TIBETAN MEDICINE AND BIOMEDICINE: EPISTEMOLOGICAL CONFLICTS, PRACTICAL SOLUTIONS

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Abstract

The western adaptation of non-western medical systems and traditions is a complex process that takes place at a variety of different levels. In many practical medical contexts, epistemological issues receive little attention. Both patients and practitioners may switch frameworks relatively freely, without much concern about underlying theoretical assumptions. Epistemological issues may be more central elsewhere, for example in regard to the licensing and approval of practitioners and medicinal substances, or in terms of the rethinking of western models of knowledge to include new insights from these non-western sources. I suggest in this paper that the major learned medical traditions of Asia, such as āyurveda and traditional Chinese medicine and traditional Tibetan medicine, for all their differences from biomedicine and among each other, are in some respects relatively compatible with western biomedical understandings. They can be read in physiological terms, as referring to a vocabulary of bodily processes that underlie health and disease. Such approaches, however, marginalise or exclude elements that disrupt this compatibility (e.g. references to divinatory procedures, spirit attack or flows of subtle ‘energies’). Other non-western healing practices, such as those in which spirit attack, ‘soul loss’ or ‘shamanic’ procedures are more central, are less easily assimilated to biomedical models, and may simply be dismissed as incompatible with modern scientific understandings. Rather than assenting to physiological reduction in the one case, and dismissal as pre-scientific in the other, we should look for a wider context of understanding within which both kinds of approach can be seen as part of a coherent view of human beings and human existence.

The adaptation of non-western medical systems and traditions to biomedicine is a complex phenomenon that takes place at a variety of different levels. Some of these are presentational and superficial.

1 I thank Mona Schrempf for providing the initial stimulus for this article, Waltraud Ernst and Vivienne Lo for encouraging me to recast it for the present context, and two anonymous reviewers for their helpful comments.

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Westerners seeking Tibetan medical treatment typically view ‘traditional Tibetan medicine’ as a holistic health system grounded in a deeply spiritual approach to life. This is part of its attraction for westerners, who may see the western biomedical tradition as clinical and alienating, and as neglecting the personal and spiritual dimensions. The Tibetan medical practitioner, they hope, will treat them as a whole person, within a wider spiritual framework, rather than as a mere body with a physical problem.

Some years ago, in an article based on a study of a Tibetan refugee medical clinic in northern India, I suggested that Tibetan practitioners of traditional Tibetan medicine who were working with western clients learned to present themselves in ways that catered to such western preconceptions. Thus in Yeshi Donden’s Dharamsala clinic, which catered largely to westerners, the atmosphere of the consulting room was quasi-monastic in its ambience, with the doctor wearing full traditional monastic dress, and the arguably more ‘exotic’ aspects of Tibetan medical practice, such as pulse and urine examination, were meticulously observed.

Tibetan practitioners who were working with Tibetan refugee patients in India operated differently. For these patients, similarities to biomedical practice were not a problem, if anything the reverse. My co-researcher, Linda Connor, and I were initially quite surprised at the prominence of the stethoscope and the sphygmomanometer in the refugee Tibetan medical practice that we were studying. The ambience of the doctor’s office was much like that of a western general practitioner, with a strong focus on the specific complaint, and little concern with ‘holistic’ aspects such as diet. While pulse analysis was carried out on all patients, it often seemed perfunctory. Urine analysis was hardly used at all. One of the doctors we worked with was in fact a monk, but his dress was a practical compromise between official Tibetan monastic garb and the Indian climate. Nor did any of this seem to worry his patients, who were happy to discuss their illness in terms of their blood pressure (khrag shed) or to be referred

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2 I use this term to refer to the tradition of medical practice associated with the text known as the rGyud bzhi, the fourfold medical tantra. See Meyer 1984 and Samuel 2001a. There is no complete translation of the rGyud bzhi as yet in any Western language. Clark 1995 translates the first two (mainly theoretical) books, and Parfionovitch et al. 1992 gives a good overview of the complete work.

