

Article

Shi (勢), STS, and Theory: Or What Can We Learn from Chinese Medicine?

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Wen-Yuan Lin¹

Abstract

How might science and technology studies and science, technology and society studies (STS) learn from its studies of other knowledge traditions? This article explores this question by looking at Chinese medicine (CM). The latter has been under pressure from modernization and "scientization" for a century, and the dynamics of these pressures have been explored "symmetrically" within STS and related disciplines. But in this work, CM has been the "the case" and STS theory has held stable. This article uses a CM term, reasoning-as-propensity (shi, 勢), to look at contemporary practices of cancer care in a hospital in Taiwan. It describes how shi (勢) informed the design of a new decoction, Kuan Sin Yin, while also relating to the production of scientific knowledge, biomedical interventions, Buddhist practices, and the patients living with cancer themselves. Does CM's use of shi (勢) simply confirm the essential and incompatible otherness of CM? Looked at from outside the answer seems to be yes. However, this article explores how STS might change itself—and the theory—practice division in STS—by thinking

Corresponding Author:

Wen-Yuan Lin, National Tsing Hua University, No. 101, Section 2, Kuang-Fu Road, Hsinchu 300, Taiwan, Republic of China.

Email: wylin I @mx.nthu.edu.tw

¹National Tsing Hua University, Hsinchu, Taiwan, Republic of China

through shi (勢) in dialogue with its othered object. This opens the possibility of an STS for CM.

Keywords

propensity (shi, 勢), Chinese medicine, equivocation, postcolonialism, translation

Introduction

Symmetry is central to STS. Truth and falsity are treated in the same terms. So too are science and nonscientific—including indigenous—knowledges. Chinese medicine (hereafter CM), its intersections with biomedicine, and pressures on CM to "scientize" have all been symmetrically explored. A range of fine studies have shown how CM is mangled with biomedicine (Hsu 1999; Scheid 2002), integrates scientific connections (Farquhar 2012; Hsu 2011; Kim 2006; Lei 1999), negotiates novel boundaries (Ma and Lynch 2014), reinvents diagnostic traditions and epistemological modalities (Karchmer 2010; Scheid 2002), translates and redefines its expertise and terminology (Farquhar 2014; Pritzker 2014), and hybridizes its different traditions (Ward 2012; Zhan 2009). Said by Lei (2014) to be "neither donkey nor horse," it is clear that CM endlessly reinvents itself in response to transformations and changes.

This impressive body of work has taught us much about CM, its flexible ability to interact with biomedicine, its mutability, and its heterogeneity. But the terms of intellectual trade have been one-sided. Just as biomedicine has displaced CM, so STS theory has displaced CM terms of art. Like modernday immutable mobiles (Latour 1988), both have moved from locations in Europe and North America to places in the Chinese world. CM has been domesticated (Lin and Law 2014)¹ and STS concepts have been applied ready-made to CM. But this is a displacement that throws up difficulties. Applying concepts from far-removed normative, epistemological, or ontological contexts may lead to ethical and political disconcertment or theoretical eclecticism (Law and Lin 2010; Verran 2002; Wyatt and Balmer 2007). It also tends to assimilate the other by homogenizing its otherness and reproducing asymmetry (Haraway 1992; Lee and Brown 1994). As others have noted, if the empirical is subaltern while the conceptual remains Western, then the overall effect is scarcely symmetrical. So, for instance, Chakrabarty (2000), troubled by the one-way understanding of

European-trained historians that renders the Indian past invisible, argues for the need to provincialize European historiography. Verran (2001) suggests that numbering is not abstract or general but relational and practical, and circumvents debate about universalism and relativism by examining how Yoruba and Western mathematical practices intertwine in Nigerian classrooms. Strathern (1980, 1991) tinkers with English and Hagen ways of knowing nature and culture and walks away from universal theoretical tools for comparing others' ways of knowing. Refusing to contrast singular grids of knowing, she proposes merographic descriptions, making partial analogies between things, for tracing the trails of conceptual practices where partial connections go with gaps without neatly fitting into a large whole. Following Strathern, Mol (2014) moves between sites to compare how lekker (a Dutch expression of pleasant sensual, or more precisely bodily in Mol's term, appreciation) interferes with English representations of nature-culture divides and whole-part understanding in situated trails of practices. Moreover, Anderson (2008, 2) gives a symmetrical account of encounters between the Fore in New Guinea with Carleton Gajdusek, a white researcher from the United States. Between the contrasting accounts of scientific adventures, commodity economy, and ethical accusations, Anderson draws insights from gift exchange, an anthropological legacy developed from studies of hau (a Maori expression connoting the spirit of the gift) and links the reciprocity between the kuru scientist and the Melanesians, through which white men collected Fore blood and brains while in return the Fore collected the white men into their inalienable webs of sociality.²

This article attempts a similar move. It follows specific CM practices and uses these to rework STS theory and problematize the postcolonial divide between Western theory and the empirical subaltern (Jensen 2014). It does this by following the actors, exploring what happens if we track their logic, and then allowing that logic to shift STS theory. In particular, it works with the CM notions of *propensity* (shi, shì, 勢) and its application in the CM formulary with the use of terms of art such as of sovereign (jūn, 君), minister (chén, 臣), assistant (zuŏ, 佐), and courier (shǐ, 使). Examining the development of a new decoction, Kuan Sin Yin (kuān xīn yǐn, 寬 心飲, hereafter KSY) and related practices for the treatment of cancer in Taiwan, this article describes how one practitioner has adapted CM to the universalism claimed by biomedicine by moving freely between the two. This article makes no new substantive claims about CM, its practitioners, or its knowledge. Rather, it seeks to multiply and enrich STS repertoires by making use of concepts from CM and starting to create an STS from and perhaps for—CM.

