it's also used elsewhere in Neijing in a quite atypical fashion, to mean simply "heal, cure", which is how I've read it here.

Yin flourishing and yang empty, first supplement the yang, afterwards drain the yin, and harmonise them. Yin empty and yang flourishing, first supplement the yin, afterwards drain the yang and harmonise them. Three channels (*pulses*) move in the space of the foot big toe, [you] must examine their full and empty. Empty and draining it, this is called double/heavy emptiness; double emptiness [means] the illness increases severely. Whenever needling these, use the finger to press it/them. When the channel movement is full and fast, quickly drain it; empty and slow, then supplement it; go against this, the illness increases severely. The movements (*pulses*): the yangming is above, the jueyin is in the middle, the shaoyin is below. The breast transporters are in the middle of the breast, the back transporters in the middle of the back. Shoulder and arm empty, treat it above. Swollen tongue, needle the tongue posts using the sword needle. The hands/arms bend but don't stretch/extend, the illness is in the sinews; stretch and don't bend, the illness is in the bones; in the bones, guard (*ie treat*) the bones; in the sinews, guard the sinews. The essentials of supplementing: When full, treat it deep; be slow to press the needle hole in order to utterly bring out the evil qi. When empty, needle it shallow in order to nourish the channel; quickly press the needle hole, don't let evil qi get to enter. Evil qi arrives tense and fast, grain qi arrives slow and harmonious. Channel fullness, deep needle it to drain qi; channel emptiness, shallow needle it making essence qi not get to come out, in order to nourish the channels, only bringing out the evil qi. Needling all pain, the channels (*pulses*) are all full, therefore it's said: from the yao/waist and above, the hand taiyin and yangming all govern it; from the yao/waist and below, the foot taiyin and yangming all govern it. Illness above, treat it below; illness below, treat it high; illness in the head, treat the foot; illness in the yao, treat the back of the knee. [When] illness is born in the head, the head swells; born in the hand, the arm swells; born in the foot, the foot swells; to treat illness, firstly needle where the illness is born from.

Yin flourishing and yang empty: A number of sources take yin and yang to refer specifically to the maikou and renying pulses respectively. Some regard the "flourishing" condition as an indication of evil in that aspect or those channels, and the "empty" as an emptiness of proper qi, likewise in the ensuing sentence.

And harmonise them: Some regard this harmonising as a natural end result of the dual process of supplementing yang and draining yin, others consider it a separate step that has to be attended to.

Three channels (pulses) move in the space of the foot big toe: The channels involved are universally agreed to be the foot yangming, jueyin and shaoyin (stomach, liver and kidney), all of which have an involvement with the space between the big and second toes; the main pathway of the liver channel is in that space; a branch of the stomach channel goes from the instep into that space and onto the big toe; and the kidney channel flows transversely from the little toe across the sole of the foot, passing through the underside of that space. The "upper" and "middle" pulse locations are considered to be Chongyang St42 and Taichong Lr3; the "lower" is typically taken to be, not Yongquan Kd1 on the sole, but Taixi Kd3, the normal pulse location on the kidney channel, even though technically it's not itself in the big-toe space; the identification of these positions is attributed to Lou Ying, the 14th century author of Yixue Gangmu.

Quickly drain it: Jiayi here has simply "then drain it", matching the pattern of the ensuing "then supplement it".

The breast transporters [are] in the middle of the breast: Opinions differ on whether zhong1 here is intended in the sense "middle, centre, in", or "strike, hit" (that is, needle). Although it's not anywhere suggested that this clause, along with the ensuing "back transporters", "shoulder and arm empty", "tongue", and "hand bending/stretching" clauses, are interpolations or errors, neither is there anywhere a convincing explanation, either of what they mean (in the case of the first three), or why they are placed in the middle of this passage, to which they bear no obvious relevance. Along with the obvious face value reading that disorders of the chest and back should be treated using acupoints in those regions, a common reading of the "breast" and "back" clauses is that those words symbolize yin and yang respectively, and for illnesses that are yin and yang in nature, acupoints on the chest and back respectively should be treated. For the former, acupoints high on the sides of the chest are suggested, such as Zhongfu Lu1, Yunmen Lu2, Tianchi Pc1; and for the latter, acupoints high on the sides of the back (the shoulderblade region) or on the shoulder, such as Jianliao Tb14, Tianliao Tb15, Tianzong Sm11, Quyuan Sm13, Jianwaishu Sm14, Jianyu Cn15; I don't know where these suggestions originate.

Shoulder and arm empty: Jiayi has "shoulderblade" instead of "arm". Some translations use "hollow" here, suggesting to some degree a physical deformation, although the character is that typically used to refer to emptiness of qi in the body or the channels, and its use to describe a physical "hollowness" seems quite unlikely; alternatively it's said to be a "deficiency syndrome" of the shoulder, which likewise requires explanation. The syndromes of the disorder are typically said to be aching and numbness in the shoulder and/or shoulderblade and/or arm region, which can be treated by acupoints such as Jianyu Cn15 and Jianjing Gb21 (which are nominated in the Taisu annotation).

Swollen tongue: The character used here is chong2/zhong4 "again, repeat" or "heavy", which I've regarded as an equivalent for that character with the "flesh" radical added, zhong3 "swollen, swelling". The typical reading, based on the Taisu commentary, is instead in the

sense chong2 "repeat", meaning there's a glossoid swelling, inflammation or growth beneath the tongue, one resembling a small "second tongue". The sword needle is described in Lingshu 1 as having "a tip as sharp as a sword, to get large [amounts of] pus". The "tongue posts/pillars" are seen as the large sinews on the underside of the tongue.

In the bones, guard the bones; in the sinews, guard the sinews: Some translations suggest the method of "guarding" (that is, treating) the bones and sinews is through needling them directly or locally, others suggest indirect treatment, through kidneys and liver.

The essentials of supplementing: Some sources (beginning with Taisu) consider the character translated here as "essentials" is an error, and this should instead say "supplementing and draining", or "supplementing needling" or the like.

When full: Yi1 fang1, literally "one square/direction"; fang1 can have numerous meanings, such as "a place, region; an aspect; kind, type; way, method; prescription", any of which could be plausibly applied here. Some take it in the "place" sense, meaning treatment is applied "at a place where the channel qi is full" (whatever that might mean); fang1 can also have a temporal sense, "when, just when, just as", in this case meaning when fullness or emptiness is just beginning, or simply whenever and wherever it occurs.

Be slow to press the needlehole: Xi1 typically means "sparse, thin, not many"; here it's generally taken to mean pressing slowly, using light pressure; I think it's much more likely that it's meant instead in the directly opposite sense of "quickly" in the next sentence, that is, it's not done immediately, there's a notable delay or pause before it's done, to allow the evil time to drain before the hole is sealed.

Evil qi arrives tense: Instead of jin3 "tight, tense", Taisu has jian1 "firm, strong, hard".

Grain qi arrives: The standard text here has "evil" instead of "grain"; a number of editions have the latter, as do Jiayi and Taisu, and it's universally adopted as the correct version.

Channel fullness: From here to the end of the paragraph is essentially a restatement of the previous sentences, suggesting the possibility (not noted elsewhere) that it's a later annotation.

Spring qi is in the hair, summer qi is in the skin, autumn qi is in the flesh divisions, winter qi is in the sinews and bones. Needling these illnesses, each takes its season as the prescription. So, needling a fat person, use the autumn and winter prescription, needling a thin person, use the spring and summer prescription.

Spring qi is in the hair: Based on the ensuing statements, most translations say this specifically means evil qi, which is a reasonable view, but also I think also obscures the implication that proper and evil qi are both focused on the same level in any given season.

Each takes its season as the prescription: The character qi1 "even, level" here is commonly regarded as a substitution for that character with the "knife" radical added, ji4 "dose, prescription"; some don't adopt this, instead giving translations involving ideas of "evenness, balance, consistency".

Needling a fat person: This makes the point that needling depth is relative to body size, not an absolute; that is, even in spring and summer, needling a person with a lot of flesh requires needling to a depth equivalent to what would be used on a normal person in autumn or winter; for a particularly thin person, even in autumn and winter, needling should be to a depth equivalent to spring or summer needling for a normal person.

Illness pain, yin; pain, and the hand is used to press it, not getting it, yin; deep needle it. Illness above, yang; illness below, yin. Itching, yang, shallow needle it. Illness firstly arising in yin, firstly treat yin, and afterward treat yang; illness firstly arising in yang, firstly treat yang and afterward treat yin. Needling hot jue, leave the needle, [it] contrarily becomes cold; needling cold jue, leave the needle, [it] contrarily becomes heat. Needling hot jue, two yin one yang; needling cold jue, two yang one yin. What's meant by two yin [is] twice needle yin; one yang [means] once needle yang. Longtime/chronic illness, evil qi enters deep; needling this illness, insert deep and leave it a long time; a day's space, then repeat needle it. [You] must first regulate left and right, remove the blood channels. The needling way is complete.

Illness pain, yin: Different variations of the same broad explanation are offered for this, that pain is often caused by evil in the yin regions, or is often caused by stagnant cold evil.

The hand is used to press it, not getting it: There are different readings of this - palpation fails to show a clear and definite location for the pain, or pain isn't felt on palpation, or pain doesn't ease when the area is palpated.

Illness firstly arising in yin: Rather than being taken in a broad sense, possibly referring to any sort of yin or yang part, aspect or function of the body, most translations specify that both the place the illness arises and where it's treated are specifically the channels.

[It] contrarily becomes cold: Some consider this means simply that the heat condition corrects to normal, in some there's a suggestion of over correction to a perverse cold condition, some say it means needling should be continued till a cold sensation is felt beneath the needle.

What's meant by "two yin": That is, "two yin, one yang" means two yin needlings should be performed, and one yang needling. None of the translations venture an opinion as to whether this means needling sessions, channels, acupoints, depths etc.

A day's space: That is, every other day, every second day.

First regulate left and right: A minority take this at face value, that it means correcting any left-right imbalance in an illness; but most translations voice the view, apparently originating with Zhang Jiebin, that this, for some reason, means examining the main and network/luo channels to see where the illness is located, with direct needling if the illness is in the main channels, and cross needling if it's in the network/luo.

Remove the blood channels: That is, remove stagnant blood in the visible superficial blood vessels.

The way of all needling, [you] must examine the shape/body and qi. [If] the shape and qi are not yet shed/cast off [but there is] little qi and the channel (*pulse*) is also agitated, [this is] agitated jue; it must be crisscross needled [so that] scattered qi can be gathered, accumulated qi can be spread. Take residence deep in a quiet place, observe the spirit going and coming, close the doors, seal the windows, hun and po not scattered, focused thought, one spirit [in] the essence qi region, not hearing people's voices. In order to gather the essence [you] must unify spirit, make the will be on the needle. Shallow and leave it, subtle and float it, to move the spirit. Qi arrives, then stop. Male inside, female outside. Firmly resist, don't bring out; carefully guard, don't [let] in. This is called "getting qi".

Crisscross needle: Miu4, originally meaning bent or tangled branches of trees, refers to a needling technique, principally applied to the network/luo rather than the main channels,

and typically involving needling on the opposite side of the body to the region affected by illness; "crosswise needling" is the title of a chapter dedicated to the subject, Suwen 63.

Scattered qi can be gathered: Generally taken to mean that scattered proper qi can be properly gathered and focused, while stagnant accumulations, or accumulated evil qi, can be spread or dispersed, dispelled.

Take residence deep in a quiet place: The passage from this point describes the environment in which needling should take place, and the approach the physician should adopt, emphasising establishing a secure, stable and undisturbed location, in which a close concentration can be maintained.

Observe the spirit coming and going: Typically taken to mean the physician should pay attention to the mental state of the patient. See the note on "shallow and leave it" below for a further comment on this.

Close the doors, seal the windows: While the "deep residence" indication is typically taken literally, meaning a quiet and undisturbed location should be found for needling to take place in, the "doors" and "windows" are often regarded figuratively, meaning the physician should focus his attention, close out the outside world, and seal out any distractions; while this is entirely plausible, and some element of it may indeed by intended, I don't see any good reason to consider it's meant to be entirely figurative or metaphoric.

Hun and po not scattered: Here meaning the hun and po of the physician, not the patient; that is, the mind focused, not wandering or distracted.

One spirit [in] the essence qi region: Yi1, meaning the number "one", here meaning "unified, concentrated", as also in the ensuing "[you] must unify spirit". Various readings are made of " the essence qi region", eg that the physician's body and spirit should be united and coordinated; instead of zhi1, the connecting participle or preposition preceding fen1 "divide, division; region, area" etc, the Taisu version of the text has bu4 "no, not", giving the much more plausible "essence and qi not divided".

Shallow and leave it, subtle and float it, to move the spirit: These needling techniques are commonly regarded as examples of the different kinds of methods that have to be applied depending on the patient's condition, although they seem to me more like descriptions of the same rather than different techniques, the salient point of both being "shallow" or "floating" needling. For reasons unknown to me, wei1 "fine, slight, subtle, profound" is often considered to indicate manipulating the needle, turning it. There are various views on the involvement of spirit/shen; one is that it means the different needle manipulations are used "to distract the patient's attention". Another source takes it as an adjective, meaning the physician has to be able to quickly and deftly apply the various "profound/abstruse" (wei1) needle techniques in a skilful or marvellous way (shen2) as the situation demands. An alternative suggestion, which I've not elsewhere, is that this instance of the character doesn't refer to either the patient's or physician's mental or consciousness processes or anything of the kind; rather, it means the "mechanism", the subtle and hidden flow of qi and blood in the channels, the sense implied in eg Lingshu 1's "the coarse guards the shape, the superior guards the spirit", "moving" or altering the state of this "spirit" being the aim of needling. This same reading could also plausibly be applied to the preceding "observe the spirit coming and going".

Male inside, female outside: Some take this and the ensuing clauses literally, meaning men and women should not be in the same room when treatment happens, or when awaiting

treatment. Others consider it means deep needling ("inside") should be used for men, shallow ("outside") for women. Yet another view is that it means the body's yin and yang qi (female and male) should be made to intermingle, not be allowed to separate or be excluded from each other, so yang is encouraged to go "inside", yin "outside". For those taking a non-literal view of male and female, the ensuing clauses mean that care should be taken to make sure proper qi doesn't come out of the body during treatment, and evil qi isn't allowed in.

The prohibitions of all needling: Recently inside, don't needle; recently needled, don't go inside. Once intoxicated, don't needle; once needled, don't become intoxicated. Recently angry, don't needle; once needled, don't become angry. Recently toiling hard, don't needle; once needled, don't do hard toil. Once glutted, don't needle; once needled, don't become glutted. Once hungry, don't needle; once needled, don't go hungry. Once thirsty, don't needle; once needled, don't go thirsty. Great surprise/shock, great fear, [you] must settle the qi, then needle it. Arriving riding a carriage, lie down and rest for a period of time like that of a meal, then needle it. Arriving walking, sit and rest for a period of time like walking ten li, then needle it. All these twelve prohibitions, the channels are disordered, qi scattered and counterflow, the ying/encircling and wei/defensive [qi] and main channel qi are not in sequence; consequently, needle it, then yang illness enters into yin, yin illness emerges to become yang; then evil qi is born again. The coarse worker doesn't observe; this is called "harming the body". The shape and body wanton and dissolute, so wasting away the brain and marrow, the jinye/body fluids don't transform, shedding the five flavours, this is called "losing qi".

Recently inside, don't needle: Nei4 "in, inner, inside, to insert" here means sexual intercourse. This and the ensuing line of contraindications all follow the same double clause pattern, stating that the forbidden activity or state must be avoided both in the period before and in the period after needling takes place.

Once glutted: Bao3 implies more than simply eating, that is, eating to the point of fullness, satiated, gorged, glutted; that same differentiation is pointed to by the fact that the opposite, "hunger", is also to be avoided before and after needling.

For a period of time like walking ten li: Probably meaning around an hour. These periods clearly indicate that the carriage and foot journeys referred to are relatively long ones, arriving from a distance, not simply a five or ten minute affair.

All these twelve prohibitions, their channels are disordered: That is, all the situations mentioned are ones that naturally stress the body so that the circulation of qi and blood in the channels isn't fully calm and stable; if you needle while the body's in this state, it can harm rather than heal it.

The coarse worker doesn't observe: "Observe" is typically taken to mean following / abiding by the principles just discussed, but some regard it as physically examining the patient's body.

The shape and body wanton and dissolute: Many adopt Wang Bing's view, that this means general aching and weakness.

The jinye don't transform: Opinions differ on whether the yinye, the body fluids, don't perform their proper transforming functions, or whether the transforming functions of other agents fail to properly give rise to or produce the jinye.

Shed the five flavours: That is, not properly derive nourishment from water and grains, food.

The taiyang channel, its end: turned up eyes, reverse bent, contracting and slacking, the colour white, cut off skin then cut off sweat, cut off sweat, then the end. The shaoyang end: the ears are deaf, the hundred joints utterly slack, the eye-threads cut off, the eye-threads cut off one day and a half, then death; at death, the colour green-white, then death. The yangming end: mouth and eyes moving, easily startled (*or, often fearful/apprehensive*), speaking wildly (*raving, cursing*), the colour yellow, the main channels above and below flourishing and not moving (*that is, full and stagnant*), then the end. The shaoyin end: the face black, the teeth long and filthy, the abdomen distended, blocked and obstructed, above and below not connecting, then the end. The jueyin end: heat in the centre (*typically taken to mean the chest*), throat dry, frequent urination, heart vexation; severe, then the tongue curls, the eggs (*testicles*) contract upward, then the end. The taiyin end: the abdomen distended and blocked, not getting the breath (*that is, difficulty breathing, shortness of breath*), qi belching, prone to vomiting, vomiting then counterflow, counterflow then the face is red, not counterflow then above and below don't connect, above and below not connecting, then the face is black, skin and hair scorched (*that is, dry, withered*), then the end.

The taiyang channel, its end: The passage gives a description of a fatal exhaustion or severing of each of the six channels, what the symptoms are as death approaches and arrives.

Turned up eyes: One of the possible meanings of dai4 is "to lift, raise"; in combination with yan3 "eye" this is typically taken to mean a condition in which the eyes are rolled or turned upwards and staring fixedly, unable to turn freely.

Reverse bent: A state of spasm in which the supine body is bent into a rigid curve, the abdomen pushed upward and the head and neck bent back, as seen in conditions such as tetanus or meningitis, often described medically as opisthotonos (the Wikipedia article on that condition, and also that on tetanus May 2013, show a vivid demonstration of this in an 1809 painting by Sir Charles Bell). There's no doubt a close correlation between this and the next indication, "contracting and slacking", that is, convulsions, spasms, muscular fits.

The colour white: Each set of symptoms involves a "colour" indication, referring of course to the colour of the skin, particularly that of the face, the complexion.

Cut off skin: Jue2 means "to stop, cut off, sever"; "cut off skin" is typically described as the skin being exhausted or ruined, and entirely lacking the colour normally given to it by the blood, which matches the previous "colour white" indication. There is an equivalent passage to this one in Suwen 16; in it, the "skin" aspect of this indication isn't included, only the ensuing "cut off sweat".

Cut off sweat: Said to be the sweat that emerges when death is near; some say it simply means violent or profuse sweating; others give a more specific description, saying sweat emerges profusely but doesn't run when it comes on to the skin, instead beading like pearls; an alternative description is that it's profuse and oily. Although no text is specific on the subject, "cut off" in the name of this condition is presumably seen to refer to the state of the person's qi generally, not the sweat itself, which is anything but "cut off", emerging profusely; alternatively, jue2 "cut off, stop" can conversely mean "excessive,

utmost". (The Unschuld-Tessenow translation in Suwen Q10/W16 has "interrupted [streams of] sweat".)

The eye threads cut off: Xi4 means "to connect, join", or a "thread", or a "system" (although that meaning appears to derive from a later date, and applying it to Neijing is probably anachronistic). It's used in Neijing in relation to five different organs, the heart, eyes, lungs, liver and testicles (there's only one instance of each of these last three); it's typically regarded as meaning the "connections" or "connectives" linking these organs to the rest of the body, often translated as the "connector channels" or something of the kind. I'm of the opinion that it refers to the visible "bundles" or sheaths of connections that are present in all those organs, eg the sheath carrying the optic nerves, retinal blood vessels etc connecting to the back of the eyes; the nerves, blood vessels, vas deferens entering the testicles through the spermatic cord; the hepatic duct, portal veins etc entering in close proximity in the liver; the bronchii, pulmonary arteries and veins, vagus nerve etc likewise in close proximity in the lung, etc; and I've translated xi4 accordingly as "threads". This interpretation is in any case effectively very similar to the standard "connector, connective" idea. Both the parallel Suwen 16 version and the Jiayi version include an extra character in this description, which is typically taken to mean "bulging", giving a quite different indication, that the eyes are protruding and staring as though in fright or shock.

