I

Framing the field

1
Introduction

Pulse diagnosis was the aspect of Chinese medicine most admired in Europe as selected extracts of medical treatises became available in translation from the late 17th century onwards. Du Halde said with admiration: 'In effect, their able physicians predict pretty exactly all the Symptoms of a disease; and it is chiefly this that has rendered Chinese Physicians so famous in the World.'[1] To the present day, pulse diagnosis is met with fascination and disbelief.[2] This book concerns the earliest account of medical practices that pertain to Chinese pulse diagnosis.

The earliest extensive account of Chinese pulse diagnosis, or more accurately, the examination of *mai* 脈 (vessels, pulses, channels) is contained in a biography of a doctor of the Han dynasty (206 BCE – 220 CE), who lived in the period immediately following the first unification of the Chinese empire. He was called Chunyu Yi 淳于意. Since he was an official in the kingdom of Qi 齊 before devoting himself entirely to the study of medicine in 180 BCE, he was also known by his title of office 'Master of the Granary' (Canggong 倉公). His biography comprises two introductory sections about his life, twenty-five medical case histories and eight questions and answers on his medical rationale and its transmission. The biography or, rather, the 'Memoir' (*liezhuan* 列傳), constitutes the second part of the 105th chapter in the *Records of the Historian* (*Shi ji* 史記, ca 86 BCE) by Sima Qian 司馬遷 (?145–ca 86 BCE) and complements that of the legendary physician Bian Que 扁鵲, his three medical case histories and six principles of medical ethics.[3] Throughout Chinese medical history, Bian Que was venerated for his knowledge of *mai*, but, as this study will show, Chunyu Yi's Memoir provides more detail on the innovative method of examining *mai*.

[1] Du Halde (1735:184). On the reception of Chinese pulse diagnosis in Europe, see Grmek (1962).
[2] On pulse diagnosis in the Greek and East Asian imagination, see Kuriyama (1986, 1987, 1995b, 1999).
[3] *Shi ji* 105 is called 'Memoir of Bian Que and the Master of the Granary' (Bian Que Canggong zhuan 扁鵲倉公傳); translated into English by Hsu and Nienhauser (in press).

The concept of *qi* 氣, which related to airs, vapours and breaths as well as impulsions, irritations and resonances, was central to Chunyu Yi's diagnostic practice and therapy, as was the concept of the 'viscera' (*zang* 藏). The form of pulse diagnosis that Yi practised relied on examining the *mai* on the body surface to identify qualities of *qi* coming from internal viscera. His method of 'examining *mai*' (*zhen mai* 診脈) is often paraphrased as consisting of *qie mai* 切脈 (also called *qiemo*), which probably means 'to palpate' *mai*, or, perhaps, more specifically, to 'press' onto them (as if cutting through them). This study will treat *qie mai* as a pulse diagnostic method that relies on touch. It will investigate how the heightened sense of tactility that it entailed was intricately related to the specific conceptions of body and personhood intrinsic to Yi's medical practice, which, in turn, was based on a subtle understanding of the complexities of illness events and on a unique mode of tackling the question of illness causation. In particular, it will highlight that *qi* gained centrality in medical reasoning as physicians became interested in the management of psychological aspects of personhood, and as emotions became medicalised.

As Yi's Memoir represents a document of similar importance to the history of medicine in China as did the *Epidemics* in the Hippocratic corpus to Greek medicine or the Ebers papyrus to Egyptian medicine, this book also contains the first complete translation into English of the Memoir of Chunyu Yi (*Canggong zhuan* 倉公傳; see chapters 7, 8 and 9).[4] Contemporary scholarship generally considers its composition to have been completed by ca 86 BCE. Accordingly, it can be viewed as a document that pre-dates the final compilation of the *Yellow Emperor's Inner Canon* (short: *Inner Canon*; *Huangdi nei jing* 黃帝內經).[5] Even though this study demonstrates that its textual history is far more complicated, Yi's Memoir remains of primary importance to the study of early developments leading to the foundations of the medical rationale today called 'Chinese medicine'. The Memoir furthermore tells us about the transmission of medical knowledge and practice, names a variety of 'medical' treatises[6] and throws light on early developments in the history of Chinese therapeutics, in particular, of

[4] On its textual history, see Hulsewé (1993).