3 Jork 2005 reports similar attitudes.

4 Samuel 2001a.
to a biomedical clinic for treatment when he thought this was more appropriate.\(^5\)

We rapidly realised that Tibetan traditional medicine in the refugee context existed in a close ongoing relationship with biomedicine, which was provided by the local Indian biomedical practitioners and government facilities as well as by the Delek Hospital at Dharamsala and by the biomedically-trained Tibetan nursing staff at the Tibetan refugee school. There was a widely recognised division of labour. Serious ailments such as tuberculosis were routinely treated biomedically. The patients at the traditional Tibetan medical clinic were more likely to have chronic, often relatively minor, ailments for which biomedicine, at least as practised locally, had little to offer. There were also large numbers of schoolchildren from the local Tibetan refugee boarding school who came to the clinic. These were mostly seeking medical certificates so that they could take time off school to visit their families in other refugee settlements. Patients with a further class of ailments which were seen as in various ways related to ritual pollution (\(g\text{rib}\)) or to spirit activity, such as strokes, or other situations in which one side of the body was partially paralysed, might turn up at the traditional Tibetan clinic, but they might also seek other kinds of primarily religious practitioners, such as lamas or spirit-mediums. They might also self-medicate with various empowered substances provided by refugee lamas or monasteries.\(^6\)

I do not want to suggest that such choices were entirely straightforward. Tibetan patients, like western patients, were often willing to try a variety of different forms of treatment. In most cases they were pragmatic about this; they wanted something that would work. At the same time, some Tibetans were clearly attracted by the 'Buddhist' aura of Tibetan traditional medicine, though the attraction here might be less the holistic and spiritual associations which drew the western patients than ideas of the effectiveness of the spiritual empowerment (\(byin\ r\text{labs}\)) which was thought to form part of the process of manufacture of traditional Tibetan medicine. The so-called 'Precious Pills' (\(rin\ chen\ ril\ bu\)), which derive from the ritual procedures of Tantric Buddhism rather than from the ayurvedic-influenced \(r\text{Gyud bzhi}\) tradition, were particularly popular in Dalhousie, and ideas of spiritual efficacy formed part of their appeal for some patients at

\(^5\) See also Samuel 1999.

least. What is worth noticing, however, is that epistemological conflict was barely if at all visible. Patients, lamas and traditional Tibetan doctors seemed to have little or no problem in switching backward and forward between approaches that might seem to a western analyst to be based on quite different epistemological assumptions.

I am not sure how far this relative insouciance or lack of interest in the intellectual foundations of the treatment modalities which they were receiving is a specifically Tibetan or Buddhist characteristic. A famous Buddhist parable draws its force from a very similar position. In it the Buddha speaks of a patient struck with an arrow, who instead of having the arrow removed by a surgeon insists on questioning at length about the identity of the man who fired the arrow, of the weapon with which it was fired, or the bird whose feathers were used for the shaft of the arrow. 'All this would still not be known to that man,' the Buddha said, 'and meanwhile he would die': the point being that we should get on with practising the Buddhist teachings rather than asking irrelevant questions about the nature of the cosmos or the survival of a Buddha after death. What matters is that we have a problem, and a remedy for that problem.

More seriously perhaps, one might suggest that Tibetan thought as a whole into recent times has been less committed to the primacy of a single fundamental explanatory structure than is contemporary western science. Tibetan scholars of the past were undoubtedly capable of highly sophisticated analytic and critical thought, but were perhaps more willing than the secularised scholars of the modern West to see such modes of understanding as coexisting with mythological and spiritual approaches.

I think there is some truth in this suggestion, but it is also true that contemporary western patients are themselves often very willing to move between treatment modalities without too much questioning of underlying theoretical assumptions. The rhetoric of science is undoubtedly influential in contemporary western society, and most alternative treatment modalities make at least token gestures in its direction, but this may be more a question of looking scientific than being consistent with biomedical theory.