Colour green white: Some regard this as a simultaneous condition, a pale green or bluish-green colour; others take it to mean there's initially a greenish colour that then turns white or pale.

Mouth and eyes moving: That is, twitching, spasming; some consider it instead or also means not simply twitching but muscularly distorted, askew.

The main channels above and below flourishing and not moving: Opinions differ on whether this means the channels under discussion, the hand and foot yangming, or something more general, all the body's channels, or the various pulses in different parts of the body.

The teeth long and filthy: The explanation usually given for the teeth being "long" is that the gums wither and shrink back, to give the impression that the teeth have increased in length.

Abdomen distended, blocked and obstructed: Some regard this as two conditions, not one, the second clause referring to the general state of the body's qi, not the abdomen specifically; although I think the repetition of this without one of the two "blocked, obstructed" characters in the taiyin section below makes this seem less likely.

Above and below not connecting: The free flow of qi or the channels between the upper and lower body is impeded; although this isn't directly stated anywhere, the upper/lower division carries a strong suggestion of a diaphragm blockage. This same indication is seen in both the shaoyin and taiyin sections.

Not counterflow, then above and below don't connect: The implication in this sequence is that vomiting demonstrates that there is free movement between the upper and lower body; if there's no vomiting and/or counterflow it's only because that upward movement is blocked.

Heart vexation: Fan2 refers to a state of agitated, irritable, mental or emotional unease, discontentment or depression; it's consistently used in combination with characters meaning eg fullness, distension, swelling, congestion, suggesting a condition in which the line between mental/emotional and physical is strongly blurred (as most people who've experienced eg a significant romantic loss can attest is in fact often very much the case).

End of Lingshu 9

Lingshu 10: Main channels

Leigong asked Huangdi saying: Channel Prohibitions says: The principles of all needling, the main channels are the beginning; measure where they travel, determine their measures, internally align the five zang, externally differentiate the six fu. I wish to hear all about their way. Huangdi said: When a person is first born the essence is first complete; the essence complete, then the brain and marrow are born; the bones are the pillar, the channels are the encirclement, the sinews are the firmness, the flesh is the wall, the skin is solid/strong and the hair long; grains enter into the stomach, the channel paths connect, blood and qi then travel. Leigong said: I wish to hear all about the beginnings and birth of the main channels. Huangdi said: The main channels are what can determine death and life, deal with the hundred illnessses, regulate empty and full; [you] cannot fail to thoroughly understand [them].

Channel Prohibitions: Since the first six clauses of the ensuing text are almost verbatim the same as a section of Lingshu 48, whose title shares the first of the two characters used here, it's universally considered that those two characters are the name of a text, and that text is Lingshu 48.

Measure where they travel: Ying2 is the character used to refer to the body's "nutritive" qi, or to the process of "circulating" that qi, so some translations of this clause involve those ideas, but it's more often considered that the character is used here in the less common sense of "to measure", matching the "determine their measures" idea in the ensuing clause.

Internally align the five zang, externally differentiate the six fu: That is, delineate the proper relationships between the channels and the zangfu.

The essence is first complete: Note the correlation between this and "the coming of life is called essence" in Lingshu 8. Most texts take this to mean that essence is the thing from which the body is first constructed, in the womb before birth, as opposed to the later maintenance and construction of the body from the qi of water and grains after birth, a pre- and post-heaven opposition (concepts which aren't explicitly used in Neijing).

The essence complete, then the brain and marrow are born: In Neijing, the brain is seen as being an aspect of or closely connected to the bone marrow. The sequence of elements from this point appears to be meant as an inside to outside layering: marrow, bones, channels, sinews, flesh, skin and hair; for the most part this is quite obvious, but the placement of the channels and sinews is of interest.

The bones are the pillar: Gan4 means the trunk of a tree, or a pillar or post; a number regard it here as specifically a reference to the two posts that are establish to delineate the ends of a wall; in this situation, much the same idea is conveyed by all of these options.

The channels are the encirclement: This is again ying2, as in "measure where they travel" above, and again any of the ideas of "circulation, transport, nourishment" could be alternatively adopted here. The original sense of the word is to create a barrier or fortification around a place and then take residence inside it, such as in a town, market, or

notably an army encampment; I've preferred that sense in this instance since this seems to be a series of images of physical things, pillar, net, wall, rather than functions or actions.

The sinews are the firmness: Gang1 "firm, hard" is here often regarded as an error for that character with a different radical, also gang1, meaning the main or headrope of a fishing net, here conveying the idea that the sinews are the major ropes or cords overlaying the bones and binding them to the muscles, flesh and skin. While the face-value "firmness" concept isn't implausible, the sequence of physical images used here, as mentioned in the previous note, suggests the "rope, netting" proposal is probably correct.

The beginnings and birth of the main channels: Precisely what's meant by this is unclear, but seems in any case academic, since the ensuing text proceeds regardless to describe the full pathways of the channels; translations include eg "the basic state of the main channels when they're first born/created", "the beginnings, endings, and pathways of the channels".

The lung hand taiyin channel begins in the middle burner, descends to adjoin the large intestine, turns back and follows the stomach mouth, ascends [and goes through] the diaphragm, conjoins the lungs, from the lung threads goes transversely to emerge below the armpit, descends following the inner upper arm travelling in front of the shaoyin and heart master, descends to the middle of the elbow, follows the lower ridge of the upper bone of the arm, enters the cunkou, ascends the fish (*the thumbpad, thenar eminence*), follows the fish border (*the lateral edge of the thenar eminence*), emerging at the end of the big finger (*thumb*); its branch from behind the wrist goes directly to emerge on the inner ridge of the next finger (*the index finger*), emerging on its end. This moves, then illness; lungs distended and full, swollen with gasping and coughing, pain in the hollow basin (*or "broken bowl", the supraclavicular fossa*); severe, then crossing both arms and blurred vision; this is arm jue. This governs the illnesses born from the lungs: cough, ascending qi, gasping, thirst, vexed heart, chest fullness, painful jue of the front inner ridge of the upper and lower arms, heat in the middle of the palm. [If] qi is flourishing and excess/surplus, then pain of the shoulder and back, wind cold, sweat emerging [and] struck by wind, small relief (*urination*) frequent and scant; qi empty, then shoulder and back painful and cold, little qi, insufficient to breathe, the urine colour changes. For all these illnesses, [if] flourishing then drain it, empty then supplement it, hot then quicken it, cold then leave it, sunken down then moxa it, neither flourishing nor empty, use the main channel to treat it. Flourishing, the cunkou is threefold as big again as the renying; empty, then the cunkou is on the contrary smaller than the renying.

Adjoin the large intestine: Luo4 "net, netting, network" is the name used for the small or capillary channels of the body, here instead used in another of its standard senses "to link, join to". All the main channel pathway descriptions in this chapter use that character to describe the connection between a channel and its yinyang related zangfu; and shu3/zhu3 "to belong to, be subordinate to, in the category of; to join, connect" is likewise used to describe the connection between a channel and its own zangfu. This persistent pattern is an idiosyncracy of the author/s, it's not at all inherent in the common meanings of the characters themselves, nor representative of their use in Neijing generally; to reflect this, I've used a similarly idiosyncratic pair of words to translate these two in these passages,

"conjoin" for the connection to the channel's root zangfu (shu3/zhu3), "adjoin" for the connection to the yinyang related zangfu (luo4).

The stomach mouth: The cardia, the upper or cardiac orifice, the region where the oesophagus enters the stomach, just below the diaphragm; some translations specify both the cardiac and pyloric orifices, the upper and lower openings of the stomach, which I think is unlikely.

The lung threads: Typically regarded as meaning the windpipe or throat, which I think is broadly correct, more probably in my view referring to the whole bundle of connections to the lung in the region of the bronchii, including the pulmonary arteries and veins, vagus nerve etc (refer to the discussion of the "eye threads" in Lingshu 9); this is the only instance of this term in Neijing.

The inner upper arm roughly means medial to the midline of the biceps muscle. Note that standard illustrations of this channel don't show it going into the region of the axilla, instead descending off the deltoid muscle, then running lateral to the line described here. The shaoyin heart and jueyin heart master (pericardium) both run through the yin or inner aspect of the upper arm, posterior to or behind the lung channel.

The lower ridge of the upper bone of the arm: That is, the medial aspect of the radius. This and the previous description imply the arms are positioned by the side, with the forearms swivelled up from the elbow to be parallel to the ground, fingers pointing forward, palms facing each other.

Emerging on the end of the thumb / on the inner ridge of the next finger: Translations typically give more specific indications here, such as which sides of the fingers the channels go to, or that the branch channel meets the large intestine channel at the tip of the index finger; these are all paraphrased extrapolations based on other factors, they aren't stated in the text here. "The inner ridge/edge" of the index finger implies, in anatomical terms, the anterior surface, presumably of the lateral or radial edge of the finger, matching the passage of the large intestine channel along the posterior surface of that edge.

This moves, then illness: <A difficult subject, to be addressed at a later date.>

Swollen with gasping and coughing: There is a view that the repeated characters commonly translated as "swollen" instead mean some kind of noise, rasping, rales.

Crossing both arms: This is taken to mean that the arms are crossed in front of and pressed against the chest, as a response to the severe chest symptoms, swelling, coughing etc. Mao4 can mean blurred vision and/or giddiness, or mental confusion or vexation, and opinions vary as to which is intended here.

This is arm jue: Some take this to mean that the preceding are symptoms of a condition called arm jue, upsurging qi in the channels of the arm; others view them as independent or separate conditions whose underlying cause is arm jue.

Gasping, thirst: Instead of ke3 "thirst", Jiayi, Maijing and Qianjin all have that character with the "mouth" instead of the "water" radical, he4 "to shout", or ye4 "a gravelly/hoarse sound", and a number of translations adopt that reading, "noisy gasping, dyspneic rale".

Painful jue of the arms: Maijing and Qianjin have simply "pain", omitting "jue" from this.

Wind cold, sweat emerges [and] struck by wind: The 19th century Japanese commentator Tamba Genkan makes the point that since this is a discussion of illnesses caused by excess of lung qi, these external evil indications seem out of place, and may well be an interpolation.

Urination frequent and scant: Qian4 "lacking, deficient, scant" can alternatively mean "to yawn".

Little qi, insufficient to breath: Insufficiency of qi causing shortness of breath, difficult breathing.

The urine changes colour: After this, the Maijing version of the text has "sudden defecation without measure" (that is, profuse sudden diarrhea), and a note in Jiayi says that one version of it has the same.

Hot then quicken it: This means remove the needle quickly after insertion, don't leave it stay in for any appreciable amount of time, the opposite of the ensuing "leave it"; some say it also means making the insertion quickly, using a quick rather than steady and even action.

Sunken down then moxa it: This is typically described as a condition in which yang qi is deficient, or declining internally, and the channel or pulse is sunken, not rising; there's uncertainty about whether the latter refers to the quality of the pulse, not rising to meet the palpating finger, or a physical description of the channel, that it's in some way sunken or deep lying. The use of moxa is of course consistent with a condition in which there's a general deficiency of qi, particularly yang qi.

Neither flourishing nor empty, use the channel to treat it: The standard explanation of this is that the illness is caused by some form of disharmony or turbulence, but one that doesn't involve either a deficiency or excess; consequently the acupoints of the channel should be needled to address the condition, but using neither draining nor supplementing needling.

Threefold as big again as the renying: That is, four times as big; refer to the discussion in Lingshu 9.

The large intestine hand yangming channel begins at the end of the next finger to the big finger (*thumb*), goes along the upper ridge of the finger (*the radial side*), merges at Hegu (Cn4) in the space between the two bones, ascends to enter the middle of the two sinews, goes along the upper ridge of the arm, enters the outer ridge of the elbow, ascends the outer front ridge of the upper arm, ascends the shoulder, emerges on the front ridge of the acromion bone, ascends to emerge above the meeting of the pillar bone, descends to enter the hollow basin, adjoins the lungs, descends [through] the diaphragm, conjoins the large intestine; its branch, from the hollow basin, ascends the neck, passes through the jaw/cheek, enters the middle of the lower teeth, turns back and emerges to flank the mouth, intersects Renzhong, left to right, right to left, ascends to flank the nose holes (*nostrils*). This moves, then illness; tooth pain, neck swollen. The illnesses born from what this governs, the jinye (*body fluids*): the eyes yellow, the mouth dry, nose snivel, nose bleed, throat bi, pain of the front of the shoulder and upper arm, the finger next to the big finger painful and not functioning. Qi having excess, then where the channel passes, hot swelling; empty, then cold shivering, not recovering. For all these illnesses, flourishing then drain it, empty then supplement it, hot then quicken it, cold then leave it, sunken down then moxa it, neither flourishing nor empty use the main channel to treat it. Flourishing, the renying three times as big as the cunkou, empty, the renying on the contrary is smaller than the cunkou.

Emerges at Hegu in the space between the two bones, ascends to enter the middle of the two sinews: The two bones are the first and second metacarpals, the two sinews are the extensor pollicis longus and extensor pollicis brevis, the tendons that define the

"anatomical snuff box" when the thumb is extended away from the palm, the location of Yangxi Cn5.

The acromion bone: The location indicated by the character yu2 isn't entirely clear, with different definitions including the shoulder, the breastbone region in front of the shoulder, or the collarbone/clavicle, but the general interpretation here is that it means the area where the shoulderblade and clavicle meet, which is roughly represented by the acromion, the anterior portion of which is the standard location of Jianyu Cn15, the second character of that name being the one in question.

The meeting of the pillar bone: The typical reading of this is that zhu4 "pillar, post" (not the same character used in "the bones are the pillar" at the beginning of the chapter) means the vertebrae, or specifically the 7th cervical vertebra, the bone that bulges prominently at the base of the neck, below which is Dazhui Du14, the meeting point of "the three yang" (Jiayi). An alternative suggestion (eg Wang Bing, Gao Shishi) is that it refers to the point where the shoulder region meets the neck, specifically Tianding Cn17, approximately midway between the centre of the throat and the centre of the supraclavicular fossa.

Passes through the jaw: In my personal experience, there's a tendency in English to describe the soft fleshy areas of the face, or those over the zygomatic or malar bone beneath the eyes, as the "cheek", and those underlain by the jawbone or mandible as the "jaw", but this differentiation is rather fuzzy; likewise, the character used here, jia2, can refer to any portion of the sides of the face, from below the eyes down to the jawbone, including its lateral edges below the ears.

Enters into the lower teeth: A number of translations say "the gums" here, which is a reasonable inference, but not actually stated.

Intersects Renzhong, left to right, right to left: Ren2 zhong1 "man middle" is the location indicated in Jiayi for Shuigou Du26, in the philtrum between the base of the nose and the upper lip, and is also used as an alternate name for that acupoint; although "renzhong" is sometimes described as a commonly known term for this location, I've not seen any evidence of its use prior to Neijing. At this point, the right-hand channel crosses over to finish below the left nostril, and vice-versa; this is the only instance of a main channel crossing the midline.

Neck swollen: Versions of the text in other early books instead indicate the jaw or cheek.

Nose snivel: Most regard this a clear discharge from the nose, others instead say it means blockage or congestion of the nose.

The finger next to the big finger painful, not functioning: That is, the finger is stiff or loses muscle function, can't be used as normal.

Cold shivering, not recovering: This is, the person finds it hard to stop shivering, or to recover a normal feeling of warmth.

The stomach foot yangming channel begins at the nose, intersects in the bridge, to the side enters the taiyang channel, descends going along the outside of the nose, enters the middle of the upper teeth, turns round to emerge and flank the mouth, encircles the lips, descends to intersect Chengjiang (Rn24), turns back and goes along the rear lower ridge of the chin emerging at Daying (St5), going along the jaw carriage, ascends in front of the ear, goes through Kezhuren (*Shangguan Gb3*), goes along the hair border (*at the temples*) to reach the forehead. A branch from in front of Daying descends to Renying (St9), goes along the throat, enters the hollow basin, descends [through] the diaphragm, conjoins the stomach, adjoins

the pancreas-spleen. A direct/straight [branch] from the hollow basin descends the inner ridge of the breast, descends flanking the navel, enters the middle of Qijie (*Qichong St30*). A branch begins in the stomach mouth, proceeds downwards inside the abdomen, descends to reach the middle of Qijie and join [the previous branch], descends to Biguan (St31), arrives at Futu (St32), descends to the middle of the kneecap, descends going along the outer ridge of the shin, descends to the instep of the foot, enters the inner space of the middle toe. A branch descends the ridge three cun and separates, descends to enter the outer space of the middle toe. A branch separates on top of the instep, enters the space of the big toe, emerging at its end. This moves, then illness: trembling, shivering with cold, prone to moaning, frequently yawning, face black; [when] the illness arrives then there's an aversion to people and fire; hearing the sound of wood, then fearful and alarmed, heart movement, wanting to be alone, sealing the doors, shutting the windows and staying; severe, then wanting to ascend high places and sing, throw off the clothes and walk about, bulging noisy abdomen distension; this is shin jue. This governs the illnesses that the blood gives birth to: madness, nue, wanton warmth/heat, sweat emerging, snivelling nose, nosebleed, mouth awry, lip sores, neck swollen, throat bi, large abdomen water swelling, kneecap swelling and pain, going along the chest, breast, Qijie, thigh, Futu, the outer ridge of the shin, above the instep of the foot, all painful, the middle toe not functioning. Qi flourishing, then the front of the body is all hot; [if] there's an excess in the stomach then [there's] doing away with grains, prone to hunger, urine colour yellow; qi insufficient then the front of the body is all cold and trembling; cold in the stomach, then distended fullness. For all these illnesses, flourishing, then drain it; empty, then supplement it, hot, then quicken it; cold, then leave it; sunken down, then moxa it; neither flourishing nor empty, use the main channel to treat it. Flourishing, the renying is threefold as big as the cunkou; empty, the renying is on the contrary smaller than the cunkou.

Begins at the nose, intersects in the bridge: The character e4 is taken to mean the bridge of the nose, the upper section of the nose underlain by bone rather than cartilage. At face value, the text reads that the channel begins where the nose intersects with the bridge, which in itself seems unlikely. The Jiayi and Taisu versions of the text (and others) omit zhi1, the character at the centre of the clause that implies it is all a single phrase or clause, and a number of sources (and the translation here) adopt the resulting double clause or stage reading, that the channel begins at the nose, meaning to the side of the nostrils, at the point the large intestine channel ends, then ascends to the top of the bridge of the nose, the depression where the nose and forehead meet (the nasal root, or nasion, at the conjunction of the nasal and frontal bones), where the two channels "intersect" or meet each other. In this case, unlike the end of the large intestine channel, the ensuing paths of the left and right branches remain on their respective sides, they don't cross over; likewise for the ensuing "intersection" at Chengjiang Rn24 below the mouth.

To the side, enters the taiyang channel: The typical reading of this, continuing on from the preceding "root of the nose" reading, is that the channel travels outwards then downward, alongside the nose in the region below the eyes, in the process connecting to the foot taiyang bladder channel, Jingming Bd1 at the inner corner or canthus of the eye being directly in the path indicated. Instead of na4 "enter", the Jiayi version of the text has the graphically similar yue1 "to tie, fasten, bind", which is more plausible; the ensuing pathway of the channel in any case makes it clear that any "entering" or connection

between the two channels is only temporary or restricted to a limited point, not a persisting one.

Enters the middle of the upper teeth: One version of the text reverses "up/above" and "enters" here, leading some translations to say the channel "ascends into the teeth"; I'm in agreement with those sources that point out that the general trend of the channel pathway seems inconsistent with this indication. As with a number of instances in this chapter's pathway descriptions, some translations say the channel here enters the "gums", which is a reasonable inference, but the text only actually states "teeth".

Turns back to emerge and flank the mouth: The "turning round/back" indication here suggests that the preceding "middle" of the teeth means the channel goes to or toward the midline, not just into the lateral or outer teeth.

Chengjiang Rn24 is in the middle of the mentolabial sulcus, the transverse groove between the lower lip and the chin; the name means "holding jiang", jiang being an acetic (ie vinegary, non-alcoholic) fermentation of water in which grain has been steeped, which was the standard drink of ancient China; "holding jiang" presumably means that the liquid typically runs into and gathers in this groove during the course of drinking.