[5] The *Huangdi nei jing* is generally considered the earliest and most important canonical work of Chinese elite medical knowledge. More than half its material dates from between the third century BCE and before 260 CE (Keegan 1988:17). It is to be assumed that several books by this title were in circulation in antiquity and that the earliest version of the extant compilation probably dates from the first century CE (Unschuld 2003:5), which in its extant form is the heavily revised edition from the Song dynasty (960–1279 CE) (Sivin 1993). In its extant form it consists of two books, the *Su wen* (Basic Questions) and *Ling shu* (Divine Pivot), but the same materials are organised differently in the *Huangdi nei jing Tai su* (Grand Basis). On 'canonical' medicine, see ch. 1, n. 9.

[6] Keegan (1988), Sivin (1995a). 'Medicine' is used in a wide sense here and elsewhere in this study, designating practices thought to enhance a person's aliveness. In the early Han, they ranged from the calisthenic, dietetic and sexual arts to prognosticatory and mantic techniques for determining a person's constitution, afflictions and life span.

decoctions, acupuncture and moxibustion.[7] Diagnosis based on *mai* and *se* 色 (colour/complexion) and therapeutics through administration of decoctions, acupuncture and moxibustion have remained the distinctive features of elite medical practices in China for two millennia. While Yi's body conceptions and therapeutic interventions show continuities with those recorded in the early medical manuscript literature,[8] they are framed in a more elaborate medical rationale, which in general, however, pre-dates that of the canonical 'medicine of systematic correspondences'.[9]

The Memoir is of interest to the anthropologist, social and medical historian not least because of the genre in which it records medical knowledge: in twenty-five medical case histories or, in Yi's own terms, 'examination records' (*zhen ji* 診籍). These records provide unparalleled detail on medical practice in antiquity, from diagnostic procedure to therapeutic intervention. The doctor meticulously records the name of the disorder, its concomitant signs and symptoms, explains how the disorder was contracted, and gives reasons why he came to this diagnosis. Most importantly, he prognosticates whether or not the disorder will lead to death. His predictions are always correct; ten cases end in death, the other fifteen involve therapeutic interventions which are always successful, such as the ingestion of broths, the application of poultices, fumigation, needling and cauterisation. The doctor often details stages in the course of the illness or, if he applies treatment, of betterment. His terminology is technical, and he clearly has a complex understanding of medical disorders. He also reports on medical disputes, which throw light on forms of argumentation and scientific debate in antiquity.[10] Since medical knowledge is presented in narrative form, the Memoir also has a literary value that is as yet insufficiently explored.

One crucial finding of this study is that the case histories are formulaic. This applies in particular to cases 1–10. The formulaic features are found in recurrent phrases, which can be interpreted to concern different aspects of a patient's disorder (*bing* 病), namely (1) the name of the disorder, (2) the cause of the disorder and (3) the diagnostic quality indicative of the disorder.[11] The other fifteen cases exhibit more variation but nevertheless can be shown to have the same formulaic features. By contrast, Bian Que's three medical cases and the case on the premature death of a certain

[7] Yamada (1998). 'Decoctions' are remedies made by simmering herbal, animal or mineral ingredients in water, decanting the liquid and ingesting it (see case 5, line 7); 'acupuncture' is needle therapy applied within a cosmological schema, e.g. *yin yang*; moxibustion is cauterisation with crushed *Artemisia vulgaris* leaves. See ch. 7, sections 4.2, 4.4 and 4.7.

[8] Discussed in detail in chapters 3 and 4.

[9] The term was coined by Unschuld ([1980]1985), on the basis of Porkert (1974), in light of the pervasive reasoning in terms of so-called 'five phases' or 'five agents' (*wu xing* 五行) that is particularly prominent in the *Su wen.* See p. 23. 'Canonical' refers to all those medical works, which in Imperial times were called 'canons' (*jing* 經), like the *Huangdi nei jing, Zhen jiu jia yi jing, Mai jing, Nan jing*; it is not accorded the meaning it has in Christian doctrine. On 'canons', see Chan (1998:304–5).