Homeopathy, for example, seems to be able to survive quite effectively in the western context despite its almost universal rejection by

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7 This parable occurs in the Cūḷāṇālunkya Sutta of the Majjhima Nikāya in the Pali Canon, Nāṇamoli 1995, p. 535. I am not sure whether it also occurs in the Tibetan version of the Buddhist scriptures.
the biomedical establishment. Homeopathy is a significant case, because the biomedical rejection in this case is so clearly founded on a priori theoretical grounds rather than on clinical evaluation. The problem biomedical scientists have with homeopathy is not that it does not work but that the logic by which it works appears to be radically incompatible with biomedical theory. Yet it is not difficult these days to find western biomedical practitioners who also employ homeopathy, acupuncture or traditional Chinese medicine. This is perhaps not so surprising. Practitioners and patients are engaged in a pragmatic search for healing much more than in a quest for theoretical consistency.

What I have said so far suggests that there are limits to the significance of epistemological conflict in the encounter between biomedical, on the one hand, and Tibetan or other non-western medical modalities, on the other. Yet there are some issues to be explored here, and they are not without real-world implications. One major real-world implication regards the extent to which the practice of non-biomedical treatment modalities is allowed or legitimated by contemporary western governments. In such situations, the biomedical establishment inevitably serves as the gatekeeper, and the opinions of biomedically-trained scientists weigh heavily in the critical decisions as to what is allowed and in which contexts.

Most scholars involved with Asian medical traditions are well aware of this dimension of the epistemological conflict, and it can of course have ramifications of all kinds. Can one, for example, apply the standard modes of pharmacological testing and certification, based on the randomised controlled trial, to a Tibetan medical compound which contains a large number of separate ingredients claimed to work in conjunction with each other, none of them pure chemical substances? How does one deal with the complex and variable Tibetan treatment regimens, designed in relation to the patient’s bodily balance rather than the specific disease, and involving different medicines at different times of day? Biomedical testing generally presupposes a substantial sample of patients with the same condition who can be treated uniformly on a double-blind basis, but a competent Tibetan doctor will ideally prescribe an individual treatment regimen for each patient. Measures of efficacy may also vary considerably between Tibetan and biomedical doctors.8

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8 See Adams 2002 for more detailed Tibetan examples.
One can perhaps exaggerate the differences here, but while there have been biomedical-style clinical trials of Tibetan medical compounds, few appear to be satisfactory. Those that are closest to biomedical standards involve isolating and testing single ingredients, but while this may lead to the identification of useful substances for the western pharmacopoeia, it does nothing to evaluate the procedures of Tibetan medicine itself. Those carried out in more 'Tibetan' terms (using complex compounds and variable treatment regimens, for example) carry little credibility with the biomedical establishment. Other areas of Tibetan healing, such as those premised on the spirit-causation of illness, seem to involve assumptions that are fundamentally irreconcilable with the biomedical worldview. Other non-western healing modalities face similar issues.

In the remainder of the article, I shall look first at those Asian medical approaches, such as the modern forms of traditional Tibetan or Chinese medicine, that can be relatively easily incorporated within an expanded biomedical world view, and then go on to those, such as healing traditions based on spirit-causation or soul-loss concepts, which present more radical conflicts with biomedicine. Finally, I shall make some suggestions about a more inclusive framework within which we might begin to work towards reconciling some of these conflicts.

**Expert systems: biomedicine and the scholarly humoral traditions**

There are undeniably contrasts between the major scholarly traditions of humoral medicine, the Islamic-Galenic, ayurvedic, Tibetan and Chinese, and biomedicine, but there are also ways in which these systems are more assimilable by biomedicine than might appear on the surface. This is not entirely surprising; biomedicine, after all, developed historically from one of these systems, the Galenic, today represented by the Islamic medical tradition. What is more significant than the historical connection, though, is that both biomedicine and these mostly humorally-based traditions are perceived as learned, scholarly traditions with a theoretical basis. Biomedical scientists may not accept the presuppositions of ayurveda or of Chinese medicine, but it is not difficult for them to recognise that there are presuppositions, along with a body of relatively systematic medical theory.
Here the sometimes schematic and oversimplified presentations of these systems by western enthusiasts if anything strengthen the impression of a heavily theorised approach to healing. In practice, it is not necessarily so easy to reduce āyurvedic medicine to the balance of the three *doṣa*, or Tibetan traditional medicine to countering the activity of the corresponding three *nyes pa*. As, undoubtedly, is the case with biomedicine itself, these medical traditions have a considerably more heterogenous nature than their systematic presentation may imply. The three *doṣa* and the corresponding Tibetan concepts provide, rather, a framework within which a variety of more pragmatic and varied approaches to specific syndromes are contained.