Using Science

Dr. Hsu comes from a family with a CM background, but his first degree was environmental science and he had a successful career in government and the private sector for many years. He subsequently returned to the China Medical College (中國醫藥大學), the first modern CM university established in Taiwan in 1958, and enrolled in a biomedical and CM degree program. Doubly licensed, he practiced biomedicine for years before establishing a CM department in a hospital. Then he went back to the university again, obtained a PhD in public health, and started an academic university career while simultaneously practicing CM in a major CM hospital. He is now both a highly popular CM doctor and one of the most productive researchers in Taiwan; he sees hundreds of patients a day, is an editor of many CM journals, and a consultant to the academic committee of the national CM doctors' association.

Integrating his training in epidemiology and CM, Dr. Hsu's laboratory has developed questionnaires for differentiating traditional CM patterning (biàn zhèng, 辯證) among patients suffering from various diseases and has published widely. But despite his many successes, he is not satisfied:

I am interviewing Dr. Hsu in his cozy office. He is the vice superintendent of the hospital but his office is somewhat crowded; his interns, a research assistant and some students from his university laboratory also share his room. Dr. Hsu explains: "In addition to seeing patients, I have to juggle the business of leading students to research, doing administration, and teaching interns."

He is doing quite well. Whilst talking about his research, Dr. Hsu asks his assistant to show me ever more papers and files; most are in English-language science citation index (SCI)-ranked journals. At the end of the interview these documents are piled up on the small table between us. Then he says: "Those are for research, you know! They're not really useful." By this he means that laboratory work and journal publications are ways of verifying CM's scientific standing and pursuing a university academic career in which CM researchers are assessed in terms of SCI publications, but such experiments are not useful in clinical practice. "That's the reality," he concludes.

Near the end of interview, he talks about his "hobby." For the last few years he has been giving private lectures to his interns. He goes to a bookshelf and takes down a few volumes of notebooks that they have transcribed. He pushes the academic papers to the left, making room for the notebooks on the right, and opens one of the latter. It is on pulsation. Then he says: "It is very difficult to examine this using laboratory science.... But it is like teaching disciples in the

old days. Leading my interns into the world of traditional medicine and passing down my accumulated experience on clinical cases, this is what I think CM is really about."

Scientific publications on the left and tutorial teachings on the right, this scenario summarizes the tension between the two traditions. On the one hand, we have the contemporary international mechanisms of knowledge production: laboratory research, supervision, peer-reviewed publications, the SCI, and university research tenure tracks. On the other hand, we have the old but endangered mechanisms of CM: the accumulation of personal experience, master-disciple apprenticeships, clinical practice, and the transcription of cases. It is commonly observed that the system of CM knowledge is transforming and compromising itself. Institutionally, knowledge production and transmission are moving away from clinical practice, while the study of classics is giving way to newly introduced university curricula and laboratory research. Meridians (jīng luò, 經絡) and acupuncture points have been reinterpreted in terms of biomechanical anatomy. And qi (qì, 氣) circulating in the changing dynamics of yin-yang (yīn yáng, 陰陽) and the five phases (wǔ xíng, 五行)³ has been replaced with a scientific ontology of discrete and separate entities (Kim 2006, 2007; Lei 1999, 2014; Scheid 2002; Zhan 2009).

These tensions are at work on Dr. Hsu. He does laboratory research on CM and uses epidemiological tools to develop questionnaires for turning patterns, such as "qi deficiency" (qì xū, 氣虛), into verifiable scientific objects. At the same time, he also gives tutorials. Understood substantively, this kind of observation is scarcely novel. Authors such as Zhan (2009) have argued that CM works by hybridizing rather than purifying, and Scheid (2008) has contrasted CM with the mangle of science, suggesting that antagonistic distinctions between human and nonhuman, nature and culture, and ontology and understanding found in science do not hold in CM. Again, Lin and Law (2014) have suggested the contemporary hybridization of CM with biomedicine in Taiwan is not simply a sign of the subordination of CM but also an expression of CM's correlativity. But what should we make of this difference and what does it suggest about the relation between STS theory and its CM cases?

Knowing Propensity

Dr. Hsu's discontent and his practice offer a useful way of thinking about these questions, for he does not separate research from CM practice. Thus,

he uses scientific research to expand clinical practice and shows that most cancer patients being treated biomedically suffer from qi deficiency.

I apply the core diagnostic principles [of CM] to design questionnaires for differentiating patients into groups and establishing the clinical and statistical foundations for further study...my aim is to confirm the syndrome patterns (zhèng xíng, 證型) quickly on large scale.... This is a way of validating my clinical intuitions [and therefore convincing others].