[10] Lloyd (1996). [11] See p. 112 and tables 2–4.

King Wen 文, recorded in the last section of Yi's Memoir, do not fit this formula.

The finding that the case histories are formulaic is central to their interpretation in this study. As the text reports in a learned vocabulary on many bodily processes and medical interventions with which a contemporary reader is not familiar, its terminology can easily be misinterpreted if one unguardedly imputes to it ideas of medical reasoning known from the *Inner Canon* and other texts of the received medical literature. This study takes advantage of the text's formulaic structure and focuses in each case history on those clauses that are linguistically marked and hence considered rhetorically relevant. By ordering these clauses into three long paradigmatic lists of (1) the compound words designating the names of the disorder, (2) the phrases outlining the causes given for each illness occurrence and (3) the rather lengthy explications on mostly tactile qualities of *mai*, it became possible to systematically compare and contrast them with each other. The aim of using this text structural method was to counter the problem of every historian and ethnographer, which is to be anachronistic and ethnocentric. The study thus represents a sustained effort to account for the conceptions of body and personhood, illness and illness causation in accordance with the weighting of the premodern Chinese narrator(s).

The text also mentions signs and symptoms of illness events, sometimes even as constituents of the compound words that formed the names of the disorders. However, generally these signs and symptoms were not part of the rhetorically marked formulae. Rather, they were mentioned here and there in passing. In other words, they were considered concomitant aspects of the illness but in the narrator's view not features of primary importance for the assessment of the illness event, as they are in contemporary 'differential diagnosis'. Previous studies of the Memoir have focused mostly on these concomitantly mentioned signs and symptoms in their assessment of the disorders described. This reflects the anachronistic concerns of contemporary biomedical doctors but does not do justice to the multilayered meanings of a learned ancient terminology. Thus, the two previous translators of this Memoir into German and French, respectively, F. Hübotter and R. Bridgman, who were physicians by training, identified the disorders in terms of biomedicine.[12] In a similar vein, Joseph Needham and Lu Gweidjen focused mostly on signs and symptoms, giving retrospective biomedical diagnoses.[13] Their guesses were sophisticated but highly speculative, and they revealed little about the early Chinese medical rationale underlying the case histories.

This study is anthropologically framed in that it seeks to explore conceptions of body and illness, diagnosis and treatment implicit to the culture

[12] Hübotter (1927), Bridgman (1955).
[13] Lu and Needham (1967 and 1980:106–13). See also Needham *et al.* (1970) and Needham and Lu (1999).

and society so vividly depicted in this Memoir. Inspired by recent studies on the anthropology of the body,[14] interpretive/critical medical anthropology,[15] and their application to Chinese cultures,[16] this study explores meanings in relation to other aspects of the practices described and refrains from equating specific bodily processes with their supposed contemporary correlates. For instance, *dong mai* 動脈 is not, in a decontextualised way, translated as 'beating vessel/pulse' and interpreted as 'pulsating artery'.

From an anthropological viewpoint, the diagnostic practices are informed by sophisticated theorising that has to be understood in its own terms and which is misrepresented by such labels as 'primitive magic', 'occult thought' and 'natural philosophy', notions that implicitly claim superiority of occidental rationality and reason. From the perspective of the social historian, the field of medical diagnosis grew out of the prognosticatory sciences, which were practised by retainers that local nobility entertained in the Warring States (475–221 BCE) and early Han.[17] In Yi's Memoir, pulse diagnosis clearly is a form of pulse prognosis.

Ultimately, this study also contributes to the anthropology of sensory experience by viewing the body techniques of physicians and their medical rationale as a cultural elaboration of a specific mode of perception.[18] It concerns science in the widest sense, where science is understood as a field of enquiry that takes seriously the perception of the external world and explores it in a systematic fashion as any formulaically structured enquiry does.[19] Furthermore, it concerns science in that it deals with the practice of learned knowledge with layers of meaning that in antiquity as well were intelligible only to those initiated into the social group that cultivated it.[20]

