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Does It Take a Miracle? Negotiating Knowledges, Identities, and Communities of Traditional Chinese Medicine

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When Li Fengyi, a practitioner of traditional Chinese medicine in Shanghai, China, told me that he saw striking similarities between the American TV medical drama series *ER* and his own everyday practice, I was at once surprised and fascinated. In 1998 and 1999, I worked with Li at the Jiren Clinic of Traditional Chinese Medicine, a private clinic that he cofounded in 1994. Our discussion of *ER* and traditional Chinese medicine took place during a lunch break, when I was able to engage Li in conversations not directly related to cancers and liver diseases—the two specialties for which he is famous in Shanghai's traditional Chinese medical and biomedical circles. After I mentioned that I saw an episode, dubbed in Chinese on a local TV channel, Li told me that the same TV station was so inspired by the popularity of *ER* that they became interested in developing a similar series—except that the setting would not be the emergency room of a biomedical hospital, but a clinic of traditional Chinese medicine.

Pointing at the file cabinets behind him, Li continued with a proud grin,

The folks at the TV station want me to provide raw materials for the script! They prefer our clinic because it's more eventful than the routines at a Western-medicine clinic. Take a look at these clinical journals—they are full of "difficult and unusual cases" [yinan bingli] we've solved. You don't have to spice them up to create drama because each one of them is a small "clinical miracle" in itself! What could be a better way to advertise traditional Chinese medicine?¹

Li is but one of the many "miracle makers" that I came to know during eighteen months of fieldwork in Shanghai and San Francisco. For those who have been socialized into traditional Chinese medicine—whether as practitioner, patient, or researcher—the ability to handle difficult clinical cases and, in particular, to achieve what mainstream biomedicine cannot is an unmistakable sign of professional accomplishment. At a recent memorial service of Cao Dejing,

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a renowned practitioner and cancer specialist in San Francisco, a native Californian acupuncturist named Frieda Stein spoke of the deceased in front of a diverse audience consisting of relatives, acupuncturists and herbalists, students of traditional Chinese medicine, former patients, biomedical professionals, and research scientists:

Dr. Cao came to work at our teaching clinic [of traditional Chinese medicine] after he first arrived from China in 1985. He *always* asked for the most difficult cancer cases that Western doctors could not deal with. After he started his own clinic, he kept telling me, "Send me the most challenging cases that you come across. I'll show people here what Chinese medicine can do!" He was able to help many patients who would have otherwise given up. He did so much to build the Chinese medicine community in San Francisco, and to educate the general public! Dr. Cao was very special.²

This narrative highlighted that, throughout his career in San Francisco, Cao actively sought out and solved difficult cases with which biomedicine had failed. He was "very special" because of his own outstanding clinical knowledge and practice, and, more importantly, because he used his "miracle-making" abilities to craft a niche for traditional Chinese medicine within the biomedicine-centered health care system. In doing so, he helped forge an inclusive, translocal community of traditional Chinese medicine that traveled across, and was strengthened by, networks that reached well beyond the local circle of practitioners. Cao was in turn remembered in those terms.

From an *ER*-inspired TV drama in Shanghai to a memorial service in San Francisco, "miracles" take place in, and travel through, apparently disparate and yet connected settings. The fact that "clinical miracles" play central and vexed roles in constructing the translocal knowledges, identities, and communities of traditional Chinese medicine begs one immediate question: How has the everyday practice and discourse of traditional Chinese medicine come to be a site for the production of the extraordinary?

In the following discussions, I examine the sociohistorical contexts and clinical encounters through which "miracles" are produced, as well as the ways in which differently situated people strategically invoke and interpret these "miracles" to negotiate knowledge and authority in professional and broader social networks. In tracing the multiple trajectories and meanings of "clinical miracles" in the everyday practice and discourse of traditional Chinese medicine in Shanghai and the San Francisco Bay Area, I show that it is precisely through the processes of marginalization and Othering in relation to "scientific," "biomedical" mainstreams that the clinical efficacy of traditional Chinese medicine becomes construed as "miracles." Furthermore, I argue that the marginality of traditional Chinese medicine is not a primordial structural position defined by a preexisting Science Proper. Rather, it is constructed and constantly transformed through a set of uneven, interactive sociohistorical processes of knowledge, identity, and community formation, and, at the same time, is itself a set of heterogeneous processes that mediate the transfiguration of various knowledges, identities, and communities.

In contemporary urban China and the United States, herbal medicine and acupuncture—the two main components of traditional Chinese medicine—are primarily used for conditions where biomedicine is less effective or ineffective. These conditions include, for example, allergies, pain syndromes, certain types of cancers that are resistant to biomedical therapies, and other chronic illnesses (Eisenberg et al. 1998; National Institute of Health 1997). Practitioners in Shanghai and San Francisco alike are quick to point out that many of their cases are "left over" by biomedicine. In many cases, it is only after a patient has tried everything that "standard procedures" have to offer that they move on to traditional Chinese medicine, hoping for a miraculous cure.

However, practitioners are also adamant that traditional Chinese medicine does more than passively filling in the blanks left by biomedicine. When demonstrating the medical legitimacy and authority of their own and of traditional Chinese medicine at large, practitioners readily cite as a fact that, in everyday practice, traditional Chinese medicine is able to do what biomedicine cannot, and, even more strikingly, that it sometimes defies "death sentences" by biomedical doctors. Skeptics and opponents of traditional Chinese medicine, by contrast, argue that these "clinical miracles" are too anecdotal or absurd to meet scientific norms. Yet, for their part, accomplished as well as aspiring practitioners of traditional Chinese medicine continue using "miraculous" clinical events to showcase clinical expertise and authority. They invoke "miracles" as affirmations of the clinical efficacy of traditional Chinese medicine, and even as testaments to its clinical superiority. In achieving what biomedicine cannot, "miracles" more than prove that traditional Chinese medicine works. They show that traditional Chinese medicine succeeds where biomedicine fails, thus making the comparison between the two medical practices part and parcel of the processes by which the clinical knowledge and authority of traditional Chinese medicine is constructed.

This comparison is by no means symmetrical. The fact that the everyday efficacy of traditional Chinese medicine is construed to be something out of the ordinary already assumes the normalized efficacy and the underlying scientistic "rationality" to which biomedicine readily lays claim. Yet, even as the production of "clinical miracle" reinscribes the marginality and Otherness of traditional Chinese medicine, it opens up a contingent ground for negotiating fluid modes of constructing knowledges and authorities, and for participating in the production of science. At a time when Western medicine squarely grounds its authority in science even though its ties to biological sciences are historically recent and highly fraught (Starr 1982), "clinical miracles" as an ambiguous yet powerful source for medical knowledge and authority beg critical rethinking of what counts—and for whom it counts—as legitimate scientific practice. In other words, at stake in the production of "clinical miracles" is more than the legitimacy of an-Other medicine, for our understandings and

practices of science also turn out to be a contingent field for creative, interested play.

I thus situate my account of the "clinical miracles" of traditional Chinese medicine within the tradition of anthropological studies of science and medicine. I do not assume a universalistic "Science," or multiple, mutually exclusive "sciences" with predetermined parameters and boundaries (cf. Harding 1998). Nor do I restrict my analysis to communities of card-carrying scientists. Rather, by making obvious the processes by which knowledge, identity, and community are mutually constituted, I explore more participatory ways of envisioning and doing science.

I also take the engagement with anthropological studies of science as an opportunity to reflect on the question of science within anthropology—how anthropology constructs its subjects and analytical frameworks, as well as how it defines itself as a scientific practice through the construction of these subjects and frameworks. To do so, I first turn to a discussion of the ways in which anthropological and broader sociohistorical discourses have explored and represented the relations between knowledge, identity, and community, and how, in doing so, these discourses have crafted science—including the science of anthropology—and its Others.