This has allowed him to develop KSY for clinical treatment and use scientific research to back up his clinical interventions. KSY is an herbal complex formula (fù fāng, 複方). It has been clinically proven in randomized controlled studies to improve the quality of life for cancer patients, and the findings have been published in SCI journals. A DNA analysis of KSY's component herbs is also being undertaken to ensure their authenticity and consistency. But Dr. Hsu also prioritizes KSY's traditions:

The design of the KSY formula is based on the famous Four Gentlemen Decoction (sì jūn zǐ tang, 四君子湯, hereafter FGD), and its derivative, the Six Gentlemen Decoction (liù jūn zǐ tang, 六君子湯, hereafter SGD). FGD is one of the most important "supporting right [qi]" (fǔ zhèng [qì], 扶正[氣]) decoctions for treating qi.

FGD..."supports right" by supplementing qi and fortifying earth.... Because spleen and stomach, [which are] the earth of the five phases, are the major generators of qi in the body after birth (pí wèi shǔ tǔ, zhǔ hòu tiān zhī qì, 脾胃屬土,主後天之氣).... FGD is composed of four herbs: ginseng (rén shēn, 人參), bai zhu (bái zhú, 白朮), fu ling (fú líng, 茯苓) and gan cao (gān cǎo, 甘草).

FGD and SGD come from the ancient Formularies of the Bureau of People's Welfare Pharmacies (太平惠民和濟局方) and are used to treat depletion and stagnation of the spleen and stomach (宋·太平惠民和劑局 1983). They help improve qi deficiency. Dr. Hsu has modified their composition and portions and has developed two versions of KSY for cancer patients. The first is based on SGD and has ten herbs: ginseng is replaced by dang shen (dǎng sān, 黨參), while huan qi (huáng qí, 黃耆), huo xiang (huò xiāng, 霍香), mai men dong (mài mén dōng, 麥門冬), and nu zhen zi (nǚ zhēn zǐ, 女真子) are added. After studying the clinical results, he designed the second version of KSY by removing chen pi, ban xia, and

mai men dong. This second version has become an FGD-based derivative with seven herbs. It is the compositions of the herbs rather than each individual ingredient that is important. Drawing on principles from formulary classics, Dr. Hsu explains:

Generally speaking, in FGD *ginseng* is for supplementing qi and *bai zhu*, *fu ling* are for fortifying spleen.... But it is not like biomedical drug where ingredient A is for problem A.... By "traditional" we do not simply mean that it is an herbal decoction, but also that it uses the [interactions between] sovereign, minister, assistant and courier in composing a prescription for correcting the biased inclination of the disease propensity (bing shì piān xìng, 病勢偏性)[of the body].

What is *disease propensity* (病勢)? What do the herbs do in matching a decoction for correcting the propensity? How does the reasoning of sovereign, minister, assistant, and courier intervene in this? And how does KSY work on cancer patients' disease propensity?

To answer these questions, we have to step outside modern science, immerse ourselves in the world of CM, and understand its cosmology. In these, the world is made of the "ten thousand things" (wàn wù, 萬物) and the qi of yin-yang circulates through the ten thousand things in the dynamics of five phases. The human body is part—but only a part—of this process. Propensity, shi (勢), is a style of reasoning for conceptualizing the immanent movement and circulation of qi. Here we need a health warning. To talk of "reasoning" is potentially misleading. The concept shi (勢) fits the English language poorly because it "inserts itself into the distinction between what Westerners call 'practice' and 'theory'…thus collapsing the distinction" (Jullien 1995, 38).

One consequence of this is that how *shi* (勢) is translated into English depends on context (Sun Tzu 1993, 73).⁵ This is partly because, as Jullien (1995) puts it in his extensive examination of Chinese classic thought, *shi* "seems torn between points of view that are apparently too divergent, *is* nevertheless a *possible* word with a discoverable coherence...with an illuminating logic" (1995, 12-13). Thus, he mobilizes terms like "deployment," "setup," "propensity," and "tendency" and their interactions to establish a framework that convey themes that include:

An inherent potentiality at work in configuration (whether in the deployment of armies on the battlefield, the configuration of an ideogram set down in calligraphy and a painted landscape, or established by literary signs); a functional

bipolarity (whether between a sovereign and his subjects in a political situation, between high and low in aesthetic representations, or between the cosmic principles "Heaven" and "earth"); and a tendency generated sponte sua simply interaction, which proceeds to develop through alternation (whether, again, it involves the course of a war or the unfolding of a work, a historical situation or the process of reality as a whole). (1995, 14-15; italics in original)

Here we focus on how it works in practice—and more generally how CM understands its practices. So how does the concept of propensity, *shi* (勢), work? The answer is that it offers a particular way of understanding the relations between "theory" and "practice," knowledge and the world, situation and movement, and practitioner and practice. Consider the yin-yang figure in tai chi (tài jí tú, 太極圖):



In Chinese classical thought, dispositions are fluid and are expressed in relational configurations. Yin and yang are not a dualism but *correlative opposites in a state of constantly changing movement*. When they are in balance, each is implied, rooted, and contained in the other. Each has the propensity to contrast with, balance, control, and convert itself into the other (Wiseman and Ellis 1995). This correlative dynamic⁶ runs through the ten thousand things: celestial bodies, seasons, directions, locations, food, social relations, gender, personalities, painting, calligraphy, the martial arts, military action, power, and medicine (徐復觀 1999).