The rear lower ridge of the chin: As discussed earlier, in relation to the large intestine channel "passing through the jaw", there's considerable imprecision and overlap involved in the terms used to refer to the regions of the face, the character used here, yi2, being no exception; it could be regarded as referring to some part of the chin, cheek, or lower jaw. I've preferred "chin" here because of the "rear, back" indication, since the acupoint mentioned, Daying St5, is indeed at the rear of the chin, but well forward of the rear of the jaw. Alternatively, hou4 "rear, back" may mean that the channel moves "backwards" along the lower ridge of the jaw.

The jaw carriage: "Jaw" in this instance is the same character translated as such in the pathway of the large intestine channel, jia2. This combined with che1 "cart, carriage" is taken to mean the lower jawbone, the mandible. It's also the name of an acupoint, Jiache St6, which is just in front of the point or angle of the jaw, that is, where the basically horizontal line of the mandible turns to an almost vertical one, in the lower masseter muscle; this is generally presumed to be the region referred to here. The typical explanation for the name "jaw carriage" is that the jawbone "carries" the teeth, an idea reflected in the synonym for this term, ya2 che1 "tooth carriage".

Kezhuren: This is the name used in Lingshu for Shangguan Gb3.

To reach the forehead: The paired characters used here, e2 lu2, are frequently defined as the region between the hair and the eyebrows, in keeping with which some translations specify that, after ascending from the temples to the corners of the forehead, the region of Touwei St8, the channel then goes in towards or even to the midline of the forehead.

A direct/straight [branch]: Implying a relatively straight or direct pathway, as this in fact is, not a turning or winding one.

The inner ridge of the chest: The line of the stomach channel defined by the acupoint locations in Jiayi goes directly through the nipple.

Qijie: "Qi street", the name used in Neijing for Qichong St30.

Begins in the stomach mouth: In this instance, although nothing to this effect is specifically stated, this is universally taken to mean the lower mouth of the stomach, the pylorus, not the upper, the cardia, as in the case of the lung channel. Some sources contend that xia4 "below, to descend" at the beginning of the ensuing clause has been mistakenly moved,

and actually belongs before "mouth" in this, giving "lower mouth"; this is a reasonable conjecture, although there's no concrete evidence for it.

Descends to Biguan (St31): Taisu and Wang Bing omit the second character of this name, giving just "thigh, thighbone, femur"; the immediately ensuing use of the name Futu (St32) tends to suggest the inclusion of guan1 is correct, but the meaning is in any case essentially unchanged.

Enters the inner space of the middle toe: That is, the space between the second and third toes; this could be paraphrased as "the lateral side of the second toe", but "the medial aspect of the second toe" (which one translation has) is incorrect.

Descends the ridge three cun and separates: Instead of lian2 "ridge, edge", the Jiayi, Maijing, Qianjin, Taisu and Wang Bing versions of the text all have "knee", "three cun below the knee" meaning the location of Zusanli St36. Lian2 "ridge" is in fact not entirely implausible, since that character is notably used in the original names of the stomach channel acupoints below Zusanli, Juxu Shangliang (Shangjuxu St37) and Juxu Xialian (Xiajuxu St39), and could on that basis be taken to mean effectively the same as "knee", that is, "go down the ridge (of the shinbone) three cun".

Enters the space of the big toe: That is, between the big and second toes, the location of the main pathway of the liver channel; this is the branch of the stomach channel referred to in "three channels (pulses) move in the space of the foot big toe" in Lingshu 9.

Trembling, shivering with cold: The last two of these four characters are zhen4 "shake, vibrate", and han2 "cold"; the first two are a repeated character, whose common pronunciation is sa3, meaning "to sprinkle, splash, spray water"; in keeping with this, some translations here say "shaking from cold as if splashed with water" or the like. However the more authorative sources say that the combination of the repeated characters merely means the same as the ensuing two characters, shivering with cold, the two two-character terms in the clause repeating and reinforcing each other; and the pronunciation in that sense is instead xian3. Sa3/xian3 is seen in combination with another character in the same sense in Lingshu 4 "when empty evil strikes the body, shivering and trembling (xian3 xi1) moves the body".

Prone to moaning, frequently yawning: For shen1 "groan, moan", Jiayi, Maijing, Qianjin and Taisu all have that character with a different radical, shen1 "to stretch", giving the very plausible combination "frequently stretching and yawning", which some translations adopt.

Face black: Yan2 can mean either the forehead, or the face generally; I don't see anything indicating which of these is intended in this instance; most translations adopt "forehead"; the forehead is on the pathway of the channel, so too is much of the lower part of the face.

[When] the illness arrives: Some take zhi4 "to reach, arrive" in another of its normal senses, "extreme", meaning the ensuing are symptoms of the illness in an advanced or severe stage. The more typical view is that they are instead the symptoms of the illness in its beginning stages, when it first "arrives", and "severe" a little later introduces the advanced symptoms; the conditions described are consistent with the standard view, graduating from relatively mildly abnormal passive fear and reclusiveness to energetically uninhibited mania.

Hearing the sound of wood: Some take this to mean the sound of trees, others the sound of wooden objects banging together. This sentence is referenced at the beginning of Suwen

30 (a quite short chapter, largely composed of commentaries on passages from the present chapter), where Huangdi asks why there should be fearfulness on hearing the sound of wood, to which Qibo replies that earth detests or has an aversion to wood (that is, in the five goes ke cycle wood overcomes earth, stomach). Instead of sheng1 "sound, voice", that passage uses a synonym, yin1, which is also used to refer to the eight different classes of musical instruments (metal, stone, earth, leather, silk, wood, gourd, bamboo), and the question also directly mentions bells and drums, so another opinion is that this means the wood class of musical instruments (such as wooden box-drums or woodblocks). The Unschuld translation of that passage cites a 1990 article on the subject concluding that "wood" is an error for "water", presumably meaning the sound of running water; I've not seen that article or any more detailed discussion of its content.

Heart movement: That is, irregular movement or palpitation of the heart. This clause in fact says "the heart wanting to move", but the meaning of that, if any, is difficult to discern, and virtually all sources consider that the middle character of this, yu4 "want, wish, desire", has been displaced, and should instead be at the beginning of the ensuing clause, "wanting to be alone" etc (as it is in the Maijing and Qianjin versions of the text), matching the use and position of the same character in the ensuing "wanting to ascend high places".

Bulging noisy abdomen distension: The final two characters of this are clearly "abdominal distension"; the preceding two could mean intestinal rumbling, borborygmus, possibly particularly energetic or loud, possibly with swelling and bulging also, or possibly only meaning swelling with no sound or noise involvement.

This is shin jue: Typically taken to mean that the preceding disorders are caused by upsurging counterflow qi of the channels in the shin region of the lower leg, or specifically the yangming stomach channel.

This governs the illnesses that the blood gives birth to: The standard explanation of this relationship is that the blood is created from the transformation of water and grains in the stomach.

Nue: Illness characterised by alternating stages of chills and fevers, such as malaria.

Mouth awry, lip sores: Some consider that the first of these two terms also means lip sores or ulcers, not a skewed or twisted mouth.

Large abdomen water swelling: Abdominal edema, the upper abdomen swollen due to water retention; "large abdomen" means the upper abdomen, the abdomen above the navel, as opposed to the "small abdomen", the abdomen below the navel. An alternative opinion here is that "large" describes the swollen state of the whole abdomen, rather than meaning the swelling is localised to the upper section.

The chest, the breast: Ying1 means the "chest, breast" generally, ru3 is more typically restricted to the "breast", the mammary region of the chest. A number of translations here say the differentiation is that ying1 means the sides of the chest, probably based on Wang Bing's annotations to that effect. Considering that all the points of pain in this list are on the line of the channel, I think this is unlikely; it's much more probable it means the part of the chest region above the breast that the stomach channel runs through, the area involving and below the "hollow basin" and collarbone.

Doing away with grains: Xiao1 "to eliminate, remove, dispel" carries the idea of doing away with, causing to go from something to nothing, typically translated as "consume, waste, vanish" etc; the idea here is that food is eaten and digested, but seems to simply

disappear without contributing to and nourishing the body; hence, despite eating, the person often feels hungry.

Urine colour yellow: Since that's the normal or typical colour of urine, this presumably means some type of abnormal shade or intensity of yellow; I've not seen any comment on the issue.

The pancreas-spleen foot taiyin channel begins at the end of the big toe, goes along the inner edge of the toe, the border of the white flesh, passes through behind the kernel bone, ascends the front ridge of the inner ankle, ascends inside the calf, proceeds behind the shin bone, intersects and emerges in front of the jueyin, ascends the inner front ridge of the knee and thigh, enters the abdomen, conjoins the pancreas-spleen, adjoins the stomach, ascends [through] the diaphragm, flanks the throat, links to the root of the tongue, scatters below the tongue. A branch again from the stomach separates, ascends [through] the diaphragm, flows into the heart. This moves, then illness: the tongue root stiff, eating then vomiting, stomach cavity pain, abdomen distended, frequent belching, getting behind and qi, then comfortable as though declining/waning, the whole body heavy. This governs the illnesses that the pancreas-spleen gives birth to: tongue root painful, the body unable to move and sway, food doesn't descend, vexed heart, urgent (*tense/acute*) pain below the heart, slurry draining, abdominal concretions, water shut up, yellow dan, not able to lie down, forcing [yourself] to stand, swelling and jue of the inner thighs and knees, the big toe not functioning. For all these illnesses, flourishing then drain it, empty then supplement it, hot then quicken it, cold then leave it, sunken down, then moxa it, neither flourishing nor empty, use the main channel to treat it. Flourishing, the cunkou is threefold again as big as the renying; empty, the cunkou is on the contrary smaller than the renying.

The border of the white flesh: It's generally perceived that the inner or yin side of the limbs is relatively white or pale, while the yang or outer side is relatively red or dark, and there's a discernible line or border where the two meet. In this case for instance that juncture is a line running roughly parallel to the ground about midway up the side of the big toe and continuing through the region proximal to it.

The kernel bone: He2 means the hard part of a fruit, the seed, pit, stone or kernel; the bone referred to is the proximal head of the first metatarsal, at the junction of that bone and the medial cuneiform bone.

Ascends inside the calf: The character used here to denote this part of the body has two variants, one using the "foot" radical (as used here), one using the "flesh" radical; Lingshu uses both these, Suwen uses the "flesh" version only; various sources give their pronunciations as shuan4, chuai3, or chuan3. They are defined as the gastrocnemius muscle or the calf of the leg, a definition that's basically derived from the context of this and other similar passages in Neijing, since there appears to be no evidence of the prior use of either character (the "foot" radical version does appear in eg Huainanzi, but with a different meaning). The area referred to at this point in the passage is the lower half of the calf or gastrocnemius, prior to the channel intersecting with the foot jueyin liver, which the liver channel description later in the chapter places at 8 cun above the ankle; I make that point simply because the central focus of both those words, and more than one equivalent Chinese term, is the upper half of the lower leg; both the Greek roots of "gastrocnemius" and the colloquial Chinese xiao3 tui3 du4 include "stomach", referring to

the bulging shape of the upper gastrocnemius; two equivalent terms used in Neijing are yu2 fu4 and fei2 chang2, which include "belly, abdomen" and "intestine" respectively; and the presence of the same perception and analogy is also evident in the Oxford definition of the English "calf" (a word whose etymology in this sense is unknown): "The fleshy hinder part of the shank of the leg, formed by the bellies of muscles which move the foot." The other uses of shuan4 in Lingshu suggest that, like the technical definitions of "calf" and "gastrocnemius", it refers to the entire length of the muscles of the rear lower leg, from knee to ankle, not just the lower or upper half.

Stomach cavity pain: Meaning not simply the stomach organ itself, but the region of the abdomen in which it's situated, the frontal region of the abdominal cavity just below the diaphragm, the stomach or gastric cavity.

Getting behind and qi, then comfortable as though waning: "Getting behind" is taken to mean defecating and/or passing wind / farting; if this happens, the person suffering from the preceding symptoms feels an improvement, as though the illness was weakening, the condition improving. A number of translations regard the ensuing "whole body heavy" as something contingent upon this, not an independent indication.

The body not able to move and sway: The second-last character of this clause is a general word for movement, the state of motion as opposed to stillness, dong4; the final character yao2 means "to shake, swing, sway, rock"; the combination of the two characters, in either order, is still in use with the same meanings as those just given for yao2 alone. There are instances of these two characters in Han literature with a specific usage, referring to qi moving or drawing exercises, roughly equivalent to modern qigong or taiji, and I suggest that if not that type of exercise specifically, at least that general sort of movement is what's indicated here, a loose swaying of the body, bending and turning of the body. A number of translations specify "turning, turning round" only, I don't know why.

Slurry draining, abdominal concretions: This is comprised of three characters; the first tang2 means something muddy or pastelike, not solid, and from that thin, watery or slushy faeces; the second jia3 means accumulations or lumps in the abdomen, typically from the solidification of stagnant blood or fluid; the third xie4 is one of the variants of the normal term for draining, that is, diarrhea or dysentery. There's obviously a strong correspondence between the first and third of these, and not the second; a parallel passage in Suwen 74 reflects that correspondence by reversing the order of the last two, as does a citation of this passage from Jiayi by the 11th century Song dynasty editors of Suwen, giving the text as translated here, tang2 xie4 "slurry draining", and jia3 "abdominal concretions". This order also creates a concordance between jia3 "lumps" and the ensuing "water shut up / sealed in", which is typically interpreted as urinary blockage, but could also be considered to be related and a contributing factor to the formation of abdominal lumps/conglomerations/concretions.

Yellow dan: The main symptoms of this disease are yellow colouring of the skin, eyes, and urine, and consequently it's often translated as "jaundice".

Unable to lie down: Opinions differ on whether this means difficulty or dislike of simply lying down, or difficulty or inability to sleep. The Jiayi version of this is quite different, "unable to eat, lips green/blue"; and Maijing has a different version again, "likes lying down, unable to eat meat, lips green/blue"; some translations adopt one or the other of these alternative readings.

Forcing [yourself] to stand: The first of this two character clause is qiang2 "strong, powerful, hard, firm; to force, coerce, do with difficulty", normally read in the last of these senses; the suggestion that it could in some way mean "rigidity" (when standing) seems strained and unlikely. A number of translations regard this as not just an independent or self-contained indication, but related to the following text, that is, after forcing him/herself to stand, a person's inner thighs and knees have swelling and jue.

The heart hand shaoyin channel begins in the heart, emerges to conjoin the heart threads, descends [through] the diaphragm, adjoins the small intestine. A branch from the heart threads ascends to flank the throat, ties to the eye threads. A direct/straight [branch] again from the heart threads goes back and ascends to the lungs, descends to emerge below the armpit, descends going along the inner back ridge of the upper arm, travelling behind the taiyin (*lung*) and heart master (*pericardium*) [channels], descends to the inner elbow, goes along the inner back ridge of the arm arriving at the tip of the sharp bone behind the palm, enters the inner back ridge of the palm, goes along on the inside of the little finger to emerge at its tip. This moves, then illness: throat dry, heart pain, thirsty and wanting to drink, this is arm jue. This governs the illnesses that the heart gives birth to: eyes yellow, rib pain, painful jue of the inner back ridge of the upper arm and forearm, heat and pain in the palm. For all these illnesses, flourishing then drain it, empty then supplement it, hot then quicken it, cold then leave it, sunken down then moxa it, neither flourishing nor empty, use the main channel to treat it. Flourishing, the cunkou is twice again as big as the renying; empty, the cunkou is on the contrary smaller than the renying.

The heart threads: Refer to the discussion of the "eye threads" in Lingshu 9.
Descends to emerge below the armpit: Jiayi, Taisu and other alternative early version of the text omit "descends".
The sharp bone behind the palm: "Behind" meaning proximal to; the bone is identified as the pisiform, near its juncture with the ulna, the location of Shenmen Ht7.
The inner back ridge of the palm: The Taisu version of the text omits "back". "Inner" here and in the ensuing finger section means not on the edge of the palm, that is, between the 4th and 5th metatarsals, the bones of the little and ring fingers, not on the exposed or medial edge of the 5th metatarsal or little finger.
Rib pain: Jiayi and Qianjin have "rib fullness and pain".
Painful jue: Some regard the jue as a separate condition, possibly a general one, not limited to the regions indicated.

The small intestine hand taiyang channel begins at the end of the little finger, goes along the outer edge of the hand, ascends the wrist, emerges in the wristbone, ascends directly along the lower ridge of the arm bone, emerges on the inner side of the elbow in the space between the two sinews, ascends going along the outer back ridge of the upper arm, emerges at the shoulder separation, winds around the shoulder blade, intersects above the shoulder, enters the hollow basin, adjoins the heart, goes along the throat, descends [through] the diaphragm, arrives at the stomach, conjoins the small intestine. A branch from the hollow basin goes along the neck, ascends the jaw, reaches the sharp corner of the eye, steps back to enter into the ear. A branch separates on the jaw, ascends the cheek, arrives at the nose, reaches the inner corner of the eye, slants to connect to the cheekbone. This

moves, then illness: throat pain, swollen jowls, not able to turn and look behind, the shoulder as though pulled, the upper arm as though breaking. This governs the illnesses that the body fluids give birth to: ears deaf, eyes yellow, jaw swelling, pain in the neck, jowl, shoulder, the outer back ridge of the upper arm, elbow and forearm. For all these illnesses, flourishing then drain it, empty then supplement it, hot then quicken it, cold then leave it, sunken down then moxa it, neither flourishing nor empty use the main channel to treat it. Flourishing, the renying is twice as big again as the cunkou; empty, the renying is on the contrary smaller than the cunkou.

Notes:

Ascends the wrist, emerges in the wristbone: The first character used here, wan4, is a standard one meaning the wrist as a general region or joint; the second, huai2, typically means the ankle (as indicated by its inclusion of the "foot" radical), and is here used to mean a feature analogous to the ankle bone or malleolus, the high or protruding bone proximal to the wrist on the ulnar edge of the arm, meaning the styloid process of the ulna.

The lower ridge of the (fore)arm bone ... the outer back ridge of the upper arm: As previously, these indications accord with the standard path of the small intestine channel if the arms are considered to be by the side, with the forearms swivelled from the elbows to be parallel to the ground, with the palms facing each other.

In the space between the two sinews: Jiayi, Maijing, Qianjin and Taisu all have "bone" here instead of "sinew", and that's generally considered correct, referring to the location of Xiaohai Sm8, on the medial side of the elbow, directly between two prominent bony protuberances, the olecranon of the ulna and the medial epicondyle of the humerus.

Emerges at the shoulder separation: "Separation" is taken to mean the gap between two bones, here meaning the humerus and scapula, the region of Naoshu Sm10, above the posterior end of the axillary fold, in the depression below the lower border of the scapular spine.

Intersects above the shoulder: Some translations are relatively noncommittal about this, others specify that it means the left and right branches of the channel meet at Dazhui Du14; the previous use of jiao1 "to meet, intersect" in this chapter certainly favours the view that the two channels contact somewhere on the midline.

Ascends the jaw ... separates on the jaw: This is in both cases jia2, which can be considered to involve aspects of what might be called jaw or cheek, as discussed in "passes through the jaw" in the large intestine channel.

The sharp corner of the eye: "Sharp" indicating that this means the outer corner, the outer canthus.

Ascends the cheek: Zhuo1 is yet another character denoting a part of the face, in a number of modern sources roughly defined as the region below the eyes down to the upper gums and teeth. The character used shortly afterwards in "slanting to connect to the cheekbone" is instead quan2, which is typically defined as corresponding to the region of the prominence of the zygomatic process, below but slightly outside rather than directly under the eyes; the indication of "slanting", going obliquely to this location, favours such an interpretation. However, it should be noted that there's no evidence of such a differentiation between zhuo1 and quan2 in a significant number of ancient sources, which use these two as equivalents, defining each other, or specifically say that zhuo1

refers to a bony prominence, that is, the cheekbone or zygomatic process (refer for example to the citations of Yan Shigu's Jijiupian commentary, Guangyun, Jiyun, and Taisu, in Dazidian's definition of zhuo1).

Slanting to connect to the cheekbone: Taisu doesn't have these four characters; in this respect, it's notable that the previous point in the pathway, the inner corner of the eye, is the point from which the ensuing channel, the foot taiyang bladder, begins.