Science and "Other" Knowledges

As has been repeatedly pointed out, "magic," "science," and "religion" form the three-cornered constellation that has shaped anthropological inquiries into the construction of knowledge, especially "Other" knowledges (e.g., Evans-Pritchard 1976; Good 1994; Malinowski 1948; Nader 1996; Tambiah 1990). In studying Other knowledges and in measuring them against science, anthropology has played a critical role in investigating and demarcating the boundaries of science, and the boundary battles are "often arbitrary, rarely neutral, and always powerful" (Nader 1996:4). These boundary battles have also posed conceptual difficulties within anthropology. As Good points out, the rationality debate in anthropology is often articulated in terms of "how we make sense of cultural views of the world that are not in accord with contemporary natural sciences" (1994:10).

This articulation itself may be the problem. Rationalist and relativist anthropologies have long battled along the lines of "rational" and "irrational," "knowledge" and "belief," "natural" and "cultural," and "universal" and "local." In doing so, rationalists and relativists have reinscribed these lines even while contesting along them. In this section, I first give a brief review of how Malinowski and Evans-Pritchard, foundational figures in rationalist and relativist anthropological studies of knowledge and rationality, articulate their conceptions of science and its Others. I argue that these earlier anthropological inquiries into Other knowledges are themselves asymmetrical knowledge and identity productions that show the meanings and authorities of science to be relationally constructed. Second, I draw on Latour's critique of anthropological representations of Other knowledges to argue against using "natural" and "cultural," "rational" and "irrational," "knowledge" and "belief," and "universal" and "local" to grid our inquiries into knowledge production. Instead, we need to critically analyze these categories as products of particular sociohistorical processes, and to understand how differently situated players interpret, negotiate and transform their meanings in interactive and creative ways.

In *Magic, Science and Religion,* Malinowski addresses the problem of "primitive man's reason" by asking two questions. First, can the "primitive man" have any rational outlook (1948:26)? Malinowski answers, "Every primitive community is in possession of a considerable store of knowledge, based on experience and fashioned by reason" (1948:26). The second question is trickier. "Can this primitive knowledge be regarded as a rudimentary form of science or is it, on the contrary, radically different, a crude empiry, a body of practical and technical abilities, rules of thumb and rules of art having no theoretical value" (1948:26)? Under question here is not just "primitive knowledge" and the mind of "primitive man." Malinowski's formulation also offers, in passing as it were, a definition of "science"—not so much in terms of what it is as what it is *not*.

After momentarily dismissing the second question for being "epistemological rather than belonging to the study of man" (1948:26), Malinowski returns to it with more vigor, this time laying out three possible definitions of "science" against which "primitive knowledge" could be measured. The first and "minimum" definition of "science" is "a body of rules and conceptions, based on experience and derived from it by logical inference, embodied in material achievements and in a fixed form of tradition and carried on by some sort of social organization" (1948:34). The second states that "the rules of science must be laid down explicitly, open to control by experiment and critique by reason" (1948:34). After measuring "primitive knowledge" against the "minimum" definition of "science," Malinowski states that "there is no doubt that even the lowest savage communities have the beginnings of science" (1948: 34). In invoking the second and narrower definition, he still concludes that "many of the principles of savage knowledge are scientific in this sense" (1948:34). But the temptation to draw the boundary between Us and Them, science and Other knowledges seems irresistible, and Malinowski provides yet a third definition of science: "If we applied another criterion yet, that of the really scientific attitude, the disinterested search for knowledge and for the understanding of causes and reasons, the answer [to the question of whether primitive knowledge can be regarded as a rudimentary form of science] would certainly not be in a direct negative" (1948:35). This final definition is the most stringent of the three definitions, but even this one leaves open the possibility that "primitive knowledge" might well count as "scientific," as Malinowski himself acknowledges-if in a strikingly round-about manner.

In articulating various conceptions and interpretations of science, Malinowski is as preoccupied with defining the "primitive mind" as with maintaining a sense of self-identity and producing a universalistic science. Moreover, not only is the identity of the European Self at stake, but the unique professional

identity of the anthropological scientist is also on the line. "There is ... among the primitives, as every fieldworker well knows, the sociologist, the ideal informant, capable with marvelous accuracy and insight to give the *raison d'être*, the function and the organization of many a simpler institution in his tribe" (Malinowski 1948:35).

In striving to fix the boundary between the "primitive man's reason" and "science," Malinowski's writing has highlighted, perhaps against his own intention, that what counts as science is open to interpretation and negotiation, and that the self image of science/scientist is contingent upon the production of its Other. In the end, Malinowski has to drop his quest, stating that "the question ... whether we should call it *science* or only *empirical and rational knowledge* is not of primary importance in this context" (1948:35).

But this "question" continues to haunt anthropological investigations of Other knowledges. In Witchcraft, Oracles, and Magic among the Azande, Evans-Pritchard (1976) approaches the muddled "it" from a more relativist, rather than rationalist, angle. For him, the Zande practice of "witchcraft" makes sense—but only within its own cultural spatiality. His account of the Zande worldview is grounded in the constellation of "mystical notions," "common-sense notions," and "scientific notions." He asserts that the Azande understand the common sense of causation as clearly as the Europeans do: a Zande does not see a witch push over a granary, but termites gnawing away its supports (1976:24). Yet the Azande also explain why a particular granary at a particular moment collapsed in terms of the mystical notion of "witchcraft" (1976:22). In other words, the Azande use the notion of "witchcraft" to account for "coincidence," while the Europeans have no explanation of why chains of causation intersect at a certain time in a certain place (1976:23). Therefore, as Handler and Segal have argued, Evans-Pritchard's Azande have a common sense as sound as that of the Europeans, while their mystical notion of "witchcraft" is not an inferior, but a supplementary explanation of concurrence (1990: ch. 8).

In contrast to his relativistic approach to "mystical" and "common-sense" notions, "scientific notions" are, for Evans-Pritchard, by definition "European." He states that "we need not define scientific notions more clearly because Azande have none, or very few, according to where *we* draw the line between common sense and science" (1976:229, emphasis added). Scientific knowledge is thus defined by the Azande's lack of it. In other words, while Evans-Pritchard uses "common sense" to unite the human mind, he invokes "scientific notions" to mark the difference between Europeans and the Azande. This cultural difference, moreover, is asymmetrical. He argues that "science developed out of common sense but was far more methodological and has better techniques of observation and reasoning" (1976:229). Therefore, the relation between "science" and "common sense," one having "developed out of" the other, is not only portrayed to be hierarchical, but also implicitly evolutionary.

More importantly, "scientific notions" are where Evans-Pritchard grounds his own ethnographic authority (Handler and Segal 1990: ch. 8). An ethnographer is not just another European among the "primitives." Rather, his presence in the field is also one of a "scientist's." Although a layman may be uninformed and prejudiced, the anthropologist's preconceived ideas, by contrast, are "scientific" (Evans-Pritchard 1976:241). Evans-Pritchard asserts that he, the scientist, observes all the links of events, and that he judges correctly what he observes (1976:229). Even though Evans-Pritchard claims to have let his fieldwork be guided by the Azande and their interest in "witchcraft," it is the science-minded ethnographer's presumed capacity to both observe "all" and judge "correctly" that underlies his interpretation of the Zande Practice of "witchcraft."

The role of "scientific notions" in *Witchcraft* is thus twofold. First, they are presented as objective, authoritative criteria that relativize and affirm the specificity *and* rationality of the Zande worldview. And, second, their presumed capacity to explain all phenomena forms an asymmetrical contrast with the Zande worldview, which makes sense only within its own cultural spatiality.