This aside, however, there is an important likeness to biomedicine at another level. These traditions can easily be read in terms of a materialist physiology. They presuppose a discrete physical body with an internal anatomy, and substances or processes within that body that cause illness or health. There are undoubtedly practices that do not fit neatly into this model. The famous ‘seven miraculous pulses’ of the pulse analysis section of the Tibetan *rGyud bzhi* enable one to discover the welfare of a family from the pulse of its most senior member, or to foretell the consequences of attacking an enemy.9 Pulse analysis, according to the *rGyud bzhi*, can also be used to detect the activity of evil spirits. Similarly, there is a range of techniques in Chinese acupuncture to counter spirit-possession.10 Such matters can however be relatively easily treated as marginal, as regrettable elements of folk belief or superstition, which spoil the clean profiles of an essentially materialist system. Even acupuncture, with its internal anatomy of channels along which subtle energy is held to flow, can be relatively easily construed in physiological terms.

I suggest that the ease with which these traditions can be assimilated to a materialist epistemology has greatly aided their acceptance in western societies. Acupuncture and traditional Chinese medicine have been particularly successful, and have been incorporated relatively easily into western models of medical training and certification. Āyurveda, Tibetan traditional medicine, and the Islamic-Galenic tradition seem well placed to follow in their footsteps.11

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9 See e.g. Meyer 1990.
10 Ryan 1998; see also Lo and Schroer 2005.
11 Problems here perhaps focus less on epistemological issues than on the lack of an established large-scale professional presence in particular western societies, and
The tendency to physiological reduction is undoubtedly present in contemporary clinical practice within the Asian medical traditions themselves. Elsewhere I have noted how one of the Tibetan traditional doctors with whom we worked in India dealt with possible spirit-illness cases. lay Tibetans can confidently self-diagnose some kinds of spirit possession, for example those involving the activity of the so-called gza' spirits, also referred to as rtsa grib or channel-contamination. The doctor we were working with had a number of such cases during our study. He neither rejected these patients' understandings of their illness outright nor explicitly confirmed it. Instead, he treated them with medicinal compounds that were held to be appropriate in cases of gza'-attack, but were also effective against alternative diagnoses which did not involve spirit-attack as such. As far as I could tell, he did not altogether reject the possibility of spirit-attack, but he clearly saw it as a less common or likely occurrence than did his patients, and was not particularly interested in pursuing the possibility when it presented itself.

Whether this physiological reduction gives a fair representation of these Asian medical traditions as a whole is a different matter. The holistic conceptual structure of these traditions may be misleading if taken too literally, but it nevertheless does have a profound influence on the way in which practitioners understand their patients' problems. Modes of diagnosis, such as pulse diagnosis, and aspects of treatment reflect this kind of understanding. Here I am thinking, for example, of the work of Valentine Daniel on the siddha medical tradition of India, or of Elisabeth Hsu on Chinese medicine. Both Daniel and Hsu stress ways in which pulse diagnosis acts as a context for training a particular type of participatory sensitivity quite at odds with official biomedical approaches. The 'subtle body' concepts (cakras, nāḍī and prāṇa in Indian traditions, meridians and qi in the Chinese) reflect these kinds of sensitivities. They represent aspects of these traditions that are problematic for biomedical science, and which again tend to be marginalised or explained away in biomedical terms in modernist Asian and western discussions.