Propensity, shi (勢), is thus about movement and disposition toward movement. Unsurprisingly, "reasoning as propensity" weaves its way through Chinese traditional knowing practices. For example, in the Dao de Jing (道德經), the ten thousand things are formed in a process: "Tao gives them life. Virtue nurses them. Matter shapes them. Propensity perfects them" (Lao Tzu 1989, chap. 51, p. 105)

Propensity and Intervention

CM follows this pattern. One of the earliest collections of CM classics, *The Yellow Emperor's Inner Canon* (黃帝內經, hereafter *Inner Canon*), notes that:

When a physician of high level diagnoses and palpates, he always notices the order of priority of yin and yang, infers the *Sixty Propensities of Ordinary and Extraordinary*, synthesizes the small and fragmentary cases obtained from diagnosis, and weights the changes in yin and yang to know clearly the location of the disease in the five viscera, and then infers the medical principle and the outline of depletion and repletion to judge according to the five standards. (Wang 1997, p. 483; slightly adapted and *shi* is translated as "propensity" rather than "condition")

In this way of thinking, a diseased body is one that deviates from its ordinary and balanced course, and medical intervention is a matter of understanding the propensity, *shi* (勢), in question and manipulating the configuration in order to rebalance it. This is further illustrated in the pioneer CM clinical classic, *Treatise on Cold Damage Diseases* (傷寒論; 東漢·張機 1978), which differentiates disease propensity and formula of decoctions (tāng zhèng, 湯證) in terms of the six warps.

This means that CM does not prioritize pathogens in tackling disease condition. Rather, it is a context-specific embodiment between the person, her emotions, and the environment. It follows that diagnosis varies. Doctors from different schools (liú pài, 流派) might not agree on the cause of disease in a person and might devise different analyses⁸ to differentiate between patterns⁹ and devise a strategy (lùn zhì, 論治) to rebalance the imbalanced propensity (Farquhar 1994, 61-146; Scheid 2007).

CM medications are also used for their specific propensities. Lao Tzu said that propensity perfects things. An herb, an animal, a mineral, even parts of people (such as hair), everything inhabits a specific formation of qi from the heaven and earth. Starting with 365 items in Shennong's Compendium of Materia Medica (神農本草經) and expanded into 1,892 entries in the famous Systematic Material Medica (本草綱目), everything is classified in terms of its property and taste (xìng wèi, 性味) and correlated with its entry to specific meridians (guī jīng, 歸經) in the latter text (Unschuld 1986). Everything develops its own particular inclination (piān xìng, 偏性) and goes through a specific trajectory of transformation while being made into medication (Nappi 2009). But, most important of all, the herbs work collaboratively to form the propensity of a decoction:

The main medical herb for treating the disease is the sovereign, the assistant medicine for helping the sovereign medicine is the minister, and the medicine for supporting the minister medicine is the courier. (Wang 1997, Su Wen, chap. 74, p. 461, my adaption)

In understanding this, Sun Tzu's (sūn zǐ, 孫子) description of military propensity is helpful:

It is the nature of logs and boulders that on the flat ground, they are stationary, but on steep ground, they roll.... Thus, that the propensity of the expert commander in exploiting his men in battle can be likened to rolling round boulders down a steep ravine thousands of feet high says something about his propensity. (Sun Tzu 1993, 120-21; slightly adapted and *shi* is translated as "propensity" rather than "strategic advantage")

Indeed, it is said that "prescribing a formula is like deploying an army" and the thirteen chapters of Sun Tzu exhaust the strategies of treatment (清·徐 大椿 1978). So, according to Collection of Prescriptions with Notes (醫方集解), a famous annotated collection of important prescriptions, FGD is a "prescription for supplement and nourishment" (bǔ yǎng zhī jì, 補養之劑). Ginseng is the sovereign that supplements qi. Bai zhu is the minister. It helps the sovereign to supplement qi, and it also dries dampness, and fortifies the spleen. Fu ling also assists in fortifying the spleen and percolating dampness and makes ginseng and bai zhu supplement qi without stagnating. This makes it the assistant. And finally, gan cao is the courier. It also supplements the qi of spleen and, most important of all, harmonizes the whole composition (清·汪昂 1999).

Thus, CM is all about propensities in specific situations. While "being balanced" does not assume a stable or default healthy state, being diseased is the embodied manifestation of imbalance between the person, her emotions, and the environment. A CM doctor differentiates between possible patterns, diagnoses the situated disease propensity, and composes a decoction by modifying the existing formula into a specific combination case by case and patient by patient (suí zhèng jiā jiǎn, 隨證加減). Instead of pursuing the assumed abstractions of universal law to discover mechanisms that explain concrete facts, knowledge about such propensities in correlative practices is elusive and situation-specific. Abstract generalizations cannot catch the specificities, so knowledge is transmitted in the form of records of clinical cases that follow situated propensity.