Many have since contributed to the debate of science and Other knowledges, and taken it in various directions. Here, I focus on Latour's critique of the two aspects of the "Great Divide" in anthropology. Having introduced anthropological concepts and ethnographic methods into social studies of scientists and their labs (Latour and Woolgar 1979), Latour takes an intellectual journey back to anthropology, and draws on the insights from cultural and social studies of science to critically examine the conceptual framework of anthropology (1993). He argues that, in spite of its egalitarian goals, anthropology, whether rationalist or relativist, has not achieved symmetry in the representations of non-European peoples and their knowledges. The problem lies in what Latour calls the "Two Great Divides" in anthropological inquiry: that between culture and nature, society and science, and that between the modern, Western Us who supposedly maintain such a distinction and Them who do not (1993). Relativist anthropology, in its various forms, is able to put cultures apparently on equal footing only by reinscribing the omniscience and transcendence of the science in which anthropology grounds its own authority.

Trying to get beyond the "Two Great Divides," Latour opposes the use of either the natural or the social as the ready-made, causal explanation of how science is made. He argues instead that nature and society-culture, as well as the division between these two realms, are constituted in the process of doing science; therefore, they are the results of, not the explanations for, how science is produced (1987). Latour describes science as having the characteristics of strategically positioned "networks," allying human and nonhuman actors, and connecting them into interactive links and mesh through which controversies are settled and consensual knowledge is built into science. These networks extend well beyond the confines of the lab. They are forged by travelers who move across a wide range of social domains to accumulate human and nonhuman resources. It is noteworthy here that some of these translocal travelers cross the paths of "traditional cultures." Latour points out that this particular kind of path-crossing has played two critical roles in constructing science and

rationality: making accusations about Other people's irrationality, and appropriating Other knowledges.

First, citing the anthropological staples of the Azande and the Trobriand Islanders, Latour argues that it is by making accusations of the "primitive's" irrationality that European travelers construct and maintain their own sense of rationality. For these travelers, "rational" knowledge is presumed to be about natural phenomena and not about the people who describe them—Us the Europeans; "irrational" claims, in contrast, tell "very little about the phenomena and a lot about the people who persist in believing them" (1987:184). The divisions between knowledge and belief, rational and irrational, nature and culture are thus inextricably linked in the asymmetrical construction of knowledges and identities which distances Us from Them.

And, second, Latour discusses the incident in which the French navigator Lapérouse appropriated his Chinese fishermen informants' description of the local landscape in order to produce the map of Sakhalin Island and to include it in the map of the Pacific. In this case, "the *implicit* geography of the natives is made *explicit* by geographers; the *local* knowledge of the savages becomes the *universal* knowledge of the cartographers; the fuzzy, approximate, and ungrounded *beliefs* of the locals are turned into a precise, certain, and justified *knowledge*" (1987:216). The European appropriation of Other knowledges is therefore integral to the production of universalistic science. Latour concludes, "who includes and who is included, who localises and who is localised is not a cognitive or a cultural difference, but the result of a constant fight: Lapérouse was about to put Sakhalin on a map, but the South Pacific cannibals that stopped his travel put him on *their* map" (1987:229).

By suggesting that the construction of Other knowledges is not outside of, but part and parcel of the production of universalistic science and rationality, Latour's analysis of the accusation of irrationality and the appropriation of Other knowledges sheds light on the critical roles of "traditional cultures" in crafting and consolidating science. However, rather than critically engaging the "constant fight" for knowledges and identities as the ongoing process it is, Latour leans toward a Eurocentric position, and finds closure in qualifying the Azande, the Trobriand Islanders and the Chinese as representatives of "the multitudes who do not do science" (1987:180, emphasis added). For him, they are, after all, examples of "the people who are not part of the networks [of science], who fall through the mesh of the net" (1987:180). In fact, by avoiding "the social" as the ready-made explanation of science and knowledge, Latour has altogether rejected the relevance of a wide range of "social actors" in producing science: "capitalism, the proletarian classes, the battle of the sexes, the struggle for the emancipation of races, Western culture, the strategies of wicked multinational corporations, the military establishment, the devious interests of professional lobbies, the race for prestige and rewards among scientists" (1987:62). The roles of these social actors in shaping science, he states, are far-fetched and not pervasive enough, and these social actors are therefore not integral to the making of science (1987:62). Thus, by excluding certain

groups of people from the networks of science, Latour already presumes a spatial image of Science Proper that has centers and margins drawn precisely along the lines of these "social actors." In his final analysis, with various Others safely placed outside of the networks of science, his scientist emerges as a masculinist Eurocentric subject privileged to travel freely and forge strategic translocal networks. As Emily Martin points out, this scientist is "an accumulating, aggressive individual born of capitalism . . . resembling all too closely a Western businessman" (1994:135).

How would our conception of science change, if, rather than assuming the scientist to be an implicitly masculinist and Eurocentric subject, we seriously reconsider and include the knowledge-making efforts by those who have conventionally been marginalized in or excluded from social analyses of science? Instead of depicting the networks of science as having origins located in the "West," what if we explore overlapping networks and processes with multiple points of departure, trajectories, and intersections? What if we follow the paths of those knowledge producers who are not (or not yet) card-carrying scientists, as they participate in, disrupt, realign, and even forge networks of science?

Anthropological studies of science have suggested that what we come to know as science is accomplished via sociohistorically contingent processes, and that doing science entails constant negotiation, interaction, and strategic moves (Franklin 1995; Fujimura 1996; Haraway 1989; Latour 1987; Martin 1994; Rapp 2000; Traweek 1988). My critical interest in "clinical miracles" draws on these insights and Latour's network model of science in particular. But I tell of a different way of traveling, a different set of networks, and the potentials for different kinds of subjectivity. Rather than assuming the "West" to be the normative referent for anthropological analyses of science, or viewing traditional Chinese medicine as a pure alternative to Western science and biomedicine, I examine the productions of knowledge, identity, and community in inexplicable relations. In doing so, I explore a more fluid and participatory conceptual framework for analyzing the production and practice of science. Whereas the South Pacific cannibals put an end to Lapérouse's journey, the practitioners of traditional Chinese medicine are still charting out new paths that reshape the topography of science.

Producing Marginality

In recent years, anthropological and historical studies of traditional Chinese medicine have focused on the historicity and heterogeneity of this medical tradition and practice (Andrews 1996; Farquhar 1987, 1994; Hsu 1999; Kleinman 1995; Sivin 1987). This body of scholarship emphasizes that traditional Chinese medicine cannot be reduced to a self-contained, coherent system which is then presumed to be emblematic of an ancient Chinese culture. Nor is traditional Chinese medicine the antithesis or prototype of modern, Western science. In this section, I show that what we know today under the umbrella of "traditional Chinese medicine" is a set of heterogeneous practices shaped by their intricate relations with science and biomedicine; at the same

time, ongoing, translocal reconfiguration of the knowledges, identities, and communities of traditional Chinese medicine also transforms people's understandings and practices of science and biomedicine. In doing so, I argue that sociohistorically situated, shifting relations and boundaries among traditional Chinese medicine, science, and biomedicine play critical roles in producing, transforming, and reinscribing the marginality and Otherness of Chinese medicine.