The terminology on which this study focuses concerns verbs of touch,[21] which interpret tactile experience within a culture-specific frame of learned knowledge.[22] These terms are often common words in literary Chinese, but in this text are used in a technical sense. The vocabulary is technical, but not in the sense that is typical of the modern sciences (with narrow definitions of word meaning that should prevent ambiguity). Rather, the physicians used common words in a special sense, and the special sense in which they used these terms in medicine often showed continuities with other

[14] e.g. Scheper-Hughes and Lock (1987), Duden ([1987]1991), Leslie and Young (1992), Shilling (1993), Csordas (2002), Lock and Farquhar (2007).
[15] e.g. Lindenbaum and Lock (1993), Good (1994), Nichter and Lock (2002), Lambek and Antze (2003).
[16] e.g. Kleinman (1980), Ots (1990a), Farquhar (1994, 2002), Hsu (1999), Scheid (2002); Bray (1997), Kuriyama (1999), Furth (1999).
[17] e.g. Sivin (1995b and 1995d), Major (1993), Li Jianmin (2000).
[18] e.g. Howes (1991, 2004), Ingold (2000), Geurts (2003), Bendix and Brenneis (2005).
[19] e.g. Granet (1934), Needham (1956), Lloyd ([1966]1992).
[20] e.g. Woolgar (1988), Latour ([1993]2006), Mol (2003).
[21] Literary Chinese grammar classifies them as 'static verbs' rather than 'adjectives', e.g. *jian* 堅 'to be firm' rather than 'firm'.
[22] On tactility, see e.g. Boyle (1998), Harvey (2003), Classen (2005); after Montagu (1971).

fields of specialised knowledge among court retainers. Nevertheless, they also created new terms and neologisms and sometimes made attempts to give definitions, for instance, of *qi*, or of the tactile perception of a particular pulse quality.

The qualities of touch encountered in the context of pulse diagnosis were elicited through specific bodily techniques that are, however, barely described in the text studied, and must be inferred or accepted as an unknown given. Tactile perception is notoriously difficult to put into words, and in Chinese pulse diagnosis has been conveyed in metaphors and similes, compound words and single-syllabic static verbs. This tactile terminology is enormously rich and fertile: in it we find implicitly contained conceptions of body and universe, causation of and recovery from illness.

This study is based primarily on an investigation of what linguists and semanticists call 'sense relations', a linguistic method for deriving word meaning from the systematic comparison of the contexts in which a term is mentioned.[23] It does not provide the reader with much evidence of the referential meaning of the terms in their specialised usage, simply because one cannot know it on the basis of the textual information at hand.[24] Well aware of the limitations of semantics, this textual study has also taken account of speech act theory and pragmatics,[25] not least because the terms studied occur in utterances that are recorded in case histories where people are in social interaction with each other.

The study certainly builds on the philological method but goes beyond it by taking a more general text critical approach to the exploration of word meaning. This is achieved by taking account of the overall structure of the text when researching the meaning of one particular term, by paying attention to the multiple layers of meaning contained in texts of compilations, and by noting instances of humour and irony.[26] Critical textual studies have opened up new horizons on how to read ancient esoteric texts, and one of the key findings is that these texts are generally compilations of short primary texts. Word meaning can critically change when one puts aside the idea that long texts were composed by one single author and instead reads a long text as a compilation of short texts.[27]

The method of 'text structure semantics' developed in the course of this study is a tool, it is hoped, which may prove useful for future meaning-oriented explorations of formulaic texts. The method was applied to the exploration of the meaning of terms that are polysemous or multivocalic

[23] e.g. the rough pulse is the 'opposite' of the slippery pulse.
[24] e.g. what does a 'rough' pulse feel like?
[25] Sense and reference highlight different aspects of word meaning but are not entirely independent of each other (Kempson 1977, Lyons 1977, Cruse 1986). On pragmatics, see Levinson (1983). On registers of speech, see Boyer (1990).
[26] On humour, see, e.g., Harbsmeier (1989), Pfister (2002).
[27] e.g. Keegan (1988), Kern (2002).

(which can be read with specific but distinctively different meanings in different contexts), and vague or general (which regardless of context always have a wide range of meanings). The formulaic structure of the text thus was crucial for identifying which terms designated a name of a disorder and which verbs described a tactile quality during the diagnostic procedure. However, given the complexities of the terms studied, with their many ambiguities and implicit connotations, the meanings identified must be understood to relate just to this particular text.