Swollen jowls: Opinions on the meaning of han4 vary; some (eg Zhang Jiebin) define it as the lower cheek; another view is that it's the region of the front upper neck, below or the underside of the chin and jaw, and above the point of the larynx or adam's apple. As translation here I've used the similarly ambiguous "jowl", which can mean the jaw, especially the underside of the jaw, the cheek, or the throat.

Not able to turn and look behind: That is, stiffness of the neck, the neck and head unable to turn or rotate freely.

The shoulder as though pulled, the upper arm as though breaking: That is, pain as though the shoulder was being pulled or pulled apart, as though the upper arm was breaking.

The illnesses that the body fluids give birth to: This clause has already been seen in the large intestine channel, where the full two-character term for the "body fluids" is used, jin1 ye4; here only ye4 is used, corresponding to the use of jin1 only in the Maijing, Qianjin and Taisu versions of the large intestine channel. If such a separation and differentiation is intended, it presents the problem of determining what the difference between jin and ye is, for which, to the best of my knowledge, there's little or no concrete basis.

Jaw swelling: "Jaw" here is jia2 (see "ascends the jaw" above). The ensuing pain locations have han4 (see "swollen jowls" above) in the second position; those who consider han4 to mean "cheek" contend that it's out of place, since the line of locations otherwise proceeds from the neck constantly downward to the shoulder and arm. The Maijing version of the text is consistent with that view, omitting han4 from the line of pain locations, and adding it after jia2, giving "jaw and cheek swelling"; some consequently consider that the correct version; such an argument of course involves the question of whether han4 is regarded as meaning the cheek (above the neck) or the jowls (level with or involving the neck); although even with the latter definition, han4, the upper neck, should arguably not be placed after jing3, the neck generally.

The bladder foot taiyang channel begins at the inner corner of the eye, ascends the forehead, intersects at the vertex. A branch from the vertex reaches the upper corner of the ear. A direct/straight [branch] from the vertex enters to connect to the brain, turns back, emerges, separates, descends the nape, goes along the inside of the shoulder blade, flanks the spine, arrives in the middle of the yao (*lumbar region*), enters to go along the muscles alongside the spine, adjoins the kidneys, conjoins the bladder. A branch from the middle of the yao descends flanking the spine, penetrates the buttocks, enters the middle of the back of the knee. A branch from inside the shoulder blade separates left and right, descends penetrating the shoulder blade, flanks the spine, internally goes through the thigh pivot, goes along the outer thigh following the back ridge, descends to meet in the middle of the back of the knee, descends penetrating inside the calf, emerges behind the outer ankle, goes along the highmound bone, reaching the outer edge of the little toe. This moves then illness: rushing head pain, the eyes as if being plucked out, the nape as though being pulled, pain in the spine, the yao as though breaking, the thigh not able to bend, the back of the knee as

though tied, the calf as though splitting, this in ankle jue. This governs the illnesses that the sinews give birth to: haemorrhoids, nue, madness, epilepsy, head fontanel and nape pain, the eyes yellow, tears emerging, nose snivel, nose bleed, the nape, back, yao, rump, back of the knee, calf, foot all painful, the little toe not functioning. For all these illnesses, flourishing then drain it, empty then supplement, hot then quicken it, cold then leave it, sunken down then moxa it, neither flourishing nor empty use the main channel to treat it. Flourishing, the renying is twice as big again as the cunkou; empty, the renying is on the contrary smaller than the cunkou.

Intersects at the vertex: That is, the left and right branches of the channel meet on the midline at the top point or apex of the head.

Turns back, emerges, separates: The implication in this wording is that the branch from the vertex into the brain is a single line, not bilateral like the rest of the channel.

A branch from the middle of the yao descends flanking the spine: The Taisu and Wang Bing versions of the text omit "descends flanking the spine"; and the Jiayi, Maijing and Qianjin versions substitute for it "meet at the back yin", meaning the two sides of the channel meet at the anus; the 19th century commentator Mo Wenquan makes the point that haemorrhoids are included in the channel illness symptoms, which favours the proposition that the channel connects there, and that this is consequently the correct version of the text.

Internally goes through the thigh pivot: Nei4 "inside, internally" implies a relatively deep passage; the "thigh pivot" is the hip joint. As with the previous instance, Maijing, Qianjin, Taisu and Wang Bing omit the preceding "flanks the spine", Jiayi includes it.

Descends to meet in the middle of the back of the knee: That is, this branch meets the previously described branch that also goes into the back of the knee.

The inside of the calf: Nei4 "inside" here presumably means a deep passage, as in the "thigh pivot" clause previously, rather than indicating the inner or yin side of the leg; the Taisu version of the text doesn't include nei4.

The highmound bone: Jing1, particularly in more recent use, typically means "capital", the main city of a region or country, as in eg Beijing, Nanjing ("north" and "south capital" respectively). However in early use it also meant a high mound or hillock, and that seems clearly to be the usage here, describing the prominence of the tuberosity at the proximal head of the fifth metatarsal, at its junction with the cuboid bone, the position and name matching those of the "kernel bone" on the inside of the foot, as seen in the pathway of the pancreas-spleen channel; the commentary in Taisu gives a similar explanation of the name, saying jing1 in this instance means "high, big". Jinggu, "highmound bone", is also the name of an acupoint at that location, Bd64.

Rushing head pain: Typically described as pain caused by a surge or rush of evil qi to the head, or specifically the sections of the bladder channel on the head.

The eyes as if being plucked out, the nape as though being pulled: That is, pain as if those actions were being experienced, the same type of indications seen in the small intestine channel, "the shoulder as though pulled, the upper arm as though breaking". Tuo1 means "to strip flesh from the bone", or "to leave, separate; to shed; take off, come out"; the precise meaning here is debatable.

The thigh not able to bend: That is, the join between thigh and pelvis, the hip joint, unable to move freely.

The back of the knee as though tied: A curious indication, typically said to be as though the knee was tied, bound with ropes, not able to move freely; alternatively, jie2 can mean "knotted", whatever that might signify in this situation.

The illnesses that the sinews give birth to: There's no obvious or standard connection between the bladder and the sinews or tendons. One explanation given (eg Zhang Jiebin) is that the bladder channel is a particularly long or "great" one that contacts many parts of the body, so it plays a part in any convulsion or spasm conditions, disorders involving the sinews. Zhang Zhicong relates it to the statement in Suwen 3 that "yang qi is essence-like, so it nourishes the spirit; supple, so it nourishes the sinews"; since the bladder is a particularly large, great or prominent yang channel, it plays a major part in this relationship between yang qi and the sinews.

Madness, epilepsy: The first of these is the single character kuang2, a general term for madness, mania, mental derangement. That's followed by dian1 ji2, the second of which is a general term for "illness, disorder", the first of which can also mean "madness, mental imbalance", but alternatively (and in Neijing commonly) "epilepsy"; perhaps due to the preceding kuang2, most translations here take it to mean "madness", not "epilepsy"; note that "epilepsy" is consistent with these illnesses being related to the sinews.

Head, fontanel, and nape pain: Xin4 is one of a number of variants of a character meaning the fontanels, the soft spaces between the separate bones of a baby's skull that fuse and solidify with age. Such structures can be found across much of the skull, but the region indicated here is no doubt that near the midline in front of the vertex, in the vicinity of the channel pathway, where one of the du channel acupoints includes this character in its name, Xinhui Du22. The Maijing version of the text instead has "head, brain, vertex pain"; Mo Wenquan (see the "a branch from the middle" etc comment above) again comments that this is more appropriate to the pathway of the channel.

The kidney foot shaoyin channel begins below the little toe, goes slantingly to the heart of the foot, emerges below Rangu (Kd2), goes along behind the inner ankle, separates to enter the middle of the heel, then ascends inside the calf, emerges at the inner ridge of the back of the knee, ascends the inner back ridge of the thigh, penetrates the spine, conjoins the kidney, adjoins the bladder. A branch ascends from the kidney, penetrates the liver and diaphragm, enters the middle of the lungs, goes along the throat, flanks the root of the tongue. A branch from the lungs emerges to connect to the heart and flow into the middle of the chest. This moves, then illness: hungry [but] not wanting to eat, the face like lacquered deadwood, coughing, the spittle then has blood, rasping and gasping, sitting and wanting to rise, the eyes blurred as though not seeing anything, the heart as though suspended as if in a state of hunger, [if] qi is insufficient then prone to fear, the heart frightened as though a person is about to seize you, this is bone jue. This governs the illnesses that the kidneys give birth to: the mouth hot, the tongue dry, the throat swollen, ascending (*ie counterflow*) qi, the throat dry and painful, vexed heart, heart pain, yellow dan, intestinal washing, pain of the spine and the inner back ridge of the thigh, limp jue, liking to lie down, heat and pain under the foot. For all these illnesses, flourishing then drain it, empty then supplement it, hot then quicken it, cold then leave it, sunken down then moxa it, neither flourishing nor empty use the main channel to treat it. Moxa, then make [the patient] eat raw meat, relax the belt, release the hair, [take] a large staff [and] heavy shoes

and walk. Flourishing, the cunkou is twice again as big as the renying; empty, the cunkou is on the contrary smaller than the renying.

Goes slantingly to the heart of the foot: The text here in fact uses xie2 "evil", which is clearly a substitute or error for its homonym, xie2 "tilt, slant, incline".

Emerges below Rangu Kd2: Some contend that gu3 "valley" is an error for its homonym "bone", and the intended reference is thereby not to the name of the acupoint, Rangu, but to its location, below the tuberosity of the "apparent/burning bone", the tuberosity of the navicular bone, in front of and below the inner ankle; refer to the discussion of this in Lingshu 2.

Separates to enter the middle of the heel: See the extended note below.

Penetrates the spine, conjoins the kidney: A Wang Bing citation of this section omits "spine, conjoins", giving "penetrates the kidney", and some regard that as the correct form of the text; however I think the omission of the only instance of shu3 "conjoins", a crucial element of each pathway description, makes it patently incorrect.

Flanks the root of the tongue: The Jiayi version of the text has a note saying that one edition here adds: "From inside the transverse bone (the pubic symphisis), flanks the navel, goes along inside the abdomen, travels upward and enters the lungs."

The face like lacquered deadwood: Qi1 means the lacquer tree, or lacquer, or any form of paint, or black, blackened; chai2 means small sticks of wood, or firewood, or old withered rotting wood; the typical interpretation of this combination is that it means a drawn, haggard, emaciated face with a dark or blackish complexion.

Rasping and gasping: "Rasping" is represented by the duplicated character he4 "to shout, yell", also pronounced ye4 "rasping, hoarse"; some regard this combination as referring to the action of gasping, panting, breathing asthmatically, dyspnea, not necessarily the noise associated with it; instead of this doubled character, the Maijing and Qianjin versions of the text explicitly say "throat noise".

Sitting and wanting to rise: Typically taken to mean restless, unable to sit quietly or stay still. One translation relates this clause to the next, when a person stands up his/her vision becomes blurred.

The heart as though suspended, as if in a state of hunger: Sometimes described as a feeling as if the heart was suspended in midair, more typically regarded as a feeling of unease, dysphoria.

[If] qi is insufficient, then prone to fear: Some regard "qi insufficient" as an interpolation, maintaining that many or all the conditions described to this point suggest deficiency, so singling out this one is anomalous. The Jiayi version of the text in fact omits the whole section from "[if] qi is insufficient" to "about to seize him", and some regard this as correct, maintaining, on the basis of similar symptoms described elsewhere (Lingshu 4, Suwen 16) that this type of fear is a wood symptom and doesn't belong with kidney; in regard to this, it should be noted that fear is a standard water association in the five goes, so the inappropriateness of this seems debatable.

The heart frightened: Some regard the doubled character after "heart", ti4 "fearful, afraid", as a physical description of the heart, the heart thumping, racing.

As though a person is about to seize you: That is, as if about to be arrested or abducted, as if being hunted or pursued, paranoid.

Intestinal washing: Pi4 "to wash, rinse, flush"; some say this means "dysentery, diarrhea"; others maintain that it primarily means blood, or blood and pus, in the stools, and that it only comes to be associated with diarrhea or dysentery because blood and pus are often seen in those conditions; others say it means a watery condition in the intestines, and takes its name from the sloshing sound that disorder makes.

Moxa, then make [the patient] eat raw meat: The normal moxa precondition, "the channel sunken down", isn't given here, and instead there is this extended discussion of what to do when moxa is performed; I've not seen any discussion of the reason for this singularity. The typical explanation of the procedures indicated is that moxa is normally used for deficient conditions, and eating raw meat can likewise warm and nourish the body; the loosening of the clothing and hair are done so that growth isn't restricted or inhibited; I don't know of a reason for the "heavy shoes" stipulation.

Separates to enter the middle of the heel, then ascends inside the calf: "Then" is one of the many possible meanings of yi3, a very common character generally, and also in Neijing (by my calculations, the 14th most common of the 2100 or so different characters used), and one whose usage is often quite idiosyncratic. In the channel pathway descriptions in this chapter (the pathways only, not the illnesses), it's used only six times (1 in every 218 characters, which is less than half its average incidence in Neijing), once each in the stomach, bladder, kidney, and three burners channels, and twice in the gallbladder channel. In four of those instances, it's used after a branch channel has joined a previous branch at a particular point, and the combined channel then proceeds from that point as a single or combined path; in stomach, two channels meet at Qijie; bladder, at the back of the knee; gallbladder, in the hollow basin, and also the hip joint. The three burners instance is a little different, it's used where the channel continues on from a point that a later branch diverges from (the top rear corner of the ear), rather than one where two branches have already met. In the present case, the kidney channel behind the inner ankle, the text says the channel "separates" (bie2) to go down into the heel; and yi3 then introduces the next clause, the pathway up into the calf; the clear implication of this is that there's a branching at this point, that these are two separate pathways, not a single continuous line. Viewed this way, the channel in this region should consist of a line coming from the sole of the foot up through Rangu Kd2, below and then behind the inner ankle, taking in Zhaohai Kd6 and Taixi Kd3 (in that order), then branching down into the heel, that branch involving Dazhong Kd4 and Shuiquan Kd5 (not necessarily in that order), and terminating in that region; the main branch then continues up the calf from Taixi Kd3. This of course doesn't correspond to the pathway of the kidney channel as shown in standard texts, which instead describes a complete loop, the pathway from the sole firstly bypassing Zhaohai Kd6 on the way to Taixi Kd3, then after descending into the heel through Dazhong Kd4 and Shuiquan Kd5, circling back to Zhaohai Kd6 below the ankle, then continuing up behind the ankle and onto the calf, this time bypassing Taixi Kd3. In my view such a pathway is nonsense; it doesn't accord with the channel as described here, nor does it satisfy the basic nature of the channel, that it's an organic entity of the type of an artery or vein, not simply a line on a chart. The same applies to parts of the pathways of other channels, the gallbladder channel on the head for instance, which has a variety of branches, none of which, according to the description given in this chapter, involve a doubling back from the region below the ear (Wangu Gb12) to the forehead (Benshen

Gb13). I don't have a clear knowledge of where this inorganic join-the-dots depiction of the channel pathways began. On a brief examination, the illustrations in Zhongguo Zhenjiu Shi Tujian (Illustrated History of Chinese Acumoxa, editor Huang Longxiang 2003) show three basic approaches to this part of the kidney channel. Firstly, a straightline main channel, with a branch either shown or implied; for instance, the 12th century Song dynasty work Huoren Shu clearly shows a separate branch such as I've described going into the heel at this point in the kidney channel; the Qing 18th century Yizong Jinjian has a single direct line going from the sole past the ankle into the calf, with a pointer to the back of the ankle saying that a branch separates and goes to the heel, but the branch is not actually shown. The second method is to go from Rangu Kd2 to Taixi Kd3, then to describe a U shape rather than a loop, firstly descending to Zhaohai Kd6, which is typically shown (obviously with considerable licence) almost directly below Taixi, then across to Dazhong Kd4, up to Shuiquan Kd5, then past Taixi and up the calf; this can be seen, for example, in the illustrations attached to Yixue Gangmu (Ming 16th century). The third is the now-standard loop, seen clearly for example in a set of Qianlong period illustrations attributed to Wei Yulin (Qing 18th century).

The heart master hand jueyin heart wrapper network channel begins in the middle of the chest, emerges to conjoin the heart wrapper network, descends [through] the diaphragm, in succession passes through and adjoins the three burners. A branch from the chest emerges in the ribs three cun below the armpit, ascends to arrive at the armpit, descends going along the inside of the upper arm, travelling between the taiyin and shaoyin, enters the middle of the elbow, descends the forearm, travelling between the two sinews, enters the middle of the palm, goes along the middle finger to emerge at its end. A branch separates in the middle of the palm, goes along the finger next to the little finger to emerge at its end. This moves then illness: the heart of the hand hot, urgent spasms of the (*fore*)arm and elbow, the armpit swollen; severe, then propping fullness of the chest and ribs, the heart agitated [with] large movements, the face red, eyes yellow, ceaseless joyful/happy laughter. This governs the illnesses that the channels give birth to: vexed heart, heart pain, heat in the middle of the palm. For all these illnesses, flourishing then drain it, empty then supplement it, hot then quicken it, cold then leave it, sunken down then moxa it, neither flourishing nor empty use the main channel to treat it. Flourishing, the cunkou is once again as big as the renying; empty, the cunkou is on the contrary smaller than the renying.

The heart master hand jueyin heart wrapper network channel: "Heart master" and "heart wrapper" (bao1 "to wrap, envelop") or "heart wrapper network" are variant names for the region or tissues around the heart, the pericardium. Jiayi omits "heart wrapper network" here, Taisu omits "network". In the ensuing "adjoins the heart wrapper network", Maijing, Qianjin, Taisu, and Wang Bing (the latter on a number of occasions) all omit "network".

Propping fullness of the chest and ribs: Zhi1 means "branch", and is routinely used in these pathway descriptions to refer to a branch of the channel. Here it's taken in another of its standard senses, "to prop up, support", and is said to refer to "propping fullness" in the chest or ribs. In relation to this term, the Unschuld-Tessenow Suwen translation cites a source saying it means "one feels as if one were supported by pillars". I don't know that this explanation is entirely satisfactory, but I haven't seen any other meaningful discussion of it (nor have I seen the source referred to).

The heart agitated [with] great movement: Readings of this vary from mental agitation and restlessness, or fearfulness and anxiety, to physically irregular or overvigorous heartbeat, palpitations.

The three burners hand shaoyang channel begins at the end of the next finger to the little finger, ascends to emerge in the space between the two fingers, goes along the outside (*ie back*) of the hand and wrist, emerges on the outer forearm in the space between the two bones, ascends to penetrate the elbow, goes along the outer upper arm, ascends the shoulder and intersects, emerging behind the foot shaoyang, enters the hollow basin, spreads in the danzhong, scatters and adjoins the heart wrapper, descends [through] the diaphragm, goes along and conjoins the three burners. A branch from the danzhong ascends to emerge in the hollow basin, ascends the nape, ties behind the ear, ascends directly to emerge at the upper corner of the ear, then bends to descend the jaw and reaches the cheek. A branch from behind the ear enters the middle of the ear, emerges and goes in front of the ear, passes in front of Kezhuren (*Shangguan Gb3*), intersects on the jaw, reaches the sharp corner of the eye. This moves then illness: the ears deaf, muddy and unclear, throat swollen, throat bi. This governs the illnesses that the qi gives birth to: sweat emerging, the sharp corner of the eye painful, jaw/cheek (*jia2*) pain, behind the ear, shoulder, outer upper arm, elbow and forearm all painful, the next finger to the little finger not functioning. For all these illnesses, flourishing then drain it, empty then supplement it, hot then quicken it, cold then leave it, sunken down then moxa it, neither flourishing nor empty use the main channel to treat it. Flourishing, the renying is once again as big as the cunkou; empty, the renying is on the contrary smaller than the cunkou.

"Danzhong" has been seen previously, as one of the ends of the jueyin channel in Lingshu 5. The second character of this name is zhong1 "middle, centre, in, inside"; the first can mean "to bare, expose", or (pronounced shan1) "the smell of mutton, foul smell", but there appears to be no connection between these and its Neijing and subsequent medical use, where it simply functions as the name of this location. Dan4, tan1 and shan1 are all offered as the pronunciation in this sense; most sources adopt dan4. There are six instances of the character in Lingshu, two in Suwen. The various occurrences, such as that here, make it clear that it's related to the central region of the chest. In Lingshu 33 it's identified as the "sea of qi". Lingshu 35 says it's the "palace wall of the heart". The well-known list of zangfu and their functions in Suwen 8 has the danzhong in place of the pericardium, saying it's the "minister emissary official, joy and happiness emerge from it". Some commentators (eg Wang Ang) conclude from this that the danzhong and the pericardium are the same entity; others (eg Tamba Genkan) insist that there is a differentiation between the two, the pericardium referring to the specific physical structures enveloping the heart, the danzhong being a broader and more formless region that encompasses this and more. Danzhong is also the name of an acupoint (Rn17) in this location, on the midline of the chest, directly between the two nipples.