This applies just as much to understanding CM's interventions in relation to the propensities of disease as it does to clinical situations. In Dr. Hsu's extension and application, KSY aims at those undergoing biomedical treatment and suffering from that treatment. Thus, it is important to note that KSY is not only a matter of tackling disease propensity; it is also established from and works with rather than against the situated

propensities in the interactions of CM and biomedicine. In Taiwan, most patients go to biomedicine first and most biomedical doctors disapprove of CM. Despite the increasing rate of recovery, Dr. Hsu learns from his clinical experiences and research that many cancer patients are not killed by their cancer but are rather scared (as they worry about incurable disease and pain of biomedical therapies), starved (as biomedical therapies damage their appetite and digestion), and poisoned (as most biomedicines are poisonous) to death. In this context, as he tackles disease propensity, Dr. Hsu take this "biomedicine first" situation seriously. This is because, he says:

In CM, cancer is more a problem of heat toxin (rè dú, 熱毒) or stasis (yū, 瘀) and our prescription.... should use clearing heat- or stasis-transforming strategies to attack evil as well as nourishing strategies.... [However] nowadays biomedicine is much better at attacking evil than CM and most patients go to biomedicine first.... Why not use biomedicine? It does not make sense.

Then he highlights what KSY do:

Cancer patients undergoing chemo or radiation therapy are suffering from deficiency in both qi and yin (yīn xū, 陰虚),...the therapies end up killing patients before eliminating the cancer....[while modified SGD], ginseng was far too strong for cancer patients and usually caused dryness-heat (zào rè, 燥熱)...it is replaced with dang shen at a lower dose, and I added huan qi as the sovereign herb for enhancing qi..., added mai men dong and nu zhen zi to nourish yin (zī yīn, 滋陰) in the first version. But...radiation therapy damaged yin more severely and caused more heat symptoms than chemotherapy. Gradually I observed that nourishing yin too fast might retain the evils (liú xié, 留邪). And I also observed that huo xiang was good enough for waking up the spleen and stomach. So I designed the second version for patients undergoing chemotherapy.

There are endless details, but this is enough for now. Comparing to the classic FGD or SGD, KSY has an importantly different propensity for those specific patients. It works by "supporting the patients' right [qi]" through initiating the propensity of enhancing qi and nourishing their yin without supplementing yang directly with *ginseng* that might dry out yin. *Huan qi* is now the sovereign herb for enhancing qi. *Bai zhu*, *fu ling*, and *dang shen* were the ministers to support *huan qi*, while *chen pi* and *ban xia* supported the spleen and stomach as assistants. Finally, *huo xiang* played the role of

reversing courier (făn shǐ, 反使) to keep the evils away from the spleen and stomach in order to preserve the patients' digestion.

Overall, Dr. Hsu makes progress by following the "biomedicine first" propensity while manipulating it by reformulating KSY's intervention, and he thus improves the situation and patients' health. In a sense, this shows that CM joins the propensity. Biomedicine and CM are not distinguished from each other in practice, and Dr. Hsu's strategies of using science and his open-minded attitude and exploration help promote CM's scientific standing. Applying the formulary terms of art, we can say that biomedicine plays the role of sovereign, CM minister. Dr. Hsu's strategies of using science assistant and his open-minded attitude and exploration courier are revealed when we put killing cancer first. Or in an alternative reading, perhaps CM should be the sovereign and biomedicine the minister, as it is CM that makes good use of biomedicine, and not the other way round. They are assisted with the patient-specific CM prescription that harmonizes all and it is Dr. Hsu and patients' open-minded attitude being the courier that leads their way to both medicines.

However we think about this, it illustrates how understandings of disease and medicine, understanding the situation of practices, and medical interventions are all correlated. To play with Chinese language, the pronunciation of "knowledge" (zhī shì, 知識) is exactly like both that of "知勢" (which literarily means "know the propensity") and "之勢" (which literarily means the "propensity of" something). Thus, knowledge of something could be equivalent to knowing the propensity or, more exactly, the propensity of something. This is a world in which disease, people, decoction, and the ten thousand things express themselves in the form of specific, local metamorphoses (Nappi 2009). Unsurprisingly, it is also a world in which an herb may work differently in different combinations, the same disease may be treated with different prescriptions, and different diseases may be treated with the same prescription.

Multiplying Worlds

This tells us that CM practices are not simply about bodies. As I have suggested above, what Western ways of thinking would call "contexts" are also included. In Dr. Hsu's lectures for patients, he talks a great deal about the importance of social relationships.

Cancer cells are mutated normal cells..., our body can heal and purify bad cells under normal conditions, but when we are constantly under pressure

in a way that damages our heart and spirit, the body can't work well. Then it turns itself into an environment where, unlike bad cells, good cells can't survive.... So cancer is like a bad kid in the family. You don't fight, blame or even "kill" the kid, right? What you need to do is to think hard about how and why the family makes the kid behave this way. How to care for and forgive the kid in order to find the way of living together?

Thus, cancer is one of the ten thousand things that emerge from situated propensities, so the problem is not the disease itself but the disease propensity. We cannot fight it but rather have to live with it by working on propensities. This has several implications.

First, it is important to lead patients from the stressful circumstances that formed the disease propensity and the imbalance so damaging to heart and spirit. This means that for Dr. Hsu, treatment is not just about the clinic. He says that "undergoing cancer treatment is like climbing a mountain. One needs a good guide (e.g., medical staff) and good company where people help one another."

To "treat the heart," a push in a new direction is needed. So he and his colleagues organized a self-help group for patients, Kuan Sin Camp, where patients share their experiences and follow health education courses on medical and nutritional issues. Crucially, the support of patients and volunteers also helps patients to generate right qi by expelling the evil qi trapping their spirits and bodies.