The study could have examined the literary style of early medical case records with a focus on narrative theory. It could have discussed the epistemological question relevant to the philosophy of science of 'Thinking in cases'[28] or 'Thinking with cases',[29] which explores the quality and validity of knowledge that is generated through individual case studies. It could have scrutinised pressing questions of Chinese historiography that concern the significance of these medical cases in Sima Qian's monumental history of the Han empire. Or, it could have centred on the innovative therapeutic methods mentioned in this Memoir.[30] These, and further questions,[31] will be addressed tangentially. The study's focus is on diagnosis as encompassed by a complex medical rationale and by body techniques involving touch.

[28] Forrester (1996). [29] Furth *et al.* (2007). [30] Yamada (1998).
[31] e.g. Lloyd (unpubl.) 'Why Case Histories?' 32 p.

2
The questions

Chunyu Yi relies on the two pillars of so-called 'Chinese medicine': pulse diagnosis and decoctions (or 'proto-decoctions'; *tang* 湯).[1] He also makes therapeutic use of 'needling' (*ci* 刺) and 'cauterising' (*jiu* 灸). Since he applies these methods within an elaborate framework of medical reasoning, one can regard needling and cauterising as early forms of acupuncture and moxibustion.[2] Although Yi is the one who meticulously reports on the examination of *mai*, Bian Que was celebrated as the founder of their study.[3] *Shi ji* 105 was known if not memorised by scholar-physicians for centuries to come; and although perhaps hardly understood in its original sense, it lived on in their minds.

Due to the technicality of the vocabulary and considerable medical speculation, the text is extremely difficult to understand. As already mentioned, two physicians have translated the Memoir into a Western language: F. Hübotter into German and R. Bridgman into French.[4] Both translations represent a remarkable achievement for their times, but recent research in anthropology and history brings questions of a different sort into play.

These questions concern, first, the notions of *mai* (vessels/pulses) and the terminology used for expressing the qualities of tactile perception after examining *mai*; second, conceptions of *qi* and the body in the late Warring States and Han; and, third, illness causation, and whether diagnosis must always be directed at identifying the cause of a medical disorder.

Tactility in diagnosis

A new reading of the early manuscript literature reveals that the term *mai* has a remarkable history in the Warring States and early Western Han (206

[1] Yamada (1998).
[2] Hsu (2007a). The term *zhen jiu* 'acupuncture and moxibustion' occurs in the Memoir's section 4.2, see ch. 7, n. 66.
[3] Li Bozong (1990).
[4] Hübotter (1927), Bridgman (1955), the latter with an apparatus on medical contents. More recently, Sivin (1995a) translated extracts from the Memoir's introductory parts and the interrogation sections 4.5–4.7 into English.

BCE–9 CE) before it starts to be explored tactually (see pp. 26–8). In fact, the word 'pulse' as an approximate translation for the tactually explored *mai* evokes the wrong connotations, because it makes us think of pulsations and the heartbeat. Accordingly, Du Halde said that the Chinese were able 'By the Beating of the Pulse only to discover the Cause of Disease, and in what Part of the Body it resides'.[5] However, a more careful reading of their medical texts reveals that Chinese physicians were not merely interested in 'Beatings of the Pulse', nor were they searching for the 'Cause of the Disease' in past events. Rather, as will be argued here, their pulse diagnosis attended to the present.

The tactile experiences for distinguishing different *mai* are very subtle. Ethnographic fieldwork revealed that the procedure of examining *mai* puts the doctor into a position of great uncertainty.[6] From the standpoint of pragmatics, the generating of uncertainty between the healer and his clientele is one of the main achievements of divinatory practices.[7] Why generate uncertainty, one may ask, during a process in which an illness is to be named and labelled, i.e. in a diagnostic process that aims at establishing certainty? As medical anthropology emphasises, diagnosis is a complex process, which involves the negotiation of social relations,[8] takes account of economic constraints,[9] local histories and politics,[10] and searches for culturally acceptable forms of expression and interaction.[11] In biomedicine, diagnosis requires investigation into the past and identification of the cause of the patient's condition. However, as medical anthropologists point out, diagnosis also critically accounts for the present and for situational circumstance, and it names the condition examined often strategically in light of the treatment available. This is so in biomedicine as well as among so-called 'folk healers', even if the respective medical ideologies may disclaim it.[12]