Scatters and adjoins the heart wrapper: That is, the pericardium. For "adjoins", the text here in fact has luo4 "to fall, drop", but it is clearly an error for its homophone with the "silk" rather than "water" radical, luo4 "net, network, to link, connect" (or "adjoin" in my translation of this chapter), the character seen in all the other major early variant versions of this passage.

Goes along and conjoins the three burners: The Jiayi, Maijing and Qianjin versions of the text all have a variant of bian4 "everywhere, throughout" rather than xun2 "to follow, go along"; the meaning seems essentially unchanged either way. Translations here often say "connects in succession to the upper, lower and middle burners/heaters", which is a reasonable inference, but isn't directly stated in any version of the text.

Ties behind the ear: Instead of ji4 "to tie, bind, link", the Jiayi, Maijing and Qianjin versions of the text have xia2 "to flank, go on either side of", and Taisu also has a note saying that one edition of the text has that character. Some sources prefer this reading, saying eg that it refers to the two branches of the channel in the region behind the ear; I don't think such a suggestion is consistent with the "going on either side of, flanking" usage applied to this character elsewhere in these pathways.

Then bends to descend the cheek: Although not directly stated, the channel here obviously firstly "bends" to the front of the ear, then down in front of it; "cheek" is jia2 "jaw, cheek", "below the eyes" is zhuo1 (refer to the discussion of these terms in the small intestine channel etc); "then" is yi3 (refer to the discussion of the passage of the kidney channel behind the inner ankle). Instead of jia2, Jiayi, Maijing and Qianjin have the graphically semi-similar e2 "forehead", and some maintain this is correct, indicating a branch going to eg Yangbai Gb14 (supposedly a meeting point with the hand shaoyang, not indicated as such in Jiayi); the majority don't adopt this reading.

Intersects [on] the cheek: "Cheek" is again jia2; the "intersection" means this branch going to the outer corner of the eye crosses over the previous branch going to the region below the eyes.

Muddy and unclear: This consists of two duplicated characters, the first double pair meaning (among other things) "muddy water, turbid, disordered" (there are instances of it in some variation of this sense in Lingshu 55, and Suwen 17, 20, and 35), the second "dull, gloomy, not bright" (of light; this pair doesn't occur independently in Neijing); the combination is taken here to mean either muddiness, lack of clarity in the sense of hearing; or a continuous dull noise in the ear, tinnitus, either or both of these apparently being meanings particular to Neijing. There are variations on the characters in different versions of the text, but the generally agreed meaning is regardless restricted to that just discussed.

This governs the illnesses that the qi gives birth to: Lingshu 2 and Suwen 8 both say the three burners are in charge of the body's waterways; some texts say, by extension from this, that the connection here is that water illnesses are often caused by abnormalities in the qi; I find this less than convincing. A more immediately plausible rationale is that the three burners are intimately involved in the body's entire qi production and circulation process, as seen in the discussions in eg Lingshu 18.

The gallbladder foot shaoyang channel begins at the sharp corner of the eye, ascends to arrive at the corner of the (*fore*)head, descends below the ear, goes along the neck travelling in front of the hand shaoyang, reaches to above the shoulder, steps back to intersect and emerge behind the hand shaoyang, enters the hollow basin. A branch from behind the ear enters the middle of the ear, emerges and goes in front of the ear to reach to behind the sharp corner of the eye. A branch separates at the sharp corner of the eye, descends to Daying (St5), meets with the hand shaoyang, arrives at the cheek, descends to join Jiache (St6), descends the neck, meets (*the previous branch*) [in] the hollow basin then descends to

the middle of the chest, penetrates the diaphragm, adjoins the liver, conjoins the gallbladder, proceeds inside the flanks, emerges at Qijie (*Qichong St30*), winds around the (*pubic*) hair margin, goes sideways to enter the middle of the thigh press. A branch from the hollow basin descends to the armpit, goes along the chest, passes through the last rib-flanks, descends to meet [the previous branch] in the middle of the thigh press, then descends going along the thigh yang (*ie the outer thigh*), emerging on the outer ridge of the knee, descends the outer front of the assisting bone (*fibula*), descends directly to arrive at the end of the severed bone, descends to emerge in front of the outer ankle, proceeds above the instep of the foot, enters the space of the next toe to the little toe. A branch separates above the instep, enters the space of the big toe, proceeds inside the bone fork of the big toe emerging at its end, turns round and penetrates the nail emerging in the three hairs. This moves, then illness: the mouth bitter, prone to great breaths, heart and flank pain, not able to turn to the side, severe then the face has a slight dustiness, the body without an oily sheen, the outer foot contrarily hot, this is yang jue. This governs the illnesses that the bones give birth to: head pain, chin pain, pain of the sharp corner of the eye, swelling and pain in the hollow basin, swelling below the armpit, horse knife flanking scrofula, sweat emerging, trembling with cold, nue, the chest flanks and ribs, the outer thigh and knee extending to the outer shin and severed bone and front of the ankle, and all the joints, all painful, the next toe to the little toe not functioning. For all these illnesses: flourishing then drain it, empty then supplement, hot then quicken it, cold then leave it, sunken down then moxa it, neither flourishing nor empty use the main channel to treat it. Flourishing, the renying is once as big again as the cunkou; empty, the renying is on the contrary smaller than the cunkou.

A branch from behind the ear ... reaches to behind the sharp corner of the eye: Tamba Genkan here makes the point that this branch is largely a verbatim repetition of a part of the three burners channel (except the three burners also has "passes in front of Kezhuren, intersects on the cheek" before the final "reaches the sharp corner of the eye", and doesn't stipulate "behind" the eye), and suggests on this basis that its inclusion here is an error. However it should be noted that a joint passage of the two channels is also specifically indicated in the ensuing text, so it's not at all impossible or even unlikely that this duplication is entirely deliberate.

The meeting of the gallbladder channel with the three burners appears to be in the passage to the cheek / the region below the eyes (zhuo1) then to Jiache, which is the same as but in the opposite direction to the branch of the three burners that comes from the top corner of the ear, then bends to go down the cheek/jaw (jia2), then reaches the region below the eyes / the cheek (zhuo1). The hand shaoyang (three burners) channel doesn't go to the vicinity of Daying St5; the Maijing, Taisu and Wang Bing versions of the text correspondingly omit "arrives", giving "meets with the hand shaoyang at the cheek / the region below the eyes", removing the idea that the meeting is prior to the jaw/cheek.

The thigh press: The hip joint, the region at the top of the thigh bone, the femur, where it "presses" in to the hip or pelvis from the side, the prominence of the greater trochanter; a number of texts specify that this means the region of Huantiao Gb30, which is further to the back than this precise point, about a third of the way from it to the join between the sacrum and coccyx.

The last rib-flanks: That is, the sides or flanks, in the region of the lowest ribs, the free ribs.

The severed bone: This is the name given to the fibula in the region just above the outer ankle (for three cun or so), supposedly so-called because the fibula ends or is "cut off" here.
The bone fork of the big toe: That is, in the fork between the big and second toes.
The three hairs: The small clump of hair on the big toe.
Prone to big breaths: The standard reading of this is deep strong breaths, or sighing, but a number of texts translate it here as "belching", I don't know why.
The face has a slight dustiness: The skin lacking its normal sheen or gloss, and slightly dark or dirty in colour; the Taisu version of the text simply says "the face dusty".
The body without an oily sheen: Gao1 "fat, grease, oil" with ze2 "moisture, sheen, lustre", "body" here meaning the skin all over the body.
The outer foot contrarily hot: I haven't seen a good explanation for the presence of fan3 "contrary, opposed to, instead" in this clause, perhaps meaning "abnormally, uncharacteristically".
This is yang jue: "Yang" is typically taken to mean "shaoyang" here.
The illnesses that the bones give birth to: There's no obvious association between the gallbladder and bones, so some suggest this is an error; some attempts are made at explaining it, eg Zhang Jiebin says that the flavour of the gallbladder is bitter, and (according to Lingshu 63) bitter goes to the bones.
Head pain, chin pain: For the first instance of "pain", Taisu instead has "corner", and uses a variant form of "chin" that could also be interpreted as "cheek", giving "head corner (ie forehead) and cheek pain", which is more consistent with the channel pathway. Jiayi has "face and chin pain", Maijing has "head pain, forehead pain".
Horse knife flanking scrofula: The last character of this, ying3, refers to swellings or swollen sores such as scrofula (a lymphatic disorder) or goitre (thyroid). "Horse knife" (a curved long knife or short sword used by cavalrymen) is said to be a reference to the narrow long shape of one particular type of sore, typically located in the armpit; I haven't seen an explanation for the involvement of xia2 "flanking, on either side" preceding ying3, but the combination of the two is said to mean swellings on the neck that have the appearance of strung beads; I don't know where these descriptions and localisations originate.
All the joints, all painful: Some take this to mean all the body's joints, others consider it means those of the leg only.

The liver foot jueyin channel begins on the big toe at the border of the clump of hair, ascends going along the upper ridge of the foot instep [to a point] one cun away from the inner ankle; above the ankle eight cun [it] intersects and emerges behind the taiyin, ascends the inner ridge of the back of the knee, goes along the yin thigh, enters into the (*pubic*) hairs, passes through the yin instrument (*the genitals*), arrives at the small abdomen, flanks the stomach, conjoins the liver, adjoins the gallbladder, ascends to penetrate the diaphragm, spreads in the flanks and ribs, proceeds behind the throat, ascends to enter the nasopharynx, connects to the eye threads, ascends to emerge on the forehead, meeting with the du channel at the vertex. A branch from the eye threads descends inside the jaw (*jia2*), encircles the inside of the lips. A branch again separates from the liver, penetrates the diaphragm, ascends to flow into the lungs. This moves, then illness: yao pain, not able to bend forward or backward, in men tui shan, in women the lesser abdomen swollen; severe, then the throat dry, the face dusty, the colour cast off. This [governs] the illnesses that the liver gives birth to: chest fullness, vomiting counterflow, supper draining, fox shan, losing

urine (*incontinence*), sealed 'long'. For all these illnesses, flourishing then drain it, empty then supplement it, hot then quicken it, cold then leave it, sunken down then moxa it, neither flourishing nor empty use the main channel to treat it. Flourishing, the cunkou is once as big again as the renying; empty, the cunkou is on the contrary smaller than the renying.

At the border of the clump of hair: The hair on the big toe, the same as the "three hairs" in the previous channel.

Ascends going along the upper ridge of the foot instep: That is, this channel travels on the instep, the top of the foot, not on the side of the foot as the kidney and pancreas-spleen channels do.

Ascends to enter the nasopharynx: As with the terms used for the different parts of the face, those used for the cavities of the nose, mouth and throat involve some fuzziness, but basically hang2 in the term hang2 sang3 refers to the esophagus or gullet, the passageway for food into the stomach; while sang3 refers to the trachea or windpipe, the passageway for air into the lungs; the combination of the two refers to the area above both where they communicate with the nose and mouth, often translated as and roughly commensurate with the nasopharnyx.

Meeting with the du channel at the vertex: This is the only mention of one of the "eight extra" channels in these pathways; the du channel acupoint at the top of the head is Baihui Du20, which is specifically indicated by a number of translations. A note in Jiayi says that one edition of the text adds after this: "A branch from the small abdomen ties to the taiyin and shaoyang in the yao vertebrae, descends flanking the spine, in the third and fourth bone holes" (the latter presumably here meaning the sacral foramen); the same text is present in the Qianjin and Wang Bing versions.

Ascends to flow into the lungs: Thereby completing and recommencing the full circuit of the twelve channels.

Not able to bend forward or backward: Mian3 and yang3 can both refer to movements centred on the head and neck, "to bow the head" and "to look upwards", and things of this kind are sometimes seen in translations, but in this instance the preceding "yao/lumbar pain" suggests what's intended is bending forward and backward at the waist.

Tui shan: Shan often refers to conditions involving breakage, rupture, hernia, with something consequently extending or protruding beyond its proper place; it can also refer to conditions of acute pain in the abdomen or genitals, perhaps because such conditions can be the result of rupture or hernia; and some suggest it can involve accumulations, gathering or lumps as well. The particular form involved here, tui shan, refers essentially to swelling and pain of the genitals; some suggest that this is the outcome of a rupture, the intestines breaking through the abdominal cavity in the groin and impinging on the genitals.

The face dusty, the colour cast off: Some regard this as a single indication, others as two different states, the first a darkened or lustreless complexion, the second a pale one.

This [governs] the illnesses the liver gives birth to: The omission of zhu3 "to govern, manage", seen in all the other channels in this position, is clearly an error; it is present in the Jiayi, Maijing and Taisu versions of the text.

Vomiting counterflow: The apparent meaning of this is counterflow qi causing vomiting, but a number of texts say it means vomiting and hiccups, on what basis I don't know; this is the only occurrence of the term in Neijing.

Supper draining: Thin or watery diarrhea with whole undigested grains or food in it; Jiayi and Maijing instead have "rapid-flow draining", whose meaning is not dissimilar.

Fox shan: A swollen and painful condition, primarily of the scrotum, but also typically involving the lower abdomen, possibly caused by a hernia or rupture leading to intrusion of a section of the intestinal tract into the genital region; the name is said to derive from the fact that the scrotum vacillates irregularly between large and small, like the unpredictable comings and goings of a wild fox.

Sealed 'long': Long2 refers to various urinary disorder states, including frequent, painful, blocked, or constant dribbling urination; the preceding bi4 "seal, shut in, block up" in this case indicates urinary blockage or retention, ischuria. I've used inverted commas here to indicate this is a transliteration, not an English word.

When the qi of the hand taiyin is cut off then the skin and body hair wither. Taiyin moves qi warmth to the skin and body hair, so if qi doesn't nourish/circulate then the skin and body hair wither; if the skin and body hair wither then the jinye (*body fluids*) leave the skin and joints; if the jinye leave the skin and joints then the nails wither, the body hair breaks; if the body hair breaks, then the body hair has already died. Bing, critical, ding, death; fire overcomes metal.

When the qi of the hand shaoyin is cut off then the channels don't connect; if the channels don't connect, then blood doesn't flow; if blood doesn't flow, then the hair and colour/complexion have no gloss; so [if] the face is black like lacquered deadwood [then] the blood has already died. Ren, critical; gui, death; water overcomes fire.

When the qi of the foot taiyin is cut off then the channels don't nourish the muscles and flesh. The lips and tongue are the roots of the muscles and flesh, if the channels don't nourish [them], then the muscles and flesh are soft; if the muscles and flesh are soft, then the tongue wilts, the renzhong is full; if the renzhong is full, then the lips turn back; [when] the lips turn back the flesh has already died. Jia, critical; yi, death; wood overcomes earth.

When the qi of the foot shaoyin is cut off then the bones wither. The shaoyin is the winter channel, [it] travels deep and moistens the bone and marrow, so if the bones are not moist then the flesh can't adhere [to them]; if the bones and flesh aren't close to each other then the flesh softens and turns back; the flesh softens and turns back, so the teeth are long and filthy, the hair is without gloss; [if] the hair is without gloss [then] the bones have already died. Wu, critical; ji, death; earth overcomes water.

When the qi of the foot jueyin is cut off then the sinews are cut off. The jueyin is the liver channel, the liver is the meeting of the sinews, the sinews gather in the yin qi, and the channel connects to the root of the tongue; so, if the channel is not nourished then the sinews are tense; if the sinews are tense then [they] draw at the tongue and eggs (*testicles*); so, if the lips are green, the tongue curled, the eggs contracted, then the sinews have already died. Geng, critical; xin, death; metal overcomes wood.

When the qis of the five yin are all cut off then the eye threads turn; [if they] turn, then the eyes revolve; if the eyes revolve, then the will/emotions is/are already dead; if the will is already dead, then [the person is] one and a half days away from death.

When the qi of the six yang is cut off then yin and yang separate from each other; [if they] separate then the couli issue and drain; cut off sweat then emerges; then the morning portends evening death, evening portends morning death.

There is considerable correspondence between this passage and the last section of Lingshu 9; discussion of some of the terms used here can be found in the notes to that section, eg cutoff sweat, the teeth long and filthy, eye threads. Regarding lacquered deadwood and renzhong, see the kidney and large intestine channels earlier in this chapter. There's also an unusually high degree of divergence between this section and parallel versions in other early texts such as Nanjing, Jiayi etc, as noted in detail below.

The skin and body-hair wither: Jiao1 is the character used in sanjiao, the three burners; its root meaning is to heat or scorch something; by extension it means the result of such an action, parched, withered. Mao2 typically, not always, refers to the fine hair that covers the skin, rather than the hair on the head; the consistent use of "body-hair" as the translation here is based on the context, the association with lung, and the fact that the standard character for the hair on the head, fa4, is used by contrast in the ensuing foot shaoyin kidney section. Skin, body hair, and qi, are all standard five goes correspondences of metal, lung.

Lingshu: "[When] the skin and body-hair wither, then the jinye depart the skin and joints; the jinye depart the skin and joints, then the nails wither, the body-hair breaks; the body-hair breaks, then the body-hair has already died." Nanjing etc: "[When] the skin and body-hair wither, then the jinye depart; the jinye depart, then the skin and joints are harmed; the skin and joints harmed, then the skin withers, the body-hair breaks; the body-hair breaks, then qi has already died." As I see it, the differences between these, though substantial, are mainly ones of phrasing rather than content; in each case the essential sequence is that lack of qi nourishment harms the skin and body-hair, then the jinye depart, then the skin and joints are harmed, then the nails (in Lingshu) or skin (in Nanjing) and the body-hair (in both) are further harmed (in both cases circling back to the things originally said to be harmed, skin and/or body-hair, in a way not seen in the ensuing sections of the passage). There are two notable differences in content; firstly, Lingshu says the "nails" wither, Nanjing the "skin"; of these, "skin" is consistent with standard five goes theory, "nails" is not. Secondly, Lingshu says "the body-hair breaks, then the body-hair has already died", which is an obvious redundancy; Nanjing says "the body-hair breaks, then qi has already died", which is both more logical in itself, and also consistent with the pattern seen in the rest of the passage, where the things that are seen to have "already died", the blood, flesh, bones, and sinews, are major body parts or systems, principally internal, whose decline or exhaustion is evidenced by the condition of secondary parts or systems, necessarily external, the complexion, lips, the hair (on the head), the tongue and genitals.

Bing, critical; ding, death; fire overcomes metal: Du3, describing an illness, means "serious, grave, critical". Bing and ding are two of the components of a very ancient system (seen in its totality on some of the oracle bones from the late 2nd millennium BC, long predating

five goes, and in fact basically every aspect of Neijing theory) in which ten "heavenly stems" (tian gan) are paired in succession with twelve "earthly branches" (di zhi) to give a regular sequence of sixty "stems and branches" combinations (gan zhi; only half the theoretically possible 120, because the even-numbered stems only pair with the even branches, and odd with odd), which were originally used to name days, then later years. In five goes theory, two of the stems are associated with each of the goes: jia and yi wood, bing ding fire, wu yi earth, geng xin metal, ren gui water. The reason the illness deteriorates then results in death on the bing and ding days in this case is because those days correspond to fire, and the illness is one of the lungs, metal, which fire overcomes in the ke or overcoming cycle of the five goes; the same pattern applies to all the days nominated in the ensuing sections.

The hair and colour have no gloss: Some regard the combination of "hair" and "colour" as a reference to two separate things, others have it as a single thing, the colour of the hair. The character used here for "hair" is an unusual one (mao2, not the same as the "body-hair" mao2), and this is the only instance of its use in Neijing; the Jiayi, Maijing and Qianjin versions of the text instead use the standard fa4. Nanjing omits "hair" altogether, giving "the colour's gloss departs"; a number of translations consider this as the correct version of the text, regarding "hair" as an interpolation or wrongly integrated annotation, since the colour or complexion of the skin is a standard heart correspondence, the hair is not; and, the inclusion of "hair" here duplicates the same external symptom used in the foot shaoyin kidney below; and, the ensuing clause goes on to discuss the complexion, not the hair.