To begin with, the emergence of a distinctive paradigm of "traditional," "Chinese" "medicine" took place within the profound sociohistorical, intellectual, and medical transformations around the turn of the 20th century. Historians have argued that, beginning in the mid-century, as the Qing Dynasty battled unsuccessfully against European and Japanese imperialist powers, many Chinese intellectuals were prompted to question and reevaluate the presumed universality, not to mention superiority, of Chinese cultural principles and practices (Spence 1981). Much of this rethinking was informed by European intellectual traditions, especially the Enlightenment Project, and culminated in the New Culture Movement of the 1910s and 1920s. The New Culturalists and their interlocutors introduced "Mr. Science" (Sai Xiansheng) and "Mr. Democracy" (De Xiansheng) as the new magic words for enlightenment, progress, and prosperity. They also invented Chinese "culture" (wenhua) to articulate notions of a national identity that needed to be grappled with, if not completely overhauled (Liu 1995; also see Furth 1976).³ Meanwhile, in the field of medicine, American private organizations, notably the Rockefeller Foundation, joined European and American missionaries in their efforts to promote "Western medicine" and "science." Whereas 17th-century missionaries coined the Chinese term *yixue* (the study of medicine) itself, these new efforts gave rise to large-scale biomedical colleges, hospitals, and scholarly organizations that redefined the landscape of health care in China (Andrews 1996; Liu 1995; Schneider 1982; Wong and Wu 1936). Although Western medicine and medical establishment came to be known as "new medicine" (xinyi), the terms jiuyi (old medicine) and guoyi (national medicine) began appearing in both written and spoken languages to lump together a wide range of therapeutic practicesherbal medicine, acupuncture, tuina (therapeutic massage), bone-setting, and healing rituals, among others.⁴ The naming of a distinctive traditional Chinese medicine was thus a set of sociohistorical, epistemological, and institutional processes that simultaneously universalized the West and its knowledge production, and invented its objectified, culturally bounded, and backward Other. In other words, these processes rendered traditional Chinese medicine commensurable with Western medicine to the extent of being commensurably different and inferior.

During the first half of the 20th century, members of the Kuomintang (Nationalist Party) government launched several campaigns to eliminate jiuyi, "the obstacle standing in the way of health care reform" (Lei 1999; Qiu 1998).⁵ In response, practitioners in urban areas started forming professional organizations and setting up small academies of traditional Chinese medicine. In Shanghai, drawing on the administrative, curricular, and pedagogical styles of Western medicine, the herbalist Ding Ganren and others founded the Shanghai Professional School of Chinese Medicine in 1916.⁶

However, it was not until the 1950s that traditional Chinese medicine acquired a clear-cut professional profile for the first time in history (Farquhar 1994). The newly established Mao regime took the recuperation of the national culture to be part of its campaign for political legitimacy, and Mao himself declared in 1954 that traditional Chinese medicine was "our motherland's treasure house" (Croizier 1968; Farquhar 1994). On the one hand, beginning in 1956, by adopting the institutional, pedagogical, and clinical standards of biomedicine, state-run traditional Chinese medicine colleges and hospitals came to replace family clinics and small academies. Among the founding fathers of the Shanghai College of Traditional Chinese Medicine (which became the Shanghai University of Traditional Chinese Medicine in 1993), some were graduates of the Shanghai Professional School of Traditional Chinese Medicine, and some were Western-trained physicians who switched to Chinese medicine by order of the party-state. On the other hand, local priests, itinerant healers, and amateur literati doctors (ruyi) were ordered to abandon their "superstitious" or "unprofessional" practices, and thus excluded from the official version of traditional Chinese medicine.

This state-initiated campaign to standardize and scientize traditional Chinese medicine continued into the early 1960s. The immediate goal of the campaign was to develop a body of basic theories, which could then be legitimated by scientific methods, especially through experiments (*People's Daily* 1954:1). At a broader level, this campaign posited traditional Chinese medicine as a quintessentially "Chinese science" that was distinctive from "Western science" and needed to be integrated into modern science and medicine. According to a *People's Daily* editorial, traditional Chinese medicine should play "a supplementary role" in modern medicine. The integrated modern medicine should in turn "reflect the uniqueness of China's geography and climate, the uniqueness of Chinese herbs and their applications, and the uniqueness of the life and work of the Chinese of all ethnicities" (1954:1).

Furthermore, proponents of the campaign argued that, as a science, albeit a Chinese science, traditional Chinese medicine should be universalized and shared by the world. They contended, "Natural science is highly international. As soon as we form a scientific theory or make an invention, it becomes the treasure of humankind" (Zhu 1954:3). In rhetoric, traditional Chinese medicine as a science should serve *shijie renmin* (people of the world). In practice, as part of the Cold War geopolitics and in fashioning the international proletariat, the "worlding" of traditional Chinese medicine was mainly oriented towards Africa, Latin America, and parts of Asia throughout the 1960s. As the Soviet Union and the United States were also sending medical teams to the third world, the encounters between "Chinese medicine" and "biomedicine" were not about local-meets-universal, but competing universals.

Ironically, the presumed universality of science and the exotic Otherness of traditional Chinese medicine, which are sources of ambiguity and even tension in traditional Chinese medicine, together allowed the worlding of traditional Chinese medicine to reorient easily during the 1970s and capture the fascination of the general public of the United States. Since the 19th century, acupuncture and herbal medicine had been mainly practiced behind closed doors in small Chinese American communities. In the 1960s, the counterculture movement recast traditional Chinese medicine as the naturalistic and holistic alternative to the biomedical establishment. In July 1971, the general public was presented with a sensational New York Times article titled "Now, About My Operation in Peking." In the article, the journalist James Reston recounted his experience with acupuncture anesthesia, which Chinese doctors used on him for postsurgery pain (1971). Reston's historic trip to China, which preceded Richard Nixon's by seven months, triggered a stir among the scientific, biomedical, and the tiny but resilient traditional Chinese medical communities in the United States. Delegations of research scientists and biomedical professionals soon went to China to study acupuncture and herbal medicine (American Anesthesia Study Group 1976; American Herbal Pharmacology Delegation 1975). At the same time, in California, acupuncturists, patient groups, and politicians began joining efforts in campaigning for the legalization of acupuncture. In 1975, California became the fourth U.S. state to legalize acupuncture.7

Twenty-five years after the legalization of acupuncture, as of April 1, 2001, there are 5,407 licensed acupuncturists in California who are authorized by the state to practice acupuncture and prescribe herbs (California Acupuncture Board 2001). In addition, a number of leading insurance companies now offer coverage for acupuncture; hospitals in the Bay Area and elsewhere are beginning to offer services in traditional Chinese medicine; and so, too, medical schools are including acupuncture and other "alternative" therapies within their curricula.⁸ During a recent lecture to a group of medical school students, Veronica Nelson, M.D., an internist who apprenticed with a traditional Chinese healer for three years, announced that it is important for biomedical professionals to understand herbal medicine. "Patients are clamoring for alternative therapies now. Most of them are upper-middle class, white, who have the money and smarts to seek alternative therapies. There are also many Asian patients. They come to me with plastic bags of herbs, and ask me questions about them. How can we doctors [i.e., medical doctors] tell our patients that we don't know?"

The mastery of alternative medicines is therefore becoming a constituent if only a secondary one—of the biomedical professional's knowledge and authority. As a consequence, the repertoire of biomedical practice is also undergoing profound changes. However, licensed acupuncturists are ambivalent about the biomedical mainstream's enthusiasm over acupuncture and herbal medicine. As Frieda Stein puts it, Patients go to Western doctors for acupuncture because they think that these doctors are scientists and authorities of all kinds of medicine. What patients don't know is that the M.D. only needs to go through a few hundred hours of training to be allowed to practice acupuncture. A licensed acupuncturist has to have four years of training at an accredited college, pass the State Licensing Exam, and have their license renewed every year. *We* acupuncturists [i.e., licensed acupuncturists] are the real experts of what we do!

Like Stein, many acupuncturists, although enjoying their hard-won "mainstream" status, also worry about appropriation, if not complete "take-over," by the biomedical establishment.