Second, Dr. Hsu has organized active patients into an advanced group, the Kuan Sin lecture, which studies Buddhism and related practices for cancer treatment, and a formal organization, the Kuan Sin association (hereafter KS association). These activities are also designed to rebalance patients' disease propensities. As CM decoctions are sometimes named in terms of their purpose, these KS organizations and activities follow the basic idea of "Kuan" and "Sin," which literally mean "broaden" and "open out" in this context (kuan, 寬) and "heart" (sin, 心), and together they mean "open out the heart" or "don't worry."

Third, as implied above, rebalancing propensity takes in the supernatural. The KS association is also devoted to Buddhism. It organizes trips to temples, studies of Buddhism, and courses on transcendental meditation. Dr. Hsu started learning about Buddhism ten years ago from his PhD supervisor. He has a portrait of the Bodhisattva in his clinic, uses the Lotus Sutra lectures to guide patients, and encourages patients to learn to transcend the cancer that has chained their bodies and their

hearts. He frequently cites chapter 25 of *The Universal Gateway of the Bodhisattva*:

Suppose there is a person who, whether guilty or not guilty, has had his body imprisoned in fetters and chains, cangue and lock. If he calls the name of Bodhisattva Perceiver of the World's Sounds, then all his bonds will be severed and broken and at once he will gain deliverance. (Burton Watson [Trans.] 2002, 120)

Dr. Hsu also teaches patients that living with cancer is a karmic reward because the struggle with the disease helps one to awaken oneself and others in the way taught by the Buddha. And following the way of Buddha or any other righteous religion is a good way of supporting right. Patients say that doing so improves their state of health. At the same time, knowing that this might seem superstitious, Dr. Hsu designed a study of the effect of Buddhist meditation and chanting on *qi* deficiency in cancer patients. The findings were positive and were published in an SCI English-language journal—another aspect of the strategy of using scientific publications discussed earlier.

Dr. Hsu moves freely between bodily corporeality, medical materiality, human sociality, and religious spirituality. The mix of supernatural, scientific, and CM-relevant traditions runs all the way through. Indeed, any distinction between these makes little sense. All are forms of diseased embodiment and rebalancing propensities and intervention extends through all these. Here is Dr. Hsu writing on Facebook:

The core concept for prescribing CM formula is the logic of sovereign, minister, assistant and courier. Based on it, prescriptions and decoctions are composed.... Perhaps we can see this logic from a macro perspective.... [T]he logic will be more flexible, more creative and include more elements.... For example, in the principle of cancer treatment, supporting right is the sovereign, expelling evil is the minister, comforting spirit is the assistant, and broadening the heart is the courier.

Working in this way is difficult, but Dr. Hsu does not think that he works hard:

I just follow the nature of things (shùn qí zì rán, 順其自然).... When the predestined relationships come together (yīn yuán jù zú, 因緣俱足) things just happen. My CM career, PhD work, Buddhism, the KSY, group, lectures

and the association are all the same. Everything including the patients leads me forward.

To follow the nature of things is to follow their propensities (shùn shì ér wéi, 順勢而為; Lao Tzu 1989, chap. 57-63). Needham wrote of Chinese thought that:

Conceptions are not subsumed under one another but placed side by side in a pattern, and things influence one another not by acts of mechanical causation [so] things behave in particular ways not necessarily because of prior actions or impulsions of other things, but because their position in the ever-moving cyclical universe was such that they were endowed with intrinsic nature which made that behavior inevitable for them. (Needham 2005, 280-81)

There are ten thousand things with which to correlate, and there is so much to be known and done. To make things right, you do not force or push them. The best strategy is "doing not doing" (wú wéi, 無為). It is to allow the efficacy of propensities to come about naturally. This will leave nothing undone (Jullien 2004, 84-103).

Overall, then, practice is not accidental, antagonistic, or calculative. Instead, it follows the inclination of things and their movement as they group together; formulating decoctions, guiding patients, following Buddha, writing scientific papers, passing down CM, and collaborating with biomedicine, all are the same. They unfold along with Dr Hsu's intellectual, clinical, personal, and spiritual trajectory.

Following Shi

So what have we learned?

One answer is that it is indeed possible to follow the actors, and so to use the tool kit of STS to describe and make sympathetic sense of CM practices. The method of symmetry makes it possible to know the other. This is a triumph, but it works by distinguishing between theory (from STS) and the case (from CM). Subsumed to an STS redescription, Dr. Hsu's practice becomes another STS case study. It has been removed from Taiwan, translated into English, and shifted from a therapeutic to an academic world. This translation is possible because there are indeed similarities between the two contexts. Thus, material semiotic STS makes a number of assumptions somewhat like those of Dr. Hsu and his patients. *Relationality, heterogeneity, process*, and *situatedness* index those similarities (Law 2004), and it is

these, together with the commitment to symmetry and the willingness to follow the actors, that make it possible to describe the practices of CM in the very different world of STS. But what of STS theory? Has this been changed in this encounter? The answer is: not thus far. STS theory offers a repertoire for redescribing Dr. Hsu's work, but this does not shift the theory itself. The asymmetrical postcolonial divide mentioned in the Introduction section is being reproduced. If modern scientific medicine destroyed part of CM's reality (Sivin 1987, 198), then this STS redescription is similarly displacing CM's logic. So how might this be changed? Is there any way in which the work of Dr. Hsu might be used to rethink STS and its material semiotics?