[When] the qi of the foot taiyin channel is cut off, then the channels don't nourish the muscles and flesh (Nanjing, Jiayi, Maijing and Qianjin instead have "the mouth and lips"). The lips and tongue (the texts just named instead repeat "the mouth and lips") are the roots of the muscles and flesh; if the channels don't nourish [them], then the muscles and flesh are soft (Nanjing instead has "are not smooth and moist"; Jiayi, Maijing and Qianjin have "are moist"); the muscles and flesh soft, then the tongue wilts (Nanjing, Jiayi, Maijing and Qianjin all omit "the tongue wilts"; wei3 "to wilt, wither, shrivel, atrophy"), the renzhong (Nanjing instead has "flesh", likewise for the next instance) is full.

[It] travels deep and moistens the bones and marrow: Nanjing has "warms" instead of "moistens".

Then the flesh softens and turns back: Nanjing, Jiayi, Maijing and Qianjin have "moistens" instead of "softens".

The teeth lengthen and are filthy: Nanjing has "withered" instead of "filthy".

Then the sinews are cut off: Maijing and Qianjin instead have "then the sinews contract, drawing at the eggs (testicles) and the tongue"; Nanjing has the same, but adds "curls up" after "tongue".

The sinews gather in the yin qi: Instead of "qi", Nanjing, Jiayi, Maijing, Qianjin and Wang Bing all have the homonym qi4 "tool, implement, instrument; organ", that is, the "yin instrument", the genitals; this alteration is universally adopted.

And the channel connects to the root of the tongue: Nanjing omits "channel"; that is, the sinews connect to both the genitals and the root of the tongue; this is the more plausible reading. Note that the inclusion of tongue here isn't a duplication of the previous foot taiyin pancreas-spleen condition, where the flesh or bulk of the tongue is involved, here only the sinews.

Then the sinews are tense: Nanjing, Jiayi, Maijing and Qianjin have "contract" before "tense"; this clause is universally taken to refer to spasms or contractions of the sinews, convulsions; although I think the final symptoms involved, curling of the tongue and contraction of the scrotum or genitals, don't necessarily imply that, merely a tightening resulting in shrinkage or shortening.

The tongue and eggs: Dacidian lists Lingshu as the original source of the use of luan3 "egg" for "testicle"; Dazidian likewise has Suwen Q10/W16.

The lips are green: Qing1 is a somewhat ambiguous term for colours in the blue-green range, here typically regarded as meaning blue, cyanic. Nanjing omits this symptom, and some consider that omission correct, despite the concordance between wood and green.

The qi of the five yin all cut off: That is, all five of the yin channels; Jiayi omits "five", Nanjing instead has "three".

Then the eyes revolve: Some consider yun4 "to transport, shift, move" or "to turn, revolve" here is an error for, or is meant in the sense of its homonym yun4 "dizzy, giddy; to swoon, faint"; and that general idea does in any case seem to be intended.

Then the will is already dead: Although some translations say simply "will", zhi4 here is almost certainly intended in the broader sense of the emotions or spirits generally or collectively.

Cutoff sweat then emerges: After this, Nanjing and Jiayi add "big like strung beads, moving to emerge [but] not flowing, then qi has already died".

The morning portends evening death: That is, if "cutoff sweat" breaks out in the morning, death will occur that evening, and vice-versa.

At the end of the passage, Jiayi adds: "These are the ruins/defeats of the twelve channels."

The twelve main channels travel concealed in the space of the flesh divisions deep and unseen. That which is normally seen is the foot taiyin passing above the outer ankle because [it] has no place to hide. All the channels that float and are normally seen are all network channels. [Of] the six main and network channels, the great networks of the hand yangming and shaoyang rise in the spaces of the five fingers, ascend to meet in the middle of the elbow. Drinking alcohol, wei qi firstly travels in the skin, firstly filling the network channels; the network channels flourish first, so when wei qi is already balanced then ying qi is full and the main channels flourish greatly. Channels that move suddenly are all [due to] evil residing there, staying in the roots and ends. [If it] doesn't move then there's heat. [If the channels] are not solid then [they're] sunken down and hollow, not the same as most; [you can] thereby know which channel moves.

Leigong said: How is the difference between the main channels and the network channels known? Huangdi said: The main channels normally can't be seen. Their empty and full, use the qikou to know it. The channels that are seen are all network channels. Leigong said: The humble gentleman doesn't clearly understand this. Huangdi said: All the network channels are all unable to pass through the spaces of the great joints; [they] must travel on cut-off paths and emerge and enter, returning to meet in the skin; their meetings are all seen on the outside. So, whenever needling the network channels [you] must needle on their knots. [If] the blood is severe [then] even though there is no knotting, urgently treat it, drain the evil and release the blood. [If you instead] leave it [then it] issues and becomes bi.

In all diagnosis of the network channels, if the channel colour is green then [there's] cold and pain; red, then there's heat; cold in the stomach, [then] the hand fish networks [have] a lot of green; [if] there's heat in the stomach the networks on the fish border are red; those that are suddenly black [have] long-standing bi; those that have red, have black, have green, [there is] cold and hot qi; those that are green and short [indicate] little qi.

All needling of cold and hot all [must involve] lots of blood networks; [you] must treat it in a day's space; [when] the blood is exhausted and stops, then regulate empty and full. Those that are small and short [indicate] little qi. [If it's] severe [and you] drain it, then [there's] oppression; [if] the oppression is severe then there's falling down and not getting to speak, [so if there's] oppression then urgently sit down.

This section presents a number of relatively short ideas, apparently connected only by the fact that most of them are concerned with the luo or network channels, the fine and relatively superficial channels.

The foot taiyin passing above the outer ankle, because [it] has no place to hide: That is, the channel must come to the surface to cross the bone, and is covered only by a thin layer of skin. It's evident that this text is in some way mistaken, since the yin channels run past the inner ankle, not the outer. Historically, two major corrections have been suggested. The first (eg Taisu) is that "outer" is an error for "inner" (in the case of Taisu, its text in fact has that character instead, so it doesn't consider there's an error involved here at all), and this is a reference to the passage of the pancreas-spleen channel above the inner ankle, which is indeed its pathway, as described earlier in this chapter, "ascending the front ridge of the inner ankle". The second (eg Zhang Jiebin) is that "outer" should be "inner", but also, huai2 here doesn't mean "ankle", it means the equivalent area or structure on the hand, the wrist bones; this last proposal is substantiated by precisely that usage of that character earlier in this chapter, in the pathway of the small intestine channel, where it "emerges in the wristbone", meaning the styloid process of the ulna (refer to the notes in that section). The proposal is that huai2 here means the opposite wristbone, the styloid process of the radius, and the reference is to the passage of the hand (not foot) taiyin channel past the inner (not outer) wristbone (not ankle), meaning the cunkou pulse section of the lung channel. The strength of this idea is that this location is very definitely one of special significance, and its significance is intimately related to its superficiality; and furthermore it's mentioned a little later in the text, with its singularity again being referred to: "The main channels normally can't be seen; their empty and full, use the qikou to know it." A difficulty with this idea is that, in the normal manner of description, the lung channel doesn't pass "above" the bone proximal to the wrist, but below it, as stated specifically in the pathway in this chapter, "[it] follows the lower ridge of the upper bone of the arm". Some translations include a discussion of these issues; others simply adopt one or the other of these two options, or give the text at face value, as in the main text of this translation. A suggestion I've not seen is that "yin" is an error for "yang", that is, the "foot taiyang (bladder) passing above the outer ankle"; the absence of this proposal is presumably in large part because that channel passes below the outer ankle, not above it.

The six main and network channels: Opinions differ as to whether this means the six channels of hand, or the six channels of both hand and foot, that is, all twelve channels.

The hand yangming and shaoyang great networks rise in the space of the five fingers: The typical explanation of this is that the luo channels of the hand yangming and shaoyang, the large intestine and three burners, are particularly large, or visible, or are the major vessels of the group; I don't know what these assertions are based on. Zhang Jiebin says the "five fingers" refers to a branch or network of the large intestine channel separating at Pianli Cn6 (3 cun above the wrist) and connecting to the thumb and index finger, and a branch or network of the three burners from Yangchi Cn4 (on the wrist crease) going to the middle, ring and little fingers, the two collectively thereby involving all five fingers; again, I don't know what this is based on. The Jiayi text has shaoyin instead of shaoyang.

Drinking alcohol, wei qi firstly travels in the skin: This is typically taken to mean that, unlike the normal process by which food and grains enter the stomach, then their essence moves firstly into the channels and then outward into the wei qi region, alcohol, being a volatile substance, firstly enters the wei qi region of the body when it's consumed, since the nature of wei qi is similarly volatile, and that flourishing of wei qi then moves into the main channels, the ying qi region, to cause an abnormal fullness or overabundance there. Zhang Jiebin suggests that ping2 "even, level, balanced, peaceful" in this situation means "full, replete", and that idea is adopted in a number of texts; there are usages of the character in this sense, but (from a very brief examination) they possibly derive from a significantly later date.

Channels that move suddenly: Typically taken to mean a sudden abnormal beating of a pulse, due to an evil lodging in the "root and end", the beginning and ending points of the channel, as discussed in Lingshu 5 etc; "if it doesn't move", that is, if the evil doesn't move out or is dislodged through treatment, then it results in internal perverse heat.

[If the channels] are not solid then [they're] sunken down and hollow: Opinions differ regarding whether this is a continuation of or unrelated to the preceding sentence (ie "by this you can tell which channel pulses abnormally"), whether it refers to the main or network channels, and whether it refers to an external visible state of the channels or an internal one; "[you can] thereby know which channel moves" suggests to me that it refers to an external visible state, and also that dong4 "move" is used here to mean a state of disturbance or abnormality in the channel, as in "this moves, then illness" as seen throughout the channel pathways, rather than the "move the evil out" sense in which the same character is used in the preceding sentence.

[They] must travel on cutoff paths: This is variously interpreted as separate paths, or sideroads or shortcuts, or specifically pathways that are horizontal, crosswise or sideways to the vertical main channels. Personally I'm inclined to the view that it means just what it says; the main channels are extended pathways forming a continuous unbroken circuit covering the full extent of the body; since the network channels can't pass through the main joints as the main channels do, they necessarily can't have this same extended unbroken nature, they're cut off, truncated, they terminate at particular points rather than carrying on continuously.

[You] must needle on their knots: That is, at the places where there are visible coagulations or clots. "The blood is severe" is taken to mean extensive stagnation or coagulation of the blood in the network channels, in which case I don't know why "knotting" doesn't take place, or how it's known that the condition is present if not evidenced in that way.

The channel colour green: As seen earlier in this chapter, qing1 can refer to colours anywhere in a broad blue-green range, and in relation to skin colour, particularly the colour of the

blood vessels visible on the skin, is generally taken to mean a bluish colour, the colour of varicose veins. It's not specified where the associated pain is, perhaps in the channels, perhaps the interior.

The hand fish networks: The network channels on the "fish", the pad of flesh at the base of the thumb, the thenar eminence.

Suddenly black [have] longstanding bi: The Taisu text here has "fish" instead of bao4 "sudden, violent", meaning the network channels of the fish region are black, not that there's a sudden blackening in some indeterminate section of the network channels.

Those that have red, black, green: Opinions differ on whether this means these colours appear concurrently or in succession; likewise for the associated hot and cold qi, typically taken to mean some form of erratic mixture of the two.

Those that are green and short [indicate] little qi: That is, physically short, very small in length, indicating a qi deficiency. A little later the text has a very similar statement, "those that are small and short [indicate] little qi"; and since this first statement comes between the diagnostic indicator for cold and hot qi and the way of needling cold and hot, some conclude that it's an erroneous duplicated interpolation.

A day's space: Every other day, every second day.

Then [there's] oppression: Men4 is typically defined as mental "oppression", boredom, anxiety, depression; as with fan2 "vexation", as seen in Lingshu 9, the context of its use typically suggests a condition in which there's both a mental/emotional and a strongly physical element, and that's clearly the case here, with the severe stage involving falling down and loss of voice. In keeping with this, some sources define men4 here as "dizziness" or "mental confusion"; some say it specifically refers to what in Chinese was later termed "giddy/swooning needle", that is, the patient fainting when being needled; one issue with this suggestion is the direction that the person should sit down as soon as this feeling arises (some say "lie down", which is not the face value reading of the character), since a person being needled arguably would typically already be so. "Seated" at this point in Chinese history of course meant on the floor, not on a chair (in what we now think of as Japanese style).

The separate of the hand taiyin is called Lieque (Lu7); [it] begins in the dividing spaces on top of the wrist, joins with the taiyin main channel, goes directly to enter the middle of the palm, scatters entering into the fish border. Its illnesses: full, then the hand sharp [bone] and palm are hot; empty, then yawning, small relief losing and frequent. Treat it a half cun away from the wrist. [It] separates and goes to the yangming.

The separate of the hand shaoyin is called Tongli (Ht5), a cun and a half away from the wrist, [it] separates and travels upwards following the main channel, enters into the middle of the heart, ties to the tongue root, connects to the eye threads. Full, then propping diaphragm; empty, then not able to speak. Treat it behind the palm one cun. [It] separates and goes to the taiyang.

The separate of the hand heart master is called Neiguan (Pc6), two cun from the wrist, [it] emerges in the space between the two sinews, ascends following the main channel, ties to the heart wrapper network (*pericardium*) and heart threads. Full, then heart pain; empty then there's head stiffness. Treat it in the space between the two sinews.

The separate of the hand taiyang is called Zhizheng (Sm7), above the wrist five cun, [it] enters and flows to the shaoyin; a separate [branch] goes up to the elbow, connects to the shoulder acromion. Full, then the joints are slack, the elbow wasted; empty, then it gives birth to warts, small like finger sore scabs. Treat the separating place.

The separate of the hand yangming is called Pianli (Cn6), three cun from the wrist, [it] separates to enter the taiyin; a separate [branch] ascends going along the arm, climbs the shoulder acromion, ascends the jaw bend, slants to the teeth; a separate [branch] enters the ear, meets with the many channels. Full, then tooth decay, deafness; empty, then the teeth are cold, diaphragm bi. Treat the separating place.

The separate of the hand shaoyang is called Waiguan (Tb5), two cun from the wrist, [it] winds around the outside of the arm, flows into the middle of the chest, meets the heart master. Illnesses: full, then elbow spasms; empty, then not gathering. Treat the separating place.

The separate of the foot taiyang is called Feiyang (Bd58), seven cun from the ankle, it separates and goes to the shaoyin. Full, then nasal snivel and blockage, head and back pain; empty, then nasal snivel and nosebleed. Treat the separating place.

The separate of the foot shaoyang is called Guangming (Gb37), five cun away from the ankle, [it] separates and goes to the jueyin, descends to connect to the foot instep. Full, then jue; empty, then limpness, unable to walk, sitting [then] unable to rise. Treat the separating place.

The separate of the foot yangming is called Fenglong (Bd40), eight cun away from the ankle, [it] separates and goes to the taiyin; a separate [branch] goes along the outer ridge of the shinbone, ascends to connect to the head and nape, meets with the qi of all the main channels, descends to connect to the throat. Its illnesses: qi counterflow then throat bi, sudden loss of voice; full, then madness; empty, then the feet not gathering, the shin withered. Treat the separating place.

The separate of the foot taiyin is called Gongsun (Sp4), one cun behind and away from the root joint (*of the big toe*), [it] separates and goes to the yangming; a separate [branch] enters [the abdomen] to connect to the intestines and stomach. Jue qi ascending counterflow, then sudden turmoil; full, then cutting pain in the intestines; empty, then drum distension. Treat the separating place.

The separate of the foot shaoyin is called Dazhong (Kd4), level with the back of the ankle, [it] winds around the heel, separates and goes to the taiyang; a separate [branch] joins with the main channel, ascends and goes to the heart wrapper, descends externally penetrating the yao spine. Its illnesses: counterflow qi, then vexatious oppression; full, then blocked 'long'; empty, then yao pain. Treat the separating place.

The separate of the foot jueyin is called Ligou (Lr5), five cun from the inner ankle, [it] separates and goes to the shaoyang; a separate [branch] goes along the shin, ascends to the testicles, ties to the stalk (*penis*). Its illnesses: counterflow qi, then swollen testicles, sudden shan; full, then erect and long; empty, then violent itching. Treat the separating place.

The separate of the ren channel is called Weiyi; [it] descends the turtledove tail (*xiphoid process*), scatters in the abdomen. Full, then the abdomen skin painful; empty, then itching and scratching. Treat the separating place.

The separate of the du channel is called Changqiang (Du1); [it] flanks the muscles along the spine, ascends the nape, scatters on top of the head, descends to level with the shoulder blade left and right, separates and goes to the taiyang, enters and penetrates the muscles along the spine. Full, then spine stiffness; empty, then the head heavy, high shaking, there is excess flanking the spine. Treat the separating place.

The great network of pancreas-spleen is called Dabao (Sp21); [it] emerges three cun below Yuanye (Gb22), spreads in the chest and flanks. Full, then the whole body is painful; empty, then the hundred joints all completely slack. This channel is like a net. The blood of the network channels, treat it all with the great network channel of the pancreas-spleen.

All these fifteen networks, full then [they] must be seen, empty then [they] must go down; look and they're not seen, search for them above and below. People's main channels are not the same, the network channels' separating places are different.

Hand taiyin lung:

The separate of the hand taiyin is called Lieque: Translations aren't given here for the names of the acupoints. The phrasing here, and throughout the passage, suggests that Lieque is primarily the name of the branch channel, and the acupoint takes that name by association, not the reverse. With the exception of the last of these fifteen channels (the pancreas-spleen great luo), all are described as being "separates, separations" or "separating" (bie2) from the main channel. Despite this consistent wording, bie2 "separate" isn't the term applied to them as a group, but luo4, the name also used for the secondary "network" or capillary channels. The application of that name to the channels discussed here is based on its use in the pancreas-spleen great luo (in which instance luo4 quite clearly means an encompassing "network" rather than simply a "connection, linking"), and in the final sentences of the passage, where luo4 occurs twice, firstly referring to "all these fifteen networks", and secondly, saying the "network channels" have differences in their separating points. Whether these last instances in fact were intended to signify that luo4 was the specific name of this group of channels, or whether it instead simply meant they were one part of or instances of the larger body of network channels, is highly debatable; personally I'm very much inclined to the latter view. But in any case, luo4 was adopted as their group name at a very early point; there are clear instances of it in Neijing, such as Lingshu 1: "The main channels twelve, the network (luo4) channels fifteen, altogether twenty-seven qis"; and Jiayi gives the name luo4 to all the relevant acupoints, eg "Lieque, the luo of the hand taiyin". The adoption of this name created a persisting ambiguity as to the meaning of luo4, indicating either the network

channels generally, or this specific set of channels, or the acupoints associated with them. The typical approach to this in Chinese sources is to qualify these fifteen channels with the addition of the character actually used throughout the passage, bie2, and to interpret luo4 as meaning "link, connect" rather than "net, network", giving "the separate linking channels"; "connect, link" is in fact not a standard meaning of luo4, but it is clearly used that way in Neijing, including in a number of cases in this passage, eg "connects to the shoulder", "connects to the instep of the foot", "enters and connects to the intestines and stomach" etc. In English, the addition of "separate" doesn't present a solution to the issue, since "separate" is the name given to another set of channels, those outlined in the next chapter, Lingshu 11.

Begins in the dividing spaces on top of / above the wrist: Precisely what the "dividing space/s" means here is unclear; one suggestion is that it means deep and close to the bone, as seen eg in the discussions of the three levels of needling in Lingshu 7; other readings include eg the spaces in the flesh, the parting of the muscles etc. The Taisu and Qianjin versions of the text here have "below the armpit" instead of "above the wrist", which is generally considered an error, given its distance from the standard location of Lieque as seen in Jiayi.

Full, then the hand sharp [bone] and palm are hot: That is, if the channel is full, excess, then these are the disorders that ensue; likewise for the ensuing "empty"; the three leg yin channels and the leg yangming include a third category, "counterflow" ni4. Presumably since the "sharp bone" has been previously used in this chapter, in the heart channel, to mean the styloid head of the ulna, some translations interpret it as such here; but the more likely reading is the parallel feature on the thumb side of the wrist, the head of the radius, in the vicinity of Lieque.

Yawning: The Maijing version of the text has "yawning and coughing".

Small relief losing and frequent: That is, uncontrolled or frequent urination, incontinence.