Stein and others are very much aware of the complexities and contradictions of interacting with biomedicine. For instance, the traditional Chinese medicine that Reston physically experienced was of a particular kind, and a recent invention at that. It is called "acupuncture anesthesia." In Shanghai during the 1960s, the invention of acupuncture anesthesia for the first time brought acupuncture needles under the bright lights of the operating table. In the 1970s, acupuncture anesthesia was a standard procedure in most major hospitals in Shanghai, even though its inventors insisted that it was most suitable for rural health care in China and the third world because it was efficient, low-cost, and easy to operate. Moreover, it was routinely performed in front of international visitors who were interested in medicine. By the late 1980s, however, acupuncture anesthesia had largely disappeared from both biomedical and traditional Chinese hospitals. The reason, I was told by acupuncturists and surgeons who once worked together to perform this procedure, was that it was "less effective" than biomedical techniques.9 More importantly, according to these acupuncturists and surgeons, two decades of laboratory and clinical research failed to produce any conclusive "scientific" explanation, as understood by biomedicine, of why and how acupuncture anesthesia works. Finally, at the end of the 1990s, as postsocialist China strives to "get on track with the world" (yu shijie jiegui)—or rather, with Europe and North America—the Chinese state places a new emphasis on promoting sciences and technologies that would be considered "advanced" (xianjin) by "international standards." In the field of medicine, the development and import of new biomedical techniques, equipment, and drugs has deepened many medical professionals' and patients' impression that, whereas biomedicine has progressed by leaps and bounds, acupuncture anesthesia seems "stuck." Nowadays in Shanghai, acupuncture anesthesia is no longer a clinical option. By 1999, only one research project on acupuncture anesthesia remained active. Thus, ironically, even though acupuncture anesthesia was itself the product of scientization, and even though it once spearheaded the worlding of traditional Chinese medicine, today it is becoming increasingly marginalized in relation to "international" bioscience and technologies.

The trajectory of acupuncture anesthesia is part of the broader sociohistorical and institutional processes that have shaped the marginality of traditional Chinese medicine. During my fieldwork in Shanghai in 1998 and 1999, I again

and again heard practitioners reminisce—as if speaking of lost wonders about lost herbal formulas and acupuncture techniques as they became gradually crowded out by biomedical procedures. During our conversation, An Shidi and Weng Delian, two practitioners trained in the 1950s, enumerated a wide range of traditional therapies going out of use: treating internal illnesses with externally applied herbs, reducing infant fever with a special tuina technique, the use of highly toxic herbs, and so on. These therapies are considered too unreliable, illogical, or even dangerous by biomedical standards, and have been replaced by standard—that is, biomedical—procedures. Weng said to me,

Our cohort has seen the rises and falls of Chinese medicine. It was hot in the late 1950s when we entered the Shanghai College of Traditional Chinese Medicine, but that wave died down by the time we graduated [in 1964]. When I was an intern, my mentor and I encountered a case of post-childbirth heat stroke. I asked my mentor why he didn't help. He told me that I was too naïve—we weren't supposed to interfere unless invited by the Western doctors who were in charge. That patient died. Then Chinese medicine was hot again in the 1970s. But, even during those periods when the government *is* paying attention to us, it's more symbolic than substantial. We never get quite as much financial or administrative support as Western medicine.

Now we don't even dare to deal with medical emergencies. When a patient dies in the emergency room of a Western medicine clinic, everybody is convinced that the patient is supposed to die. You'd be in big trouble if you used herbs and the patient did not get better. Patients and their relatives would make a big scene and name the biomedical drugs you are *supposed* to use. Just by word of mouth people become well informed of what kind of cutting-edge antibiotics are available, even though they probably don't understand how it works or what exactly it's good for!

Others, including Jay Fitzgerald, a San Francisco-based acupuncturist, have confirmed Weng's observation on the situations in the emergency room. Fitzgerald complained to me that, in the emergency rooms of traditional Chinese hospitals in China, one finds antibiotics rather than herbal teas. While on a tour in China in search of pure traditional, Chinese medicine, he caught a cold and developed a high fever, and was excited to visit a traditional clinic in Shanghai. To his horror, however, instead of the herbal tea and acupuncture needles that he had expected, he was given antibiotics through intravenous injection!

Thus, the various configurations of the marginality of traditional Chinese medicine suggest that, as scientization mediates the professionalization and transformation of Chinese medicine into a sensational, transnational phenomenon, it also redefines and even reduces the repertoire of traditional Chinese therapies. Moreover, authoritative discourses of science play important roles in delimiting the legitimate space of traditional Chinese medicine in relation to biomedicine, even as the changing contours, trajectories, and positions of traditional Chinese medicine call into question what counts as science, what counts as biomedicine, and what counts as traditional Chinese medicine. As I will show in the following section, it is only when the scope of scientific rationality and clinical efficacy is normalized in terms of what biomedicine is capable of, that the efficacy of traditional Chinese medicine is translated into something extraordinary and everyday practice becomes a site for the birth of "miracles."

From Clinical Success to "Miracles"

Historically, clinical success played important roles in the production of medical knowledge and practice. In China, practitioners and scholars compiled collections of "medical cases" (*yi'an*) that documented personal experiences in everyday clinical practice, especially efficacious diagnoses and treatments.¹⁰ Until the first half of the 20th century, yi'an remained an important genre in Chinese medical writings, and were commonly used as textbooks and references for practitioners.¹¹ Even today, aspiring practitioners still resort to intensive studies of their teachers' clinical cases in order to enhance their own clinical skills.

Other than serving as raw material for yi'an, an efficacious clinical case sometimes played a much more dramatic role-making a career. According to the memoir of He Shixi, a practitioner now in his eighties, producing a sensational clinical case was how Zhu Nanshan launched his career as a renowned herbalist in Shanghai around the turn of the 20th century (He 1997). While still a young man, Zhu made a good living practicing medicine in his hometown in Jiangsu Province until he decided to move to Shanghai. Instead of attracting more businesses and living a better life, Zhu found himself without a clinic or much income. Depressed, he spent the better part of his days sitting at a teahouse. One day, the handmaid of the mistress of the teahouse turned to Zhu for help because her son was suffering from an illness called guzhang (drum distension) and, the story goes, none of the local healers were able to cure him. Zhu prescribed herbs for him. He Shixi writes, "After taking Zhu's herbs for the first time, the patient sweated and defecated in a large amount. His body felt lighter, and his illness was halfway gone. The effect of the treatment was wonderful. Under Zhu's care, the patient completely recovered within a short period of time" (1997:106). The mistress of the teahouse was so impressed by Zhu's efficacy that she spread the news to all her customers. Zhu became an instant success and eventually one of the top practitioners in Shanghai.

Although this story connotes a sense of wonder, it does so without implying that Zhu's success was entirely accidental. He Shixi points out that Zhu used a dosage five to six times the commonly prescribed dosage (1997:107). However, instead of seeing this as a deviation, He Shixi explains that Zhu's boldness was grounded in his ability to discern the clinical situation and his superb understanding of the ways of herbal medicine (1997:107). In other words, although the incident itself was accidental, Zhu's success was not. Moreover, even though the initial success launched his career, Zhu came to represent the best of traditional Chinese medicine of the time only after consistently producing clinical efficacy (1997:107).