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12 Samuel 1999.
Shigehisa Kuriyama's book *The Expressiveness of the Body* (2004) takes this argument further through a systematic comparison of the historical development of Greek and Chinese medical traditions. Greek and Chinese medical traditions developed fundamentally different understandings of the nature of the body and its organs, which were grounded in radically different senses of the embodied self. Chinese conceptions of the interior of the body emphasised the storage and containment of qi, as a key strategy for longevity and good health. Greek medicine increasingly saw the body as a hierarchical structure focussed around the will: they saw muscles where the Chinese saw storehouses. By the seventeenth century, the activating soul or spirit was disappearing from western medical understanding, and the body was increasingly seen in purely mechanical terms, but Kuriyama's account reminds us that the physiology of western biomedicine cannot be detached from its specific history and the epistemological assumptions built into that history.

If aspects of a concept such as qi, then, do not fit neatly into the physiological reduction (the idea of the storage of qi within the organs, for example, or the question of deviant qi), this is not so much because they are unscientific as because they are based in an alternative science with a different history. If we are prepared to take this idea seriously, then reducing *qi* or *prāna* to quasi-physiological currents and flows is unlikely to give an adequate picture of the insights into human health and bodily functioning within Chinese or Indian traditions.

**Encounters with the spirit-world: the limits of materialism**

This brings me to the second class of non-western medical and healing practices, where the possibility of a reductionist assimilation to the physiological model of biomedical science is, for the most part, absent. Here we are looking at practices where the spirit-world has moved to centre stage, and the key procedures used in healing involve countering the malign influence of spirits, witches, sorcerers and the like. There are many ways of doing this, as a very substantial body

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14 See Lo and Schroer 2005.
of detailed anthropological research bears witness. There is also a wide variety of idioms employed within these healing modalities, with a general though by no means rigid distinction between soul-loss idioms, which focus on the individual’s loss of vital energy, and spirit-possession idioms, which focus on the nature of the spirit-being who is attacking and possessing them. Such idioms and practices are extremely widespread in Asian societies as elsewhere in the world. The term ‘shamanic’ is often used for many of them, though it implies an underlying unity that can be misleading.\textsuperscript{15}

Biomedicine has a harder time incorporating these modes of healing. Shamanic healers are not difficult to find in many western countries today, if you have some idea where to look, but as far as I know there is no official course for certification as a shamanic healer anywhere in the western world as yet, and I doubt that there will be for some time to come.\textsuperscript{16}

I have suggested one reason why this is so already. The spirit-world is not at all amenable to physiological reduction. In fact, it is in many ways the antithesis of physiological explanation, the dark other to the bright world of clinical illumination presented by modern biomedicine.\textsuperscript{17} While biomedicine assures us that all, even perhaps consciousness itself, can be explained in terms of bodily processes, the spirit-doctors and shamanic healers take an entirely opposite tack, both in terms of explanation and in terms of treatment. Within their framework, consciousness (in its widest sense, including emotions and bodily sensations as well as rational thought) is primary, and is indeed opened up further to include the interaction with the consciousness of other beings, human and non-human.

There have been some brave attempts at physiological reduction of shamanic practice—the idea that the vibrations of the shaman’s drum entrained human brain-waves was one, and it may have had some truth in it—but they seldom get past a certain point. The technique of such healers is all too clearly culturally specific, operating in

\textsuperscript{15} See e.g. Atkinson 1992, Samuel 2001b.

\textsuperscript{16} The assimilation of shamanic healing as psychiatry or psychotherapy is another question, and there are plenty of examples at hand. This issue requires much more detailed treatment than I can provide in the present article (see Samuel 1990, 2001b). The psychological reductionism characteristic of many such contexts, however, is as destructive of non-western modes of thinking as the physiological reduction I discuss in the main text.