A diagnostic procedure that generates uncertainty brings into play the present. Furthermore, it opens up a space for thinking about the future and the choices of treatment available. The creation of uncertainty thus enhances the practitioner's and patient's attentiveness to situational circumstance. Anthropologists have emphasised how social, cultural, economic, as well as historical and political, processes shape such situations. There has been a tendency, however, to underplay the bodily processes of the patients and

[5] Du Halde (1735:184).
[6] The fieldwork was undertaken in Kunming city, Yunnan province, People's Republic of China, 1988–9. See Hsu (1999).
[7] Whyte (1997). [8] e.g. Lock (1993), Samuelsen and Steffen (2004).
[9] e.g. Scheper-Hughes (1992), Farmer (1999). [10] e.g. Young (1995), Davis (2000).
[11] e.g. Laderman and Roseman (1996), Lewis (1999).
[12] Nichter (1996:120–3) highlighted the strategic aspects of illness labelling and, in contradistinction to 'disease taxonomies', spoke of 'illness task-onomies'. Kleinman (1988:16) highlighted that strategic thinking applies also to biomedical diagnoses, e.g. health insurance reimbursements. Also, the availability of lithium multiplied diagnoses of the bipolar disorder.

practitioners in such circumstances due to the dichotomy intrinsic to Western scholarship, which takes biomedicine as authority on bodily processes and the social sciences as authority on those that are not bodily. Inroads towards overcoming this dichotomy have been made within the fields of the anthropology of the body and also the anthropology of the senses and emotions.[13]

Foucauldian approaches to the anthropology of the body emphasise how the social is inscribed in the body, how institutional objectives are internalised by the subject and how power is everywhere, above and below, precisely because individuals have internalised the dominant discourse in a given society.[14] Phenomenological approaches, by contrast, foreground that the body is a generative principle. It is the starting point of any form of human experience, and cross-cultural variation arises from culture-specific elaboration of these bodily experiences common to humankind. Human existence is experienced primarily in and through the body.[15] The tension between these two theoretical approaches is partly resolved by practice theory, which reminds us that these processes happen in dynamic social fields, and involve actors – with specific tastes and dispositions – in negotiation with each other.[16] This provides the basis for the exploration of sensory experience pursued in this study.

Sensory perception and emotion, as experienced by individuals through their bodies, is culturally mediated and socially learnt. Case histories record subjective experiences that are instantiated in particular moments. Each is unique, and yet, seen together, they shape and are shaped by social and cultural processes among a certain group of people. These experiences are simultaneously social and bodily. The anthropology of sensory experience emphasises that the sensorial medium through which the external world is experienced shapes the way in which the person relates to it. Touch might be key to sensing feelings.

Pulse diagnosis generates in the medical practitioner an uncertainty that differs from the technique of a diviner who throws beads or lays out cards, in that this uncertainty is mediated through a sophisticated body technique that involves touch. Touch causes presence; a tap on one's arm catches one's attentiveness. Touch makes real; talk may be flattery, visual cues an optical illusion, odours are notoriously ephemeral and taste notoriously subjective (even if it is a socially learnt and sociologically distinct subjectivity), yet touch imbues events and things with veracity. Touch causes closeness, even intimacy; a physician feels the pulse and the patient feels closeness, opens

[13] This point was already argued in early works on the anthropology of emotions, e.g. Heelas and Lock (1981), Rosaldo (1980), Myers (1979).
[14] e.g. Foucault ([1963]1989, [1975]1979, [1976]1990), Lock and Kaufert (1998).
[15] e.g. Merleau-Ponty ([1945]1962), Csordas (1994), Lambek and Strathern (1998).
[16] e.g. Bourdieu ([1979]1984, 1991). See also Harker *et al.* (1990), Jenkins ([1992]2002) and Reckwitz (2002).