Clinical success continues to be career defining in contemporary practices of traditional Chinese medicine in China and the United States. In contrast to

previous periods, however, clinical success in traditional Chinese medicine is often mediated by, and in turn marks its marginality in relation to biomedical mainstreams. Indeed, the marginality of traditional Chinese medicine has transformed everyday efficacy into something out of the ordinary and even miraculous. For example, when asked how she became a famous cancer specialist, Pan Yanchi, a practitioner in her eighties, told me that it was "by coincidence." She said,

My father was a traditional healer specializing in internal medicine. Our family practice was handed down from generation to generation. So I started with internal medicine. But in 1954 I started working at the No. 11 Hospital. They did not have a gynecology department back then. So many female patients came to see me because I'm a woman. I remember that, in that first year, I had a patient who had ovarian cancer, and was undergoing radiotherapy. My colleagues in Western medicine said that her case was hopeless and even surgery would not help her. So she stopped medication and sat at home waiting to die. Her mother dragged her into my office. The mother got down on her knees and begged me to help her daughter. I started trying. The patient had severe lower-back pain, large volume of watery vaginal discharge, and her tongue was pale. She had also given birth to three children. These were all signs of vin depletion. And I came to the conclusion that she had kidney deficiency [kidney being a vin organ], which caused damp heat and the stagnation of internal evils. I gave her a prescription. She did not get better. So I went to an older healer for help. He suggested a ready-made prescription in the Tang-Dynasty medicine book Qianjin Fang. I changed a few herbs in the prescription and gave it to the patient. In a month, all her symptoms disappeared! She then went to the Women's Hospital in Shanghai to get a lab test. The report came out negative, and her tumor was gone! The news went around, and all sorts of cancer patients started to see me, hoping for miracles like this. Even the Cancer Hospital began asking me to help with some of their cases. As I had more and more clinical experiences with cancer, I became a cancer specialist.12

Pan is unequivocal and even proud that her career defining clinical event is a "leftover" case of biomedicine, and that its significance lies in her success in defying a death sentence by her biomedical counterparts. The interaction and comparison with biomedicine is therefore integral to Pan's clinical success and translates it into "miracles." Yet this sense of the extraordinary also underscores that, instead of explaining or generalizing the mechanisms of Pan's treatment, the conceptual framework and technologies of biomedicine affirm Pan's efficacy only to the extent of confirming the result of her treatment in biomedical terms. The significance of Pan's "miracle" making thus remains ambiguous: she has accomplished what biomedicine cannot, and yet the rationality of her success is not accounted for-let alone normalized-by authoritative biomedical means. Also unlike her predecessors such as Zhu Nanshan, Pan stresses that, even after she became experienced in dealing with cancer, her daily practice is still full of failures. She said to me, "Cancer Hospital only hands down to me cases they have given up on, and oftentimes it's simply too late for the patient." These failures, ironically, make successes seem even more miraculous.

Like many practitioners in Shanghai, Pan is very much aware of the development of traditional Chinese medicine in the United States, and is more hopeful of the future of Chinese medicine in California. Less obvious to her, perhaps, is that the stakes in producing "clinical miracles" are even higher in California. For many practitioners in California, clinical success is almost essential for making a living. Wendy Luo, an acupuncturist trained in Shanghai, recounted her experiences after immigrating to San Francisco in 1981,

When I first started making a living here as an acupuncturist, many people did not know much about acupuncture and herbal medicine. Patients only came to me for illnesses that Western doctors could not cure. These were often very difficult cases. That's mostly true even today. And patients have very little patience—they would not want to come back if they did not see results quickly. That is a bit unfair—this is medicine, not magic! And why should people expect overnight cures from us, when they have had the illness for years and Western medicine could do nothing about them? But, anyway, I was lucky to soon realize that I had to produce results, fast—I had to "wow" my patients so that they would spread my name.

I knew a senior colleague of mine who came to the Bay Area around the same time. Back in China, he was very well known for effectively using toxic herbs to treat cancer. But he had problems here because the laws are more restrictive, and prescribing those herbs could get him into trouble. Also because of bad luck, he was not able to cure many patients. He lasted for a year and went back to China.

Many practitioners in the Bay Area have told me similarly complex stories of marginality and "miracle" making. Although at times the encounters with marginality seem disheartening and the pressure to produce "miracles" overwhelming, many practitioners also achieve clinical efficacy and use it as an effective way to launch careers. Furthermore, as in the case of the deceased Dr. Cao, "miracle"-making abilities and events facilitate efforts to engage biomedical communities and the general public and to promote Chinese medicine. Therefore, not only individual careers, but also the development of translocal practices and communities of traditional Chinese medicine are at stake in the production of "clinical miracles." Back in Shanghai, Li Fengyi like Dr. Cao—also actively and decidedly engages the marginality of traditional Chinese medicine to perform "clinical miracles" and, in doing so, negotiates professional and broader knowledges, identities, and communities.

Making "Miracles," Transfiguring Science

The Jiren Clinic of Traditional Chinese Medicine is located on the third floor of a gray concrete office building that belongs to a professional science and technology association in the southwest corner of Shanghai. Since the 1950s, this part of the city has been concentrated with major hospitals, including, among others, the Cancer Hospital, the Children's Hospital, Zhongshan Hospital of the Shanghai Medical University, and Longhua Hospital of the Shanghai University of Traditional Chinese Medicine. There is also something unmistakably new in this area. Clusters of unabashedly glistening "Europeanstyle" (*oushi*) apartment buildings, which are much desired by Shanghai's

emerging entrepreneurial and white-collar classes, make the office building that hosts Jiren Clinic seem the unwelcome reminder of the Mao era. Nowadays, two activities bring this place to life: computer and informational technology lessons for local youths, and Li's practice.

The door of Jiren Clinic opens into a small waiting room that has a reception area. A young female graduate from the Shanghai University of Traditional Chinese Medicine works there as the receptionist. She is often seen working on the computer, where patient records are kept. The walls of the waiting room are covered with red silk banners embroidered with big yellow characters. Grateful patients have given these to praise Li's medical ethics (*yide*) and his medical skills (*yishu*). A plastic Christmas tree decorated with red and gold ribbons stands in one corner. "My colleagues and students, and some of my former patients had a Christmas party here a few months ago," Li explained to me when he saw me marvel at the seemingly out-of-place, and definitely out-of-season tree.

In the back of the waiting room is an office where two of Li's colleagues give out medical consultation over the clinic's hotline. To its left is a meeting room, where Li and his patients sit at a rectangular conference table. Unlike the crowded clinics at most local biomedical and traditional Chinese hospitals, where practitioners share offices and have desks squeezed back-to-back against each other, this room is enviably spacious. It easily holds ten to fifteen people. Also unlike most local clinics, there are no laboratory forms or medical equipment in sight. There is, however, a wooden plate inscribed with the characters *ai* (love) and *shan* (kindness). It is a piece of calligraphy by Master Hong Yi, the venerated Buddhist monk at the Temple of the Jade Buddha in Shanghai. At times Li's Ph.D. advisees at the Shanghai University of Traditional Chinese Medicine, where Li is a professor, would come in and work on the desktop computer in the corner of the meeting room, writing articles or looking up information on the internet.

Li tells me that originally he planned to let patients wait for their turns in the waiting room, so that he could interview them one at a time in his own private office in the back of the meeting room which would allow more privacy. But patients decided that they preferred gathering around the conference table, so that they could chat in low voices and give out sometimes wanted and more often unwanted advice to whomever is being diagnosed. Whenever I was at the clinic, Li and I would sit together at one end of the table. The only things that visibly distinguish Li from his patients are his white lab coat, and the stack of prescription forms in front of him.

This smiling, unassuming man has had a life and career that is nothing short of a miracle itself. In 1966, at the beginning of the Cultural Revolution, Li's high school education was abruptly terminated when he and millions of others of his cohort were sent away from the city of Shanghai to work as farmers in rural China. In 1975, he secured a rare opportunity to attend medical school at the Shanghai College of Traditional Chinese Medicine. Ironically, for Li, the much-coveted opportunity to move back to Shanghai meant giving up his longtime interest in engineering. Instead he was to study traditional Chinese medicine. However, perhaps to his relief, Li was able to learn biomedicine at school. Founded in 1956 among the first four state-run traditional Chinese medicine colleges in China, the Shanghai College is both admired and criticized for its commitment to teaching "two-fisted traditional Chinese medicine." The "two-fisted traditional Chinese medicine" includes biomedical concepts and techniques *within* its scope. It refers, through contrast, to other versions of "traditional Chinese medicine," as taught by other colleges of traditional Chinese medicine, that consider themselves more pure and orthodox.