There are hints in the literatures. Zhan (2014) asks us to treat "experiential CM as conceptual" to generate an analytics in and of the specific, the contingent, and the experiential one that works by metaphors and analogies rather than deduction and induction (see also Farguhar 2014; Scheid 2014). Lin and Law (2014) have suggested the contemporary hybridization of CM with biomedicine in Taiwan is not simply a sign of the subordination of CM but also an expression of CM's correlativity—its capacity since its inception to connect elements in endless but situated webs of practice. Another way of thinking about this is to attend to hidden difference. Anthropologist Viveiros de Castro (2011, 2012) observes that if realities are different in different locations, then descriptions that bridge these realities by applying to both—words in common or homonyms—operate by concealing difference and betraying at least one of the realities they are describing. In a move he calls controlled equivocation, he suggests that anthropologists should understand that this is happening, look for homonyms, and decide which world or worlds they will betray. So what does this tell us about the STS terms of art mentioned above? Of relationality, heterogeneity, process, and situatedness? How do these work as equivocations?

Relationality conceals crucial differences between CM and STS and loses much that is important about CM relational patterns. This is because CM relations have to do with *propensities* or *shi* (勢). They aren't just "relations." They are expressions of (local) dispositions, directions of movement, tendencies, or inclinations. Dr. Hsu's interventions all depend on knowing the disposition of things, and more particularly appreciating how disposition has been unbalanced to generate a disease state, and therefore how counterbalancing *shi* (勢) might be used and shifted to rebalance. So "relationality," though indexing something important to CM as well as STS, also hides almost everything. The problem pops up with the other theory terms too. Think, for instance, of *process*. What this fails to hint at is

the *movement* implied by the *shi* (勢). The central point is that in CM *process implies not simply repetition but also movement and change.* The difference is crucial. As I showed above, dispositions are fluid and correlative opposites in a state of constantly changing displacement. This reveals the theoretical paradox of giving priority to position over passage such as in the case of Zeno's arrow. Process and movement are no longer a "problematic second" as it has been in "position first" Western theoretical preconceptions (Massumi 2002). Things are not immobilized first, then move and change in a process. Shi (勢) sensibility does not do that. And things are not in themselves but in the metamorphosis among the myriad things—that is, part of a set of *shi* (勢). Each moment of movement is different. And it is imbalances in these movements that form the focus of CM pattern differentiation and the basis of intervention. This might lead to an alternative path to follow the changes without moving through the conceptual gaps.

The STS term *heterogeneity* is similarly unsatisfactory. This is because the idea of difference in kind implied in the term is foreign to CM. So, for instance, Buddhism and KSY are not qualitatively different. They are not heterogeneities being brought together. The idea makes no sense in CM. But then again, neither are they homogeneous, for they may be—and often are—different. This sensibility is not entirely foreign to material semiotics. For instance, in Irreductions, Latour (1988, 162) writes "Nothing is, by itself, the same as or different from anything else." But this does not really catch what is most important in CM, which also has to do with specific forms of transformability. This is shi (勢) at work again. In CM, things are defined in their movement. So, for instance, disease, decoction, and other resources for treatment such as the KS association and Buddhism are all continually changing. "The same" herbs work in different ways in different complex formulae, and the same disease propensities are being transformed in the working of different prescriptions. This tells us that heterogeneity is also a profound mistranslation, another uncontrolled equivocation that conceals theoretically important difference.

And what of *situatedness*? The idea that knowing and practicing are irredeemably contextual is central to both CM and material semiotics. But again, the STS term, useful though it is, misses most of what is important to CM practice. As we have seen, Dr. Hsu works in specific situations on particular forms of balance and imbalance. So, for instance, *qi* is depleted in chemotherapy, but *ginseng*, which acts to rebalance its depletion, becomes too strong under such circumstances and so is replaced by *dang shen*. And, again as we have seen, the decoctions are created and modified situation by

situation and patient by patient. They are *variable*, and that variation again has to do with knowing the specificity of *shi* (勢), disposition, and of specific displacements. Such, indeed, is what a situation is: a set of *shi* (勢) of propensities. Once again, the STS term of art is a radical mistranslation that assimilates the other.

So shi (勢) is being lost in STS translation, while the asymmetry between Western theory and subaltern "case study" is being reproduced. But what would happen if shi (勢) were treated as a term of art in STS theory? A provisional answer is that STS might attend to balance and imbalance, to the normativities intrinsic to balances and imbalances, and intervene locally and tactically by following shi (勢) and doing not doing (wú wéi, 無為). This deserves further elaboration, and Dr. Hsu points to how this might be done. Doing not doing is not no action at all. It is the art of manipulating the situated shi (勢), with the normative inclination to follow the right way and right qi, which tend to keep things in balance. Suffering from cancer is in fact, for Dr. Hsu, doing too much. The body is under pressure and therefore cannot work properly. In order to counterbalance the cancer propensities, Dr. Hsu doesn't do much, he works on KSY by following, not fighting against, the clinical "biomedicine first" shi (勢). He helps patients, not by himself or simply by medication but also with Budhisattva and the patients themselves, to open up their hearts. This displaces, neither kills nor translates, cancer, with the patient moving away from the vicious circle of corporeal, material, social, and spiritual deterioration in which she or he has been trapped (Lin 2013). Following that lead, would STS begin to look different? (Mol 2014, 108). "Balance" and "imbalance" are scarcely topics central to present-day STS. Normativities are important but are not usually integral to empirical description. And the idea that we might do by doing not doing is also mostly absent in a discipline which attends to the explicit and seeks to make strong arguments. Perhaps, then, shi (勢) might intervene in an STS intellectual imbalance by manipulating an intellectual disease of postcolonial asymmetry. This is the idea that theory is separable from "case," and the (admittedly contested) assumption that theory is generally applicable and can travel anywhere (Law and Lin forthcoming).