Treat it a half cun away from the wrist: Jiayi locates Lieque "one cun five fen above the wrist", which is the measurement given in the Maijing and Taisu versions of the current passage, on which basis Lingshu's "a half cun" is universally regarded as an error; one suggestion is that the two characters "half cun" have been incorrectly reversed, and should be "cun half", meaning a cun and a half.

All the channels end by indicating that the illnesses related to that channel should be treated at the point at which the channel separates, the point referred to at the beginning of the pathway; this oblique way of indicating the acupoint again suggests that the name given at the beginning of the description is primarily that of the channel, not the acupoint.

All the twelve zangfu related channels also say (at some point, not always at the end of the description as in this case) that the channel separates and goes to link with its yinyang partner, in this case the hand yangming large intestine; the only exception to this is the heart master or pericardium channel, which doesn't indicate a connection to the three burners; the three burners channel does however specify a connection to the pericardium.

Hand shaoyin heart:

Tongli (Ht5), a cun and a half away from the wrist: There's an obvious discrepancy here, since the end of this section says treatment should be applied "behind the palm one cun" (the Jiayi and Taisu versions instead say "wrist"), which is the location given for Tongli in Jiayi,

and is what Qianjin and Taisu have here instead, on which basis "a cun and a half" is universally regarded as an error.

Enters into the middle of the heart: Qianjin has "throat" instead of "heart".

Connects to the eye threads: The character used for "connects" here is shu3, which in the main pathway descriptions earlier in the chapter is systematically used to indicate a channel connecting to its related zangfu; on that basis translations such as "belongs, pertains, homes to" are sometimes used here; however, there's no such systematic use of this or any other character in this passage (this is in fact the only instance of shu3), so such a translation doesn't seem justified.

Full then propping diaphragm: Refer to the discussion of zhi1 in "propping fullness of the chest and ribs" in the pathway of the pericardium channel earlier in this chapter. The combination of this character with "diaphragm" is translated as eg a propping tense sensation in the diaphragm region, the diaphragm propped up (full to the point of bursting), inability of the diaphragm to support the weight, a stick-like feeling in the chest.

Hand heart master pericardium:

Head stiffness: The Jiayi, Maijing, Qianjin and Taisu texts instead have "heart vexation"; some consider that more appropriate, since the channel has no connection to the head region.

Hand taiyang small intestine:

Connects to the shoulder acromion: Refer to the discussion of yu2 "acromion" in the pathway of the large intestine channel earlier in this chapter. The combination jian1 yu2 "shoulder acromion" is the name of Jianyu Cn15; it occurs in this section twice, here, and in the hand yangming large intestine channel; in this instance virtually all sources regard it as the acupoint name, in the large intestine instance almost all instead treat it as the name of a region or anatomical feature, not an acupoint (or are ambiguously vague or non-specific on the issue), despite that fact that it's that channel the acupoint belongs to; I don't know why this is so.

The joints are slack, the elbow wasted: Jiayi has "sinews" instead of "joints". Fei4 means "ruined, wasted, not functioning"; some translations instead have "elbow convulsions/tightness", I don't know on what basis.

Warts, small like finger sore scabs: Jia1 jie4, individually or in combination, can refer to the scab on a wound or sore generally, or to scabies, an condition characterised by a rash-like scabby or scaly eruption on the skin, often of parasitic origin; the hands are one of the areas typically affected. This means warts, but not ones that are relatively large and isolated, rather, numerous and small, in clumps like a rash.

Hand yangming large intestine:

Ascends the jaw (jia2) bend: That is, the angle of the mandible, the region in which the jawbone bends from roughly horizontal to vertical.

Slants to the teeth: Pian1 "slant, lean; to the side" could instead mean "the sides of the teeth", that is, the back teeth; one instance of the character in Taisu is a variant of bian1 "everywhere", that is, all through the teeth.

Meets with the many channels: Zong1 "ancestor" is here interpreted as "many" (a standard meaning; Dazidian says its pronunciation in this sense is zhong4), referring to the

numerous channels that connect with the ear; some sources stipulate this specifically means the small intestine, three burners, gallbladder and stomach channels; an alternative suggestion is that the "ancestor" channel means the lung channel, the starting point of the cycle of the circulation of qi through the channels (and the yin partner of this channel); or that it's the "main channel" in the region of the ear, whatever that might be; or the main channel of which this is the separate or network channel, the large intestine. See the discussion of zong1 in Suwen Q2/W18.

Diaphragm bi: Ge2 "to separate, be apart" is universally taken here as a substitute or equivalent of that character with the "flesh" instead of "mound" radical, ge2 "diaphragm"; this is a quite common and standard equivalence.

Hand shaoyang three burners:

Not gathering: That is, the muscles or sinews not contracting, slack; as the opposite of the preceding elbow spasms, this is typically also taken to refer to the elbow specifically, not the body generally, that is, unable to bend the elbow.

Foot shaoyang gallbladder:

Descends to connect to the foot instep: Jiayi and Wang Bing add "join to the main channel" before this.

Jue here is typically taken to mean counterflow qi resulting in coldness in the lower limbs.

Limpness, unable to walk: Although wei3, the first of this two-character combination, typically means weakness, limpness, flaccidity, some consider that in this combination it instead means contraction, tightness, tension, leading to the legs being unable to stretch, and the person consequently not being able to walk; others take the view that wei3 means weakness, limpness, and the second character, bi4, means the opposite, contraction or spasm, the result again being difficulty walking; another view is that bi4 refers generally to difficulty walking, not specifically indicating either slackness or spasm.

Meets with the qi of all the channels: Typically taken to mean all the channels that pass through these areas of the body, rather than all the channels, although in the case of the neck and head the differentiation seems fairly academic.

Foot yangming stomach:

Ascends to connect to the head and neck: Taisu here omits "neck".

Madness: This is a combination of two characters, kuang2 dian1, the first of which means madness, dementia; the second could refer to the top of the head, or could be a substitution for the "illness" radical version of the character; its involvement could be considered to imply various things, such as head pain, dizziness or giddiness and associated fainting, falling down, or epilepsy; a number of translations instead regard the combination as simply meaning a deranged state of mind, madness, with no specific physical implications or involvement.

The feet not gathering: Refer to the hand shaoyang section above.

Foot taiyin pancreas-spleen:

Sudden turmoil: A disease displaying sudden onset of vomiting and diarrhea with acute abdominal pains, such as gastroenteritis or cholera.

Drum distension: The abdomen swollen and tight like a drum.

Foot shaoyin kidney:

Level with the back of the ankle: Dang1 could be, and generally is, read as simply "at" rather than "level with".

Joins with the main channel: Taisu has "beside" rather than "joins with".

Descends externally penetrating the yao spine: Wai4 "outside, external" seems inappropriate here, and isn't included in the Maijing, Taisu and Qianjin versions.

Vexatious oppression: Refer to the discussion of "heart vexation" in the final section of Lingshu 9, and "oppression" in the earlier "all diagnosis of the network channels" section of this chapter.

Full, then blocked 'long': That is, blocked urinary disorder; a number of texts take this to mean blockage or difficulty in both defecation and urination.

Foot jueyin liver:

Goes along the shin: The Jiayi, Maijing and Qianjin texts have "main channel" instead of "shin" (the two characters are graphically similar).

Erect and long: Persistent erection, priapism; one source says a variant opinion is the scrotum stretched, not properly contracting. The Jiayi, Maijing, Taisu and Qianjin texts all add "heat" after this, which is mostly regarded as an error.

Violent itching: Universally regarded as also referring to the genital area, pruritus vulvae/scroti.

Ren channel:

Weiyi: "Tail screen"; Jiayi gives this as an alternative name for Jiuwei Rn15; Zhang Jiebin instead contends that it refers to Huiyin Rn1, although the ensuing pathway doesn't readily accord with that location.

Itching and scratching: As well as the action of scratching, sao1 can also mean a condition causing compulsive scratching; most texts suggest this refers to a condition involving the area just mentioned, the abdomen or belly, although there are some that propose the rectum instead.

Du channel:

Flanks the muscles along the spine: Jiayi and Taisu have "flanks the spine".

High shaking, there is excess flanking the spine: Jiayi has a note saying that this isn't in Lingshu; in keeping with this, and also since its meaning and applicability to the surrounding text are difficult to discern, many conclude that it's an interpolation, a later annotation that's mistakenly been incorporated into the main text; one suggestion is that "high shaking" is just such a comment on the preceding "head heavy", "excess flanking the spine" likewise for "spine stiffness". Those text that include this in their translation have eg the body shaking and unsteady; or shake or rock the patient's head and inspect it; this is caused by an excess in the channel around the spine etc.

The great network of pancreas-spleen:

Yuanye Gb22 is three cun below the axilla, three cun below that means six cun below; one translation mistakenly says three cun below the axilla.

The hundred joints all completely slack: Jiayi here has "channels" instead of "joints"; Taisu omits "completely".

This channel is like a net: Various translations are given for this and the ensuing clauses, but most involve the broad idea that this channel in some way encompasses all of the body's blood, or all of the blood in the network channels. Opinions differ on whether the treatment indication is a general one for anything related to the blood network channels, or specifically means blood stagnation or coagulation in those channels.

Full, then [they] must be seen, empty, then [they] must go down: This is universally taken to means that, since these are superficial channels, if they are full they will protrude and be visible; if they are empty they will instead collapse, sink down into the skin and flesh, and be unseen or difficult to see.

Look and they're not seen, search for them above and below: Typically taken to mean that if these network or separating channels can't be seen, you should search carefully to try to locate them; opinions differ on whether "above and below" means everywhere along the channel pathways, or only in the vicinity of the separating point, the luo acupoint. Refer to the next comment.

People's main channels are not the same, the network channels separating places are different: This appears to relate to the previous "search above and below", explaining why the network channels or the separating points might not be found in their expected location, the reason being that, like the main channels, the exact location and paths of the network channels vary from person to person.

End of Lingshu 10

Lingshu 11: The main channel separates

Huangdi asked Qibo, saying: I've heard that a person accords with the way of heaven, internally having five zang corresponding to the five sounds, the five colours, the five times, the five flavours, the five positions; externally having six fu corresponding to the six pitchpipes; the six pitchpipes establish all the main channels; yin and yang and accord with the twelve months, the twelve chen, the twelve sections, the twelve main rivers, the twelve times. The twelve main channels, these are what the five zang and six fu employ to correspond to the way of heaven. The twelve main channels are what a person employs to live, what illness employs to become, what a person employs to heal, what illness employs to arise, where study begins, where the workman stops, what the coarse [regard as] simple, what the superior [regard as] difficult. Permit me to ask their parting and joining, emerging and entering, what are they like?

Qibo touched his head to the ground twice in obeisance and said: Such a bright question! This is what the coarse pass by, where the superior stop. Permit me to discuss it thoroughly.

The five sounds: the five notes of a pentatonic musical scale.

The five colours: green, red, yellow, white, black.

The five times: shi2 here meaning "season", spring summer autumn winter, and long or late summer.

The five flavours: sour, bitter, sweet, pungent, salty.
The five positions: that is, the five directions, east south west north, and centre.
The six pitchpipes: Lv4 means a bamboo pipe whose dimensions, notably length, are used to establish the standard pitch of a note, not unlike a tuning fork; there are twelve different pitchpipes, one set to each of the notes of a chromatic scale (a scale similar to and based on the same principle as the European or Pythagorean scale, repeated extension of the two-thirds ratio of the perfect fifth). There are twelve yang notes, whose pitchpipes are called lv4, and twelve yin notes, called lv3; lv4 here represents both yang and yin pipes, and thereby serves to match the number of the fu, and also represent all twelve notes, and thereby all twelve channels.
The twelve chen: chen2 refers to the occasions, twelve in each year, when the sun and moon align on the eliptic.
The twelve sections: this usage of jie2 "section, segment, joint" is typically translated as "solar term, climatic period", meaning the twelve periods that the year is divided into, "beginning of spring", "waking of insects", "clear brightness", "beginning of summer" etc.
The twelve main rivers: the twelve major rivers in the Chinese geographical region.
The twelve times: shi2, used previously to means "season", here means the time divisions of the day, the watches, each corresponding to two hours in modern terms, "midnight", "cock crow", "calm dawn" etc.
The twelve channels are what a person employs to live, what illness employs to become: That is, the channels paradoxically both maintain life, and are also the pathways through which disease spreads in the body; they provide a means of healing, and also a place for illness to arise. In the final two clauses of this section, a number of translations take zhi4 to mean the normal "governing, regulating, maintenance" of the body's health, rather than therapeutic treatment; and take qi3 "to begin, start, arise" to mean "lift, raise; cure, heal", that is, the channels provide a way of curing or treating illness, rather than illness arising.
Where study begins, where the workman stops: The channels are not only the first thing a person should study in the pursuit of medicine, but the point a superior physician continues to focus on all his/her life. Gong1 "worker, workman" here means a person of technical accomplishment, a good or superior workman, a usage seen elsewhere in Neijing, eg Lingshu 1.
Qibo touched his head to the ground twice in obeisance: That is, kowtowed twice to the emperor.
This is what the coarse pass by, where the superior stop: A poor physician glosses over, neglects or underestimates the study of the channels; a superior physician never departs from assiduous study of them.

The proper [channel] of foot taiyang separates and enters into the middle of the back of the knee; one path below the coccyx five cun separates and enters into the anus, links to the bladder, scatters in the kidneys, goes along the muscles along the spine; level with the heart [it] enters and scatters; a direct [branch] from the muscles along the spine ascends to emerge on the nape, again links with the taiyang; this is one main channel.

The proper [channel] of foot shaoyin reaches the middle of the back of the knee, separates and goes to and joins with the taiyang, ascends to reach the kidneys, level with the fourteenth vertebra emerges and links to the dai channel; a direct [branch] ties to the

tongue root, emerges again at the nape, joins with the taiyang; this is the first joining. Completed by the separate [channels] of all the yin, [these] are all proper [channels].

The proper [channel] of foot shaoyang winds around the thigh bone, enters the hair margin, joins with the jueyin; a separate [branch] enters the space of the last ribs in the flanks, proceeds inside the chest, links to the gall bladder, scatters above the liver, penetrates the heart, ascends flanking the throat, emerging in the middle of the chin and jowls, scatters in the face, ties to the eye threads, joins the shaoyang at the outer corner of the eye.

The proper [channel] of foot jueyin separates above the instep, ascends to reach the hair margin, joins with the shaoyang, travels together with the separate [channel]; this is the second joining.

The proper [channel] of foot yangming ascends to reach the thigh bone, enters to inside the abdomen, links to the stomach, scatters in the pancreas-spleen, ascends to connect to the heart, ascends going along the throat, emerges in the mouth, ascends to the root of the nose and the cheek, turns back to tie to the eye threads, joins with the yangming.

The proper [channel] of foot taiyin ascends to reach the thigh bone, joins with the yangming, travels together with the separate [channel], ascends and ties to the throat, penetrates the middle of the tongue; this is the third joining.

The proper [channel] of hand taiyang points to earth, separates in the shoulder separation, enters the armpit, goes to the heart, ties to the small intestine.

The proper [channel] of hand shaoyin separates to enter into Yuanye (Gb22) in the space between the two sinews, links to the heart, ascends and goes to the throat, emerges on the face, joins at the inner corner of the eye; this is the fourth joining.

The proper [channel] of hand shaoyang points to heaven, separates at the vertex, enters the hollow basin, descends and goes to the three burners, scatters in the middle of the chest.

The proper [channel] of hand heart master separates three cun below Yuanye (Gb22), enters the middle of the chest, separates and links to the three burners, emerges and goes along the throat, emerges behind the ear, joins the shaoyang below the finish bone; this is the fifth joining.

The proper [channel] of hand yangming from the hand goes along the chest and breast; separates at Jianyu (Cn15), enters the pillar bone, descends and goes to the large intestine, links to the lungs, ascends going along the throat, emerges in the hollow basin, joins with the yangming.

The proper [channel] of hand taiyin separates to enter Yuanye (Gb22) in front of the shaoyin, enters and goes to the lungs, scatters in the taiyang, ascends and emerges in the hollow basin, goes along the throat, again meets with the yangming; this is the sixth joining.

Note that the common term for these is that seen in the chapter title and used as a verb in the body of the text, "separate channels", rather that used as a title in the body of the text, "proper channels"; see the note regarding luo, linking, separate in the previous chapter.

In contrast to the main channels described in the preceding chapter, all these channels go from the extremities (or the side of the body, the region below the axilla) into the trunk and towards the neck and head, with two exceptions: the hand shaoyang begins at the top of the head and travels downward; and the hand taiyang begins in the shoulder region and travels into the trunk, but then proceeds downwards to the abdomen rather than upwards.

Despite this difference in directionality, there are few significant instances of these channels going to points not also in or near the pathway of the Lingshu 10 main channel pathways. The notable exceptions to this include the foot shaoyin kidney connecting to the dai channel, the hand shaoyang three burners to the top of the head, and the entire branch of the hand heart master pericardium onto the neck and head.

Also, all three foot yang channels connect to or into the vicinity of the heart. Given that two of the hand yin channels are intrinsically involved with the heart (the shaoyin heart and jueyin heart master or pericardium), this means the only one of the six meetings or pairs not to have a connection with the heart is the sixth, the hand yangming large intestine and taiyin lung.

One of the features stressed throughout the text is the interconnection between yin and yang partners, with the whole passage grouped in six such "meetings" or "joinings"; this interconnection is reminiscent of the network or linking luo channels described at the end of the previous chapter. This set of channels has two major differences with the network/linking channels, the first of which is that these are perceived as in no way secondary or subsidiary channels; that is, they're not superficial or network channels, they're part of the true or proper main channel. That idea is seen firstly in the use of the name or description zheng4 "straight, main, principal, true, proper" (the character often used in Neijing to refer to the body's "true" or "proper" qi, as opposed to evil or perverse illness qi). Then at the end of the description of the first pathway, that of the foot taiyang bladder, the "proper" branch joins back to the main channel on the back of the neck, and it's stated that "this is one main channel"; that is, the "proper" branch and the main channel aren't intrinsically different channels, they're part of the same main channel. And lastly, at the end of the first pairing or joining, between the foot taiyang bladder and shaoyin kidney, the kidney "proper" branch also joins to the bladder main channel at the back of the neck, and the same idea is again stressed, that "[these] are all proper [channels]".

The character used to enumerate the six "joinings/meetings" is he2, and that same character is used throughout the pathways to indicate meetings or joinings at specific points. It's used at least once in each of the yin channels, in each case connecting to its related yang partner; and in three of the yang channels (foot shaoyang gallbladder, foot and hand yangming stomach and large intestine), in each case connecting to itself, or more precisely, to the main channel of which it is a branch or separation. Only one yang channel meets with its related yin channel, the foot shaoyang gallbladder to the jueyin liver. I don't know why only the yin join to the yang, not vice-versa (the feature alluded to in the text itself, each joining is "completed with the separate [channels] of all the yin"), or why only

half the yang connect to their root channel, nor have I seen any discussion on these issues. However, one thought that does suggest itself, again one I've not seen discussed elsewhere (in the course of an extremely brief examination), is that, if the linking of the network/linking luo channels is accompanied by a series of acupoints whose function is based on that connection, the same could be conjectured of these channels, despite the fact that no acupoints are specifically mentioned; that is, the yin to yang meeting points could be considered to function in the same fashion as the luo acupoints, with the notable differences that they're deep or main rather than superficial network channel connections, and they're (almost all) located beyond the "passes", on the trunk and head. A brief look at the points where the yin separate channels meet the yang main channels suggests the following possibilities: 1. The foot shaoyin kidney meets the taiyang bladder twice, at the back of the knee and the nape; Tianzhu Bd10, Weiyang Bd39, Weizhong Bd40. 2. The foot jueyin liver meets the shaoyang gallbladder in the pubic hair region; the closest acupoint is probably Weidao Gb20. 3. The foot taiyin pancreas-spleen meets the yangming stomach in the thighbone or hip region; Biguan St31, Futu St32, Yinshi St33. 4. The hand shaoyin heart meets the taiyang small intestine at the inner corner of the eye, which is on the pathway of one of the branches of the small intestine, but has no related acupoint, Quanliao Sm18 being the closest. 5. The hand heart master pericardium meets the shaoyang three burners behind the ear; Tianyou Tb16, Yifeng Tb17, Chimai Tb18, Luxi Tb19, Jiaosun Tb20. The hand taiyin lung meets the yangming large intestine in the throat; Tianding Cn17, Futu Cn18.