By the early 1990s and just after turning forty, Li was already a wellknown practitioner in the area, and he again distinguished himself by becoming a full professor at the Shanghai University of Traditional Chinese Medicine. In 1994, inspired by Deng Xiaoping's much publicized speech on privatization and entrepreneurship, Li started networking with local and overseas capital, and soon became one of the first in Shanghai to open a private clinic. This is a multifunctional "clinic," where he treats patients, trains interns, conducts clinical research, and markets his own patent medicines. Li's success, which is mediated by and in turn mediates the multiple, at times seemingly disparate, networks and activities that he engages in, has made him an icon, albeit a somewhat iconoclastic one, of Shanghai's medical circle.

On an average workday, Li receives 50 to 60 patients. On my first visit at Jiren Clinic, I arrived at 9:00 a.m. and already more than twenty patients were there. Some seated themselves in the meeting room, and late arrivers waited for their turns in the waiting room. The receptionist was entering data into patient records, which mainly consisted of the history of diagnosis and prescription, as well as summaries of laboratory test results patients obtained from larger medical institutions. In most cases, patients brought in their own records as was the custom, but computerized records ensured that records of previous diagnosis and prescription would be available even when patients were forgetful. It turned out that most of Li's patients had cancers or liver diseases. Most cancer patients at Li's clinic suffered from a few specific forms of cancers: late-stage cancers, cancers that are insensitive to chemotherapy and radiotherapy, or tumors that cannot be surgically removed. Li is known in Shanghai for successfully treating cancers and liver diseases.

On that first day at the Clinic I was surprised that, when diagnosing patients, Li used more than tongue and pulse diagnoses—trademark techniques of traditional Chinese medicine. He was very comfortable with reading various lab reports and films, and giving advice on surgery and biomedical medication. There were a couple of patients who came without any kind of medical record or physical exam, and Li gently chided them as he felt their pulses on the wrist. On another occasion, however, he refused to give a prescription to a woman who came in on behalf of her father, because, as Li explained to her, he could not examine the patient's tongue or feel his pulse.

The morning was almost over when a gaunt old man came in on the arm of a middle-aged man, whom I later realized was the older man's nephew and a former patient of Li's. The old man had lost ten kilograms within three months, had symptoms indicative of lung cancer (i.e., coughing, thick phlegm, and low fever in the afternoon) and had been refusing to get a biomedical exam. After checking the patient's tongue and pulse, Li said to me, "The patient has a thick, yellow coating on his tongue and the tip of the tongue is red. His pulse is wiry and rapid. In Chinese medicine, we call this condition 'ascending counter-flow of stomach *qi'* [*weiqi shangnie*]. In Western medicine it is explained in terms of a large amount of sediments in the stomach. In most cases, this kind of condition turns out to be stomach or lung cancer."

Then, turning towards the patient, Li said, "You have to get an endoscopy, and a CT scan or an MRI. Only then would I be able to give you a prescription that targets your specific problem. It would be irresponsible for me to give you herbs right now."

Other patients also urged the old man, saying, "Western medicine too is science. It's available. So why don't you make use of it?"

Pointing at the nephew, Li said to me, "He found out a year ago that he had a malignant tumor on the back of his stomach which could not be surgically removed. Around the same time he was laid off from work. He did not want to live. His wife dragged him here. I convinced him to begin chemotherapy and take herbs and my patent medicines. His recent lab report came out negative!"

Then, turning towards the nephew, Li said, "Don't worry about finding a new job. I'm working with my business associates to set up a network of traditional Chinese medicine clinics in downtown communities (*shequ*). We will have three to five practitioners at each clinic to advertise preventive medicine and new health concepts that focus on prevention—Chinese medicine can also serve as a great preventive medicine! Maybe you can help us out at these clinics."

The day ended as Li saw off his last patient, a woman in her sixties equipped with a catheter unit. She had genital melanoma and underwent surgical removal two years ago. But the lesion would not heal after the operation. When Li paid her his first house call, her entire lower body was rotting away. One year of treatment with herbs and Li's own patent medicines enabled her to walk again. She said to me with tears in her eyes, "Dr. Li is a miracle worker!"

It is noteworthy that Li's expertise in science and biomedicine is not outside of, but part and parcel of the medical repertoire that allows him to produce favorable clinical results and establish medical efficacy and authority. Li's patients, moreover, apparently are less concerned with the epistemological divisions that anthropologists see between biomedicine and traditional Chinese medicine, than with what works for them (Farquhar 1999). And, after all, "Western medicine too is science."

Furthermore, unlike Pan, who becomes a cancer specialist "by coincidence," Li seeks out liver diseases and cancers to be his specialties. Cancer and liver diseases are among the leading causes of death in Shanghai. However, biomedicine has not been effective in treating late-stage cancers, cancers resistant to chemotherapy and radiotherapy, and tumors that cannot be surgically removed. Liver diseases, as Li and other practitioners have explained to me, can be even more difficult to treat because the intake of medication requires detoxification by the body, which is a function of the liver. Therefore, medication for liver diseases inevitably adds to the ailing liver's workload.

I once asked Li why he chooses to specialize in cancers and liver diseases; he first responded half jokingly, "It's easy to become famous that way." Then he gave me a more serious answer, "Because these are 'big diseases' in biomedicine. How else can I make doctors of Western medicine take me seriously? They don't want to listen to you if you keep talking about tradition and culture. You have to play their game. And I want to get right at the center of the game." In seeking out medical cases with which biomedicine is ineffective or less effective—even if it means taking on what is left over by biomedicine, Li turns the marginality of traditional Chinese medicine into a vantage point from which he decidedly engages bioscientific medical practices, and negotiates professional and broader knowledges, identities, and communities.

Li's practice, to be sure, has many critics. Many biomedical doctors in Shanghai—especially oncologists and hepatologists—are ready to point out that he is, after all, a practitioner of "traditional," "Chinese" medicine. Meanwhile, some colleagues in traditional Chinese medicine criticize him for being too "Westernized" or "biomedical." Li is acutely aware of these criticisms. In response, he firmly grounds the legitimacy of his clinical practice in his ability to keep producing "clinical miracles." He says, "I am not worried about others attacking me for what I do. My clinical results speak for themselves!"

But clinical results do not always speak for themselves. As Veronica Nelson puts it, "Herbs are sexy. But with our Western training, we need scientific experiments to back them up."

In both China and the United States, laboratory experiments and clinical trials on traditional Chinese medicine strive to follow the "standard procedures" by which biomedical experiments are performed. This particular way of conceiving of scientific experiments often poses conceptual and procedural difficulties for traditional Chinese medicine, such as in the case of acupuncture anesthesia.

This does not mean, however, that traditional Chinese medicine always plays the passive subject that comes under the omniscient gaze of science. In fact, decades of experiments on traditional Chinese medicine have challenged the existing conceptual framework of science. Bob Miller, a physiologist who was part of the American Anesthesia Study Group in 1973, is now a professor emeritus at a large public university in the southwest. Rather than scaling back on research activities, he is currently designing experiments on the connection between *qi* and consciousness. This is an exciting project for him precisely because of the conceptual challenges it poses,

The conservative scientific hypothesis is that you can explain human behavior by brain function. That gives you a simple picture of the body as a machine. But that's not the whole picture. *Qi*, or life energy, just does not fit into this hypothesis.