\textsuperscript{17} See Kim 2003, discussing shamanic healing in modern Korea.
symbols, substances and procedures whose effect, if we accept that they have one, lies not in their chemical composition or material action, not in what they are, but in what they mean. Ultimately, as Gilbert Rouget pointed out, that is true of the shaman’s drum as well.\(^\text{18}\)

So what can we do in such situations? We have two basic choices, though there are certainly plenty of attempts to seek a middle way between them.\(^\text{19}\) One is to assert the dominance of conventional biomedical science. According to this path, the basic paradigm is that of physiological processes within the physical body, and any other factors, if admissible at all, have to be treated as supplementary and external. The other choice is to open out to a wider frame of reference within which consciousness, the spirit world, and therapeutic interactions with that world, can find a meaningful and—dare I say?—‘scientific’ representation.

I have made some suggestions of my own some years ago as to how we might do this, but rather than return to them here, I will refer instead to one of the last papers of the great Chilean cognitive scientist and neurophysiologist Francisco Varela, who died in 2001.\(^\text{20}\) In this article, Varela and his colleague Natalie Depraz discuss the relationship between neurophysiology and imagination, on the basis of recent work on the functioning of the brain. They point to the process of ‘upward causation’, by which mental imagery can be seen as a system of large-scale synchronisation of neural processes, a ‘transient coherency-generating process of the organism’.\(^\text{21}\) However, they insist that this process of ‘upward causation’ has to be balanced by a corresponding process of ‘downwards causation’:

> Many will accept that the self is an emergent property arising from a neural/bodily base. However [...] the reverse statement is typically missed. If the neural components and circuits act as local agents that can emergently give rise to a self, then it follows that this global level, the self, has direct efficacious actions over the local components. It is a two-way street: the local components give rise to this emergent mind, but, vice versa, the emergent mind constrains and affects directly these local components.\(^\text{22}\)

\(^{18}\) Rouget 1985.
\(^{19}\) See in particular Scheper-Hughes and Lock 1987; Lock 1993.
\(^{20}\) Samuel 1990; see also Samuel 2001b; Samuel 2006. Varela and Depraz 2003.
\(^{21}\) Varela and Depraz 2003, p. 212.
\(^{22}\) Varela and Depraz 2003, p. 214.
They go on to provide a practical medical example, in which epileptic patients are able to affect the course of the epileptic crisis through deliberate cognitive activity, while the whole process can be traced in terms of electrical signals in the brain.23

Varela and Depraz’s article began as a presentation at one of the ‘Mind and Life’ conferences sponsored by the fourteenth Dalai Lama, and Varela himself was particularly interested in the effects of Tibetan meditation procedures as pragmatic techniques for operating with the ‘downward causation’ side of the process. As the Dalai Lama himself pointed out some years later, in an address to the Society for Neuroscience in Washington, DC, if meditation could ‘effect observable synaptic and neural changes in the brain’, as was beginning to seem possible, then this could have ‘far-reaching implications’.24 Yet the implications of Varela and Depraz’s argument perhaps go even further. As they note, if we accept their ‘two-way street’, then

[t]he dualism of mind and matter as forever apart merges into a new conceptual space where we see that, if one gives the local to global and the global to local their proper role, mind and experience reveal without any mysterious residue an effective or efficacious potential. Our minds are enmeshed in multilevel causalities in the material basis of our bodies, just as much as this organic basis is the substrate from which our minds can be said to emerge.25

An anthropologist might add that once mind and experience are seen as efficacious, not just as epiphenomenal, then the social and cultural context also becomes an essential part of our explanatory structure. Certainly, the kind of expanded framework which Varela and Depraz were exploring in their paper provides plenty of space within which processes of spirit-causation of illness, shamanic recovery of lost souls, and the like can be understood. If we return to the learned traditional medical systems of Asia, too, we can now see possibilities of a fully ‘scientific’ mode of understanding these systems that does not need to marginalise the subtle physiology of qi or prāṇa, or to treat the spirit-world as an embarrassing survival of folk belief.

I would suggest that it is in a direction such as this that we should look for a reconciliation of the epistemological conflicts between biomedicine and Asian medical traditions. Without such a reconcilia-

23 Varela and Depraz 2003, p. 214.
tion, mind, consciousness and emotion will remain a marginal add-on to a fundamentally biomedical paradigm, and the place of the Asian traditions within western healthcare systems will always be vulnerable and insecure.

References