Such is the work of this article. It tells a CM story in CM terms about the indivisibility of theory and practice. It follows the *shi* (勢) of things as they are revealed in the work of Dr. Hsu. But it is not just "about" Dr. Hsu, for it also attempts to manipulate the *shi* (勢) of STS in a particular context. To nudge it just a little, perhaps this article has not achieved *doing not doing*, but it tries to follow Sun Tzu's logic and avoid brute force. The hope is that

if *shi* (勢) became a term of art, then we might imagine STS studies as small and creative moves of theory/case for intervening in specific locations—and only in specific locations. They would not simply be "about theory," but neither would they simply be "cases." Instead, they would evade the *theory—practice division* to form a mosaic-like STS, in which knowing would draw from and form part of a concrete ancestry of modification. The implication for STS is startling. Its practitioners would attend to the lineage or lineages, learn by apprenticeship, and STS would take different forms in different locations.

A final question: how far might a shi (勢)-sensitive CM STS extend? Perhaps it would only be an STS for CM. But perhaps it would be useful in other places too. I do not propose it as a general solution. To do so would be to refuse one of its most important lessons: that knowing is about the shi (勢) of contextual movement. It would also be to forget that there are many Others, many forms of mistranslation, and many forms of postcoloniality. Who knows what an STS inflected by, say, lekker (Mol 2014) or shi (勢) might look like? But one thing is clear. The days of a single STS would have passed. The discipline would no longer rest upon a limited and presumptively transportable set of theoretical resources. It would no longer distinguish theories from cases. It would no longer find its centers in the metropolis and its peripheries in the Others. Instead, a postcolonial STS would be multiple. It would be formed of differently located and contexted, partially overlapping, and constantly moving lineages. It would have become an STS provincialized by Others.

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Notes

- The impressive scholarship has taught us how to interpret Chinese medicine's (CM) understanding of itself in terms of its own world and context (Farquhar 1994; Hsu 1999; Nappi 2009; Scheid 2007). It has also attended to its cultural, political, and social (Croizier 1968; Hsu 2011; Lei 2014; Scheid 2002; Sivin 1987; Taylor 2005) and theorized these again in Western social science and STS terms.
- How the attributions from Marcel Mauss to contemporary Melanesian anthropologists help connecting the native grid of knowing with the English is an important issue (Strathern 1990).
- 3. The nourish and control cycles between wood (mù, 木), fire (huŏ, 火), earth (tǔ, 土), metal (jīn, 金), and water (shuǐ, 水; Wiseman and Ellis 1995, 7-12).
- 4. For CM, the well-being of a human body depends on supporting the right qi and expelling evil qi, thus "supporting right (qi)" is the fundamental to the strategy of treatment that rests primarily upon the method of supplement (bǔ, 補; Wiseman and Ellis 1995, 251-52).
- 5. This processural and configurative concept is distinct from familiar English though and it is sometimes translated into "strategic power" (Sun Tzu 1994), "strategic advantage" (Sun Tzu 1993), "condition" (Wang 1997), "event" (Laozi, Ames, and Hall 2003), or "environment" (Lao Tzu 1989).
- See Needham (2005, 253-345), for an extensive discussion of correlative reasoning and its significance.
- 7. The six warps are six categories of pattern differentiation: mature yang (tài yang, 太陽), yang brightness (yáng míng, 陽明), immature yang (shào yang, 少陽), mature yin (tài yīn, 太陰), immature yin (shào yīn, 少陰), and attenuated yin (jué yīn, 厥陰).
- 8. Such as using the six warps (liù jīng, 六經), the visceral systems (zàng fũ, 臟腑), the eight rubrics (bā gāng, 八綱), or the four sectors (wèi qì yíng xiě, 衛氣營血) analysis.
- 9. While the idea of "patterns" differentiation is a contemporary hegemony created in the political synthesis of CM and the term "disease" (bing, 病; without the ontological implication) and "syndrome" (zhèng, 症) are also used alternatively (Scheid 2002), the propensity principle applies. See Scheid (2014), for genealogies of CM's notion of pattern.

10. See Massumi (2002), for a distinction between stasis and motion in tackling questions of movement, affect, and sensation in the case of art and media.

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Author Biography

Wen-Yuan Lin is a professor at the National Tsing Hua University, Taiwan. He uses STS material semiotic approaches to explore the emerging alternative knowledge spaces and politics enacted in technological and medical practices. He is the author of 看不見的行動能力:從行動者網絡到位移理論 (Invisible Agency: A Displacement Theory for Subalterns; Institute of Sociology Academia Sinica Press, 2014). His website is wylin.gec.nthu.edu.tw.