That's *shattering*. That's a big deal. That's bigger than a cure for cancer. That's the whole conceptual framework!

Miller is one of the many who are enthusiastic about what they understand as a profound transformation that traditional Chinese medicine is bringing to more authoritative understandings and practices of science. Li Fengyi, for his part, takes part in producing and transforming science through classroom education. During a lecture for first-year students at the Shanghai University of Traditional Chinese Medicine, Li said,

We need to raise the level of the discussion of traditional Chinese medicine to the discussion of "science." Science is about rational explanations of nature, and these explanations are represented by scientific theory. No theory can be the exact reflection of reality because theories are always produced within and limited by specific historical periods. *Yinyang* and Five-Element Theories, as we have discussed, are the conceptual basis of Chinese medicine and are examples of such theories. They are rational ways of understanding and coping with nature.

In interpreting, reinscribing, and subverting modernist conceptions of science, nature, and rationality, Li not only rationalizes the conceptual basis of traditional Chinese medicine, but also transfigures science by placing traditional Chinese medicine firmly *within* the scope of scientific knowledge and practice. Not proto-science. Not pseudo-science. Not Chinese science. Just science.

Many students find themselves captivated by Li's distinctive lecture style. During lectures, Li routinely uses his own clinical cases—or rather, "clinical miracles"—to illustrate medical concepts and methods. Students are quick to tell me that they are willing to hear Li's views on science and medicine because these come from a man with extraordinary clinical success. Some even seek out Li after class to discuss the question of science and the future of Chinese medicine. Li's ability to perform "clinical miracles" and to make them travel from clinic to classroom then, has contributed to his authority to speak, creatively, of and for science.

Conclusion

Evans-Pritchard reported that he had to let himself be guided by the Zande interest in "witchcraft" when he was in Zandeland, and when in Nuerland, be temporarily "cattle-minded," just as the Nuer themselves were (1976:242). For him, being "cattle-minded" meant stepping outside of what he considered to be the realm of science and Us. The anthropologist's ability to be "cattle-minded," then, is grounded in the construction of the Great Divide—between science and nonscience, knowledge and belief, rational and irrational, universal and local, nature and culture, and Us and Them.

I here propose a little "miracle"-mindedness in our understandings and analyses of science. The multiple, creative, and sometimes contradictory ways in which differently situated people produce, invoke, and interpret the "clinical miracles" of traditional Chinese medicine remind us that the Great Divide is constructed through uneven, interactive sociohistorical processes, and is open to interested negotiations and transfigurations. Moreover, if "miracle" makers such as Li Fengyi can contest and transform these divides in everyday practice and discourse, so can we in our analyses of knowledge production.

I further suggest that, in order to critically examine and move beyond the Great Divide, we need to explore more fluid and participatory ways of envisioning, producing, and analyzing science, and we could begin by considering science as translocal, open-ended processes and networks for knowledge, identity, and community formation. As I have described, in the everyday discourse and practice of traditional Chinese medicine, and, in particular, through the production of "clinical miracles," the recurring question of what counts as science proves inextricable from the question of who is authorized to define and craft science and rationality. The elusive answers to these questions are shaped by larger, transformative sociohistorical processes. At the same time, they also depend on the extent to which practitioners are able to successfully negotiate individual and collective knowledges and identities, as well as their abilities to forge and mobilize inclusive, translocal communities that extend beyond the immediate circle of local practitioners. The knowledges, identities, and communities of traditional Chinese medicine then, are constituted through shifting, overlapping processes and networks that render the boundaries between traditional Chinese medicine, science, and biomedicine anything but fixed or selfevident.

Finally, in considering science as processes and networks with multiple, uneven points of entry and departure, trajectories, and intersections, I explore analytical alternatives to essentializing or privileging the "West" as the normative referent for social analyses of science. At the same time, by foregrounding the connection and movement of knowledges, people, and communities, I trace the trajectories of translocal science rather than searching for pure alternatives to "Western science." In dismantling the Great Divide, we can hope to broaden further the scope and means of anthropological inquiries into science by engaging, rather than containing, the complex ways of making knowledges and meanings.

Notes

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1. Most people in Shanghai and San Francisco, including practitioners of traditional Chinese medicine, biomedical professionals and the general public, use the term *Western medicine* as the more popular vernacular for "biomedicine." This slippage itself is indicative of the conflation between the "Western" and the bioscientific.

2. Cao does not have a Medical Doctor degree in the United States. In China, however, there is no legal distinction between a biomedical and a traditional Chinese medical "doctor" (*yisheng*). In the United States, patients refer to practitioners of traditional Chinese medicine as "doctors" in everyday discourse to show their high esteem for the practitioner and the profession.

3. According to Liu 1995, *wenhua*, the Chinese term for *culture*, was itself a "return graphic loan." A "return graphic loan" is an example of "classical Chinese character compounds that were used by the Japanese to translate modern European words and were reintroduced into modern Chinese" (Liu 1995:302).

4. Although the opponents of traditional Chinese medicine favored the term *jiuyi*, the proponents purposefully used *guoyi* to connote a sense of national essence and pride, even as the New Culturalists questioned the virtue of this "essence."

5. In February, 1929, the Kuomintang government passed a bill to eliminate jiuyi. In protest, on March 17, representatives from traditional medical communities from various provinces convened in Shanghai. Emerging out of this convention was the first national organization of traditional Chinese medicine, which coordinated efforts to promote guoyi and negotiate with the government. March 17 became "Chinese Medicine Day," which is still celebrated by communities of traditional Chinese medicine in Shanghai and San Francisco today (see Qiu 1998).

6. In 1946, the Ministry of Education ordered the Shanghai Professional School of Traditional Chinese Medicine, along with two other similar academies, to close down. The reason for the shutdown was that the school had "inadequate equipment and inappropriate management" (Qiu 1998). Students and faculty protested and continued to hold classes until 1948.

7. At the time of its legalization in California, acupuncture still could not be performed without prior diagnosis or referral by a "physician" (California State Senate Bill 86). It was not until 1997 that Senate Bill 212 finally included "acupuncturist" within the definition of "physician" and placed acupuncture within the coverage of Worker's Compensation.

8. Major insurance companies and HMOs that cover acupuncture include Blue Shield, Kaiser Permanente, Lifeguard, among others. Stanford University and the University of California at San Francisco Medical Schools both offer courses on acupuncture and other alternative therapies. Bay Area Hospitals that have acupuncture clinics or services include California Pacific Health Center, Chinese Hospital, and St. Luke's Hospital. At the same time, practitioners of traditional Chinese medicine, patient groups, biomedical professionals, and politicians are working together to include acupuncture as a regular service at the San Francisco General Hospital. 9. Surgeons and acupuncturists argue that acupuncture only produces partial anesthesia, a state in which muscles are not fully relaxed and therefore not ideal for surgical operation. Although they concede that further experimentation may yield more effective ways of performing acupuncture anesthesia, they point out that new, steadily improving biomedical anesthesia drugs and procedures are readily available. Most of these drugs and procedures come from the United States.

10. According to historians of traditional Chinese medicine, the first of these yi'an appeared in the Han Dynasty historian Sima Qian's seminal work *Shiji* ("Historical Records," ca. 90 B.C.), where he recounted 25 clinical cases by a single healer (Fu et al. 1982).

11. For example, the curriculum at the Shanghai Professional School of Chinese Medicine (1916–48) included yi'an as a standard component (Qiu 1998).

12. In 1960, the No. 11 Hospital of Shanghai was restructured and renamed the Shuguang Hospital of the Shanghai University of Traditional Chinese Medicine (Shi 1997).

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