First joining:

Below the coccyx five cun: Kao1 can mean the coccyx, or the sacrum and coccyx, or the buttocks; opinions vary as to which is intended here.

Links to the bladder: Shu3 is the character used systematically throughout the Lingshu 10 channel pathway descriptions to mark the meeting of a channel with its related internal organ, which I translated there as "conjoin". The character is used in that same circumstance in this passage on six occasions, the foot taiyang bladder, foot shaoyang gallbladder, foot yangming stomach, hand shaoyin heart, and hand heart master three burners. It's also used three times in relation to something other than the related organ; the foot taiyang bladder connecting to its own main channel, the foot shaoyin kidney to the dai channel, and the hand yangming to the lungs. Given the lack of stringency in this pattern, I haven't used the translation "conjoin" here.

This is one main channel. ... This is the first joining. Completed with the separate [channels] of all the yin, [these] are all proper [channels]: Refer to the discussion of these in the note above.

Second joining:

Enters the hair margin: That is, the pubic hair, likewise for the ensuing foot jueyin.

Scatters above the liver, penetrates the heart: It's universally thought that the positions of "above" and "liver" here are mistakenly interchanged, and the text should say "scatters in the liver, ascends to penetrate the heart", matching other similar statements in the passage, "scatters in the pancreas-spleen, ascends to connect to the heart", "scatters in the large intestine, ascends to emerge in the hollow basin".

Joins the shaoyang in the outer corner of the eye: That is, joins with or meets the root or main pathway of its own channel, the pathway described in Lingshu 10.
Travels together with the separate [channel]: That is, the separate "proper" branch of the foot jueyin here meets with the like branch of the foot shaoyang, not the shaoyang main channel.

Fourth joining:
The hand taiyang proper [channel] points to earth: This is matched by the statement in the next pairing that the hand shaoyang proper channel "points to heaven" (zhi3 "finger; to point, indicate"). The typical explanation of these statements, as seen eg in Taisu, Zhang Jiebin, is that this channel travels from above to below, directed downwards, "pointing to earth"; in the case of the hand shaoyang, which also travels downwards, "points to heaven" is said to refer to the fact that the channel begins at the top of the head. It is notable that these two channels are the two that don't finish their pathway on the neck or head, as all the others do.
The shoulder separation: That is, the gap between the bones at the shoulder, the shoulder joint.
Yuanye Gb22, 3 cun below the axilla; the "between the two sinews" indication matches the indication in Jiayi's description of the location of Yuanye that it's in a "bend" or "winding".
Joins at the inner corner of the eye: One of the branches of the hand taiyang small intestine goes to the inner corner of the eye.

Fifth joining:
The hand shaoyang proper [channel] points to heaven: See the comment to "points to earth" above.
The hand heart master proper [channel] separates three cun below Yuanye: There's some suggestion that this refers to Tianchi Pc1, but the standard location of both Yuanye and Tianchi is in the 4th intercostal space, 3 cun below the axilla; 3 cun below Yuanye is the location given for Dabao Sp21 in the previous chapter.
The finish bone: The mastoid process.

Sixth joining:
The "pillar bone" is used in Lingshu 10 to mean the prominent vertebra at the base of the neck, the 7th cervical or 1st thoracic; translations here are generally not specific regarding its meaning, possibly implying they accept the typical translation of the term as just described; some say it instead means the 1st cervical, the atlas (on what basis I don't know), which seems less plausible.
Separates to enter Yuanye in front of the shaoyin: That is, in front of the separate proper of the hand shaoyin heart, which also enters Yuanye, as described above.
Scatters in the taiyang: "Taiyang" here is universally acknowledged to be an error for the graphically similar "large intestine", which is what Taisu has instead.
Again meets with the yangming: It's unclear why fu4 "again, to return" is used here, since there's been no such previous meeting, nor is there an obvious "returning" involved in the channel pathway at that point.

End of Lingshu 11

Lingshu 12: The main rivers

Huangdi asked Qibo, saying: The twelve main channels externally accord with the twelve main rivers and internally conjoin with the five zang and six fu. The twelve main rivers, their big and small, deep and shallow, broad and narrow, far and near, all are not the same. The five zang and six fu's high and below, small and big, the grain received much and little, are also not equal. How do these correspond to each other? The main rivers receive water and move it, the five zang meet with spirit, qi, hun and po and store them; the six fu receive grains and move them, receive qi and spread it; the main channels receive blood and circulate it: how is [all this] combined and used in treatment, the deep and shallow of needling, the number of moxa applications, could I get to hear about this?

Qibo replied, saying: Such an excellent question! The ultimate height of heaven can't be measured, the ultimate width of earth can't be measured, that is the idea. Man is born in the space between heaven and earth, inside the six meetings; this height of heaven and breadth of earth are not something the power of man can measure and arrive at. With regard to a gentleman of eight chi, the skin and flesh on him are outside and can be measured, palpated, touched and attained; once dead, he can be cut apart and the firmness or weakness of his zang seen, the large or small of the fu, the much and little of grains, the long and short of the channels, clear and muddy of the blood, the much and little of qi; of the twelve main channels, the much blood and little qi, and those of little blood and much qi, and those of both much blood and qi, and those of both little blood and qi; [these] all have great numbers. In treating these using needle and moxa, each regulating the qi of the main channels, is there an accordance with these constants?

The twelve main rivers: "Main" is the same character used to refer to the "main" or "warp" channels of the body, jing1. Guanzi provides this definition: "Rivers that emerge in the mountains and flow to enter into the sea are called main rivers. Rivers that separate from other rivers and enter into the great rivers then the sea are called branch rivers." This division obviously matches that of the main and network channels in the body. The idea of the "twelve main rivers" doesn't appear to be a standard one adopted by Lingshu, but the opposite; I've not seen an instance of the term in any other Qin-Han era text (in fact even the term "main river" without the numerical qualification "twelve" is quite rare, one of the few to use it being Guanzi, the source of the definition given above), and most sources attribute Lingshu as the source of the concept. The rivers involved are listed in the next paragraph: Qing, Wei, Hai, Hu, Ru, Mian, Huai, Ta, Jiang, He, Ji and Zhang. Most modern Chinese translations offer brief accounts of the identity and location of these, but as I see that is a subject that's only of potential significance if gone into in some depth, which is well beyond the scope of this translation, so no account of them at all is given here.

Inside the six meetings: The four directions, east south west north, plus up and down, the combination of which defines all of space.

A gentleman of eight chi: This is given as the typical or average height of a person. Lingshu 14 similarly gives an average height as 7 chi 5 cun (7.5 chi), showing, as Tamba Genkan points out, that these are rough approximations, not immutable standards. According to

Wilkinson's Chinese History: A Manual, 1 chi in the Han dynasty was equivalent to 23.1 cm, by which standard 7.5 chi is 173 cm (5 ft 8 in), 8 chi is 184.8 cm (6 ft 1 in).

[These] all have great numbers: That is, these can all be quantified, there are numerical standards, constant laws or principles, that apply to them.

Huangdi said: What I hear is pleasing to the ear [but] not explained in [my] heart; I wish to hear about it in detail.

Qibo answered, saying: These are what man employs to join with heaven and earth and correspond to yin and yang, [they] cannot not be investigated. The foot taiyang externally meets with the Qing river, internally conjoins with the bladder, and connects the water pathways. The foot shaoyang externally meets with the Wei river, internally conjoins with the gallbladder. The foot yangming externally meets with the Hai river, internally conjoins with the stomach. The foot taiyin externally meets with the Hu river, internally conjoins with the pancreas-spleen. The foot shaoyin externally meets with the Ru river, internally conjoins with the kidneys. The foot jueyin externally meets with the Mian river, internally conjoins with the liver. The hand taiyang externally meets with the Huai river, internally conjoins with the small intestine, and the water pathways emerge from it. The hand shaoyang externally meets with the Ta river, internally conjoins with the three burners. The hand yangming externally meets with the Jiang river, internally conjoins with the large intestine. The hand taiyin externally meets with the He river, internally conjoins with the lung. The hand shaoyin externally meets with the Ji river, internally conjoins with the heart. The hand heart master externally meets with the Zhang river, internally conjoins with the heart wrapper. All these five zang six fu and twelve main rivers externally have sources and springs and internally have that with which they are endowed; these all, inside and outside, penetrate each other like a ring without end; a person's main channels are also so. So, heaven is yang, earth is yin; the Yao and above is heaven, the Yao and below is earth; so, the Hai northwards is yin; the Hu northwards is yin within yin; the Zhang southwards is yang; the He northwards to the Zhang is yin within yang; the Ta southwards to the Jiang is great yang (taiyang) within yang. These are the yin and yang of one nook, that which joins man and heaven and earth to each other.

The bladder ... connects the water pathways: Aside from corresponding to water in the five goes, and its obvious fluid related physiological function, Suwen 8 states that the jinye (body fluids) are stored in the bladder.

The small intestine ... water pathways emerge from it: This is typically taken to mean that the small intestine takes the water and grains digested by the stomach, divides the clear and muddy, separates off the fluid and sends it to the bladder. Presumably because this association between the small intestine and fluid or water isn't a typical one, I have seen a translation in which this clause is moved to the next sentence, since there is a standard correspondence between the three burners and fluids; however, there's no indication of this alteration existing in any version of the original text.

The Hai northwards is yin: See the extended discussion below.

These are the yin and yang of one nook: Yu2 "bend, side, corner, nook, a remote outlying place"; that is, as large as these rivers might be, they are still only one small corner of the

earth, and only one local example of the ways in which man everywhere corresponds to heaven and earth, yin and yang.

These are the directional statements made in this section, together with their equivalents in terms of the zangfu, with "north" and "south" translated to "below" and "above" respectively, in keeping with standard perceptions of those two directions:

1. *The Hai northwards (the stomach and below) is yin.*
2. *The Hu northwards (the pancreas-spleen and below) is yin within yin.*
3. *The Zhang southwards (the pericardium and above) is yang.*
4. *The He northwards to the Zhang (from the lung down to the pericardium) is yin within yang.*
5. *The Ta southwards to the Jiang (the three burners and above to the large intestine) is great yang (taiyang) within yang.*

These all make sense as simple combinations of body position and zangfu yinyang categorisation, except the last:

1. *The stomach and below is yin; that is, in terms of placement, the organs below the stomach, meaning all the organs except heart, lungs, and pericardium (or all the fu or yang organs, more on this below), are in the yin region of the body; stomach here functions as "centre", just as earth does in the five goes.*
2. *Likewise, the pancreas-spleen marks the same body level, the centre; it and all the organs below it are yin; it's a zang or yin organ, so the organs of its type are yin within yin, that is, zang below the diaphragm; by implication, the previous statement means not simply that all the organs below the stomach or diaphragm are yin, but more specifically that all the fu or yang organs below it are yang within yin (or possibly just some of them; more on this below).*
3. *The pericardium and above (effectively meaning the whole region above the diaphragm) is yang. The organs from the lungs down, meaning the lungs, heart and pericardium, all zang or yin organs, are therefore all yin within yang. Note that unlike the previous alternation from stomach yang to pancreas-spleen yin, the subjects of these two clauses are both yin, lungs and pericardium, because there are no fu or yang organs above the diaphragm; so instead of defining yang within yang, and yin within yang, in the same way the previous two clauses define yang within yin (the stomach and the fu below it) and yin within yin (the pancreas-spleen and the zang below it), these two define the same one section or segment, yin within yang (the pericardium and the zang above it).*
4. *The last remaining segment, yang within yang, is then defined as above the three burners to the large intestine. It's clear that this definition doesn't work in the terms discussed to this point, since "yang" in the preceding definitions refers to the region above the diaphragm, and the large intestine in particular clearly can't correspond to that. Zhang Jiebin offers the opinion that yin and yang here refer to inner-outer levels rather than above-below; the three burners lie outside or around all the organs, the skin lies around that, and the large intestine, by connection with the lungs, corresponds to the skin, so from the three burners out to the skin ("large intestine") is the most yang region, great yang within yang.*

The above set of explanations is adopted by all the Chinese-language translations referred to; however, the obviously strained nature of its final point throws serious doubt on it, and prompts a search for a better approach. In my view just such an explanation is evident on

a little examination, and that is this: these statements refer to the location of the relevant channels, not the zangfu; this idea is proposed by one of the English translations (on what basis, or from what source, I don't know).

With the body facing towards south, the standard Neijing arrangement, the front of the body represents south, the back north. The Hai northwards (the foot yangming stomach and behind) is yin, the Hu northwards (the foot taiyin pancreas-spleen and behind) is yin within yin. Meaning, the foot taiyin pancreas-spleen channel at the front of the inner leg, and the two channels behind ("north of") it, the jueyin liver and shaoyin kidney, are yin, since they're on the leg, and yin within yin, since they correspond to zang, yin organs, and are on the inner or yin side of the leg. The foot yangming stomach channel at the front of the outer leg, and the two channels behind ("north of") it, the shaoyang gallbladder and taiyang bladder, are also yin, since they're on the leg; although it's not directly stated, they are more precisely yang within yin, since they correspond to fu, yang organs, and are on the outer or yang side of the leg. (The placement of these two channels at the front of the leg is therefore the primary reason for their use as representatives of their respective segments, not the central location of the physical organs, or their association with the centre in the five goes; those are either simply coincidental, or secondary correspondences demonstrating the applicability or appropriateness of the five goes across multiple or mixed dimensions.)

The Zhang southwards (the pericardium and in front) is yang, the He northwards to the Zhang (from the lung behind to the pericardium) is yin within yang. The hand taiyin lung channel on the front of the inner arm (with the arm by the side) and the jueyin pericardium channel behind ("north of") it are both yang, being on the arm; they are yin within yang, corresponding to zang, yin organs, and located on the inner side of the arm.

The Ta southwards to the Jiang (the three burners and in front to the large intestine) is great yang (taiyang) within yang. The hand shaoyang three burners channel in the middle of the outer arm and the yangming large intestine channel in front ("south") of it are both yang, being on the arm; they are yang within yang, since they both correspond to fu, yang organs, and are on the outer or yang side of the arm; and they are "great yang" within yang, since they are in the frontmost section of the arm, as opposed to the region from the shaoyang three burners channel back to the taiyang small intestine channel at the back of the outer arm, which by implication is "lesser yang within yang". This final statement completes the principles for establishing a three level yinyang within yinyang within yinyang categorisation for the whole channel system.

The single weakness in this explanation is that it would be expected that the yin side of the arm would be described as in front or south of the shaoyin heart, not the jueyin pericardium, since the heart is the hindmost of the three arm yin channels. Despite this, the suitability and plausibility of this simple model are obvious, and far preferable to the strained "large intestine is the skin which is outside the three burners" rationale offered by Zhang Jiebin and accepted by many texts.

This view also explains why, in contrast to the diaphragm as the yinyang dividing point of the placement of the zangfu as used in the initial explanation, the text itself instead uses the yao, the waist or lumbar region. The diaphragm doesn't mark a dividing point between the channels of hand and foot; most or all of the main channels have some involvement both above and below the diaphragm; but only the foot channels go into the region below

the yao, so in terms of the channels the yao serves as the equivalent marker as the diaphragm does in terms of the zangfu, the dividing point between yin and yang.

Note that the channel explanation is also applicable with the arm in the position implied in the pathway descriptions in Lingshu 10, the forearm swivelled to parallel to the ground, fingers pointed forward, palms facing each other, in which position the alignment of the channels is temporarily transferred to a transverse path, matching that of the rivers, and south and north become above and below, again as they are for the rivers.

Huangdi said: The main rivers correspond to the main channels, their far and near, shallow and deep, water and blood, much and less are all not the same; how is this combined with and used in needling?

Qibo answered, saying: The foot yangming is the sea of the five zang and six fu, its channel is large, blood plentiful, qi flourishing, heat strong; needling this, not deep doesn't scatter, not staying doesn't drain. The foot yangming, needling depth six fen, stay ten breaths. The foot taiyang, five fen deep, stay seven breaths. The foot shaoyang, four fen deep, stay five breaths. The foot taiyin, three fen deep, stay four breaths. The foot shaoyin, two fen deep, stay three breaths. The foot jueyin, one fen deep, stay two breaths. The yin and yang of hand, their qi receiving path is close by, their qi arrives rapidly, their needling depths all don't go past two fen, their stayings all don't go past one breath. The young and grown, big and small, fat and thin, applying heart to deal with these is called "modelling on the constants of heaven". Moxibustion is also so; applying moxa and transgressing this achieves bad fire, then the bones wither, the channels are rough. Needling and trangressing this, then qi is cast off.

Huangdi said: The small and large of the main channels, the much and less of blood, the thick and thin of skin, the firm and weak/fragile of flesh and the big and small of the back of the knee, can [they] be measured?

Qibo answered, saying: They can be measured, selecting a middle measure, without severe shedding of flesh, and blood and qi not in decline. If you measure a person who is wasted and thin and shape and flesh cast off, how can this be used to measure needling? Examine, palpating, stroking, touching, pressing; look at cold and warm, flourishing and declining, and regulate them; this is called "based on suitability, then acting truthfully".

The arrangement of the channels in the needling depths and times section is regular from the same perspective as that proposed in the previous section, the placement of the channels, beginning with the frontmost of the leg yang channels, the yangming stomach, then going to the hindmost, the taiyang bladder, then the middle position, the shaoyang gallbladder; that same progression is repeated on the yin side of the leg, the frontmost taiyin pancreas-spleen, the hindmost shaoyin kidney, the middle jueyin liver (from the positions at the knee). The needling depths for these decrease by ones from six to one fen, the times decrease irregularly from ten to seven to five, then by ones to two. The arm channels aren't differentiated individually; they're represented by the yangming large intestine, the frontmost yang, in the equivalent position to the stomach on the leg.

The foot yangming is the sea of the five zang and six fu: That is, the stomach is the source of the body's water and grains, the "sea" from which its nourishment is taken; because of this it's always rich in blood and qi; opinions differ on whether the "strong heat" referred to is a normal or natural outcome of this abundance (the view I prefer), or is a pathological condition, an excess of perverse heat.

Not deep doesn't scatter, not staying doesn't drain: Because the stomach channel is large and full, if the needle isn't inserted deep then its effect will be too slight, insufficient to scatter evil qi in the channel; likewise, if it's not left an appreciable time, the amount drained from the channel will be too small to be significant; consequently both the needling depth (6 fen) and time (10 breaths) are the largest for any channel.

Needling depth six fen, stay ten breaths: A fen is a tenth of a cun, roughly equivalent to a tenth of an inch or a little over 2 mm (based on the equivalence of 2.3 cm to a cun in this period). Hu1 technically means an outbreath, but in this context refers to the time taken to complete a full breath in and out.

The yin and yang of hand, their qi receiving path is close by: The hand channels are closer to the sources of qi and nourishment, the lungs, heart, stomach, so qi reaches them quickly, with the result that needling only has to be shallow and short to produce a significant effect.

Applying heart to deal with these: Applying treatment thoughtfully/carefully according to the differences in people's age and physique.

The big and small of the back of the knee: Guo2 "back of the knee" here is clearly an error for the graphically similar jun4 "the large muscles", which is what both Jiayi and Taisu have instead.

They can be measured, selecting a middle measure: That is, the standards for needling and moxa are set with reference to a person of average size and build who is in normal healthy condition, not someone whose flesh or qi are weakened or deficient. As the preceding sentences imply, those standards need to be carefully varied according to the patient's age, size and state of health.

Palpating, stroking, touching, pressing: This is a succession of four characters that all mean some form of feeling or contact with the fingers, ways in which the body is assessed, examined, diagnosed; the first, qie4, is the standard character used to mean "take the pulse"; xun2 "to follow, go along" (seen commonly meaning something of this kind in the channel pathway descriptions) or "to stroke", is here generally taken to mean feeling the condition of the chi or inner forearm; and men2 "touch, stroke" and an4 "press, massage" are taken to mean feeling the condition of the body's flesh and muscles.

This is called based on suitability then acting truthfully: Opinions vary on precisely how this should be translated, but the broadly agreed meaning is in any case that it merely restates what's already been said, that proper treatment needs to be varied according to each patient's particular circumstances; one translation maintains that zhen1 "true, truth", typically taken to mean the "true" or proper method or principles of treatment, is an error for that character with the "heart" radical added, shen4 "careful, cautious", giving "this is called (or 'this is what's meant by') acting carefully/prudently on the basis of suitability", an obviously plausible and applicable statement.

End of Lingshu 12