

Introduction

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Tradition is the living faith of the dead, traditionalism is the dead faith of the living. And, I suppose I should add, it is traditionalism that gives tradition such a bad name. Jaroslav Jan Pelikan, *The Vindication of Tradition*

The 2012 issue of *Osiris*, the journal of the History of Science Society, critically examined a discipline in crisis, beset by what the editors diagnosed as a malaise of abundance and diversity that has been caused by the out-of-control growth and multiplication of objects of study. If once we spoke of science in the singular, they observe, historians today turn their attention to multiple sciences spread across the globe, existing during all historical periods and extending from the practices of everyday life to quantum physics. Science, furthermore, is rarely imagined today as clearly demarcated from technology or, for that matter, medicine. In response, some contributors to the *Osiris* volume argued for a return to more clearly defined disciplinary boundaries, while others showed that disciplinary boundaries and concerns are reflective of larger social and political trends and thus not easily manipulated by individual actors or professional groups.

A similar diagnosis could be applied to the field of science studies, too. What started out as the sociology of scientific knowledge and then became science and technology studies has now morphed into the larger field of social—or even cultural—studies of science, technology, and medicine. Hence, while some of the leading thinkers in the discipline continue to follow the discipline’s ancestors in demarcating science from other fields of social activity even as they ground it in social practice and object-

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oriented practices,¹ others challenge the existence of clearly defined boundaries between science and whatever we might wish to constitute as its real or imagined other² or even look toward such other traditions of thoughtful practice for inspiration in rethinking science studies itself (Zhan 2012).

The articles we have collected in this special issue of *EASTS* are written against the background of these debates, to which, in turn, they also seek to contribute. They do so, however, not by means of direct engagement at the level of theory but obliquely through a series of case studies focused on the field of Asian medicines. Asian medicines are well suited to such an endeavor for a number of reasons. Consistently labeled as “traditional,” “ethnic,” and “pseudo-scientific” by those who would like to root science firmly in the West, practitioners and proponents of Asian medicines have long been forced to take up their own positions vis-à-vis science and biomedicine and define their practices accordingly. Following these struggles through time and across different locations, in turn, has provided researchers across the medical humanities with valuable field sites for exploring the nature of science, medicine, and the modern.

In our own previous work, we have taken up this challenge on a number of different fronts, not least in our investigation of Asian medicines as living traditions. Our argument, in brief, is that historical accounts that seek to distinguish sciences from traditions on account of the former’s forward orientation and built-in drive toward ongoing reconstitution and refashioning are fundamentally problematic. This is because traditions, at least those that are “living,” are characterized by many of the same qualities those authors see as demarcating science. We defined such living traditions as “sites of contestation” where anything that composes and defines that tradition, so to speak, is always and forever up for grabs. This includes knowledge claims, practices, phenomena engaged with, institutions, entitlements, self-definitions, social relationships, and much more. And yet, such living traditions consistently manage to maintain a sense of identity that emphasizes continuity over time. They succeed in doing so because the processes of transformation that reshape them tend to proceed in piecemeal rather than revolutionary fashion. That is, some things change while others remain the same. Hence, even if after a while everything has changed, social actors at any given moment in time can, if they so wish, experience a sense of continuity with respect to whatever it is they are engaged in. It is this perception and the sense of security it bestows that have permitted physicians, scholars, researchers, and other stakeholders in the various Asian medical traditions to modernize, scientize, regularize, and otherwise transform what they do through consistent engagement with science and the West for several centuries and yet claim that they are still embodying the essence of their tradition as it was defined hundreds or even thousands of years ago.

For science studies scholars, engagement with Asian medical traditions is thus not something to be avoided because it falls outside the definition of science proper. Instead, as the six articles collected in this special issue consistently demonstrate, it can open up fruitful avenues of investigation that ultimately benefit both science

¹ Such an argument is made, for instance, by Rheinberger (2010), who explicitly aligns his own position with that of Ludwik Fleck, Gaston Bachelard, and Georges Canguilhem.

² An example is the position taken by Latour (1993), whose flattening of social analysis seeks to erase all qualitative distinctions between tradition and modernity, grounding whatever difference there is in the quantitative difference of the size of their respective networks.

studies and Asian medicines in their attempts to understand themselves. Here, we would like to highlight the following four interrelated issues as particularly deserving of our attention: epistemology, use and prevalence, issues of meaning, and newly created risks.

1 Epistemology

Parallel to the efforts of science studies scholars to challenge representationalist conceptions of reality, practitioners, historians, and anthropologists of Chinese medicine have long been struggling with this philosophical tradition. A pertinent example is Shigehisa Kuriyama's comparative history of the body, especially his writings on the Japanese illness *katakori*, a term not directly translatable into English but roughly equivalent to shoulder pain, which presented him with the key for his 1999 book *The Expressiveness of the Body and the Divergence of Greek and Chinese Medicine*. In this case study Kuriyama teased out the multilayered historical processes through which this "new" disease emerged in seventeenth-century Japan from a complicated network of imaginative conceptualizations, bodily sensations, and, most important, the physical practice of massage that at the same time grasped and gave shape to the tangible phenomenon of *katakori* (Kuriyama 1997). That is, rather than describing *katakori* as being derived from either speculative philosophy or erroneous mental representations, Kuriyama allowed it to emerge as a tangible bodily phenomenon created by the investigating hands, paralleling Ian Hacking's influential thesis on "the creation of a phenomenon" in scientific practice (Hacking 1983). Inasmuch as both approaches liberated scholars from the confinement of the representationalist conception of reality, they offer crucial intellectual resources for investigating how reformers negotiated with the positivist conception of science while endeavoring to reassemble Asian medicine.

2 Use and Prevalence

Rather than assuming traditional medicines to be by definition living traditions, we actually need to begin with a big question mark. Our feeling is that unless they are institutionalized, contemporary practices of traditional medicine are not always easily visible. For example, after the devastating earthquake that struck Taiwan on 21 September 1999, a large number of psychiatrists rushed to the devastated area to help victims cope with trauma. To their great surprise, while the survivors of this catastrophe did indeed crave psychological support, the overwhelming majority sought help from traditional practitioners specializing in "calling back the frightened soul," *shoujing* in Chinese. This incident reveals just how prevalent the practice of *shoujing* remains in contemporary Taiwanese society and suggests that it may limit the penetration of modern psychiatric knowledge into the emotional lives of the Taiwanese people. It follows that before we can provide a fair evaluation of their influence on people's well-being, much more research is needed to make visible the prevalence and uses of living medical traditions in all their forms and shapes—not in order to over-

come or replace them by biomedical practices assumed, by definition, to be better, but first of all to simply understand their status and integration in people's lives.

3 Meaning

Our third point concerns the construction of meaning. Scholars have long been aware of the continued prevalence of traditional medicines in contemporary society. However, all too often they do not view this popularity as a meaningful and valuable element of the medical cultures under investigation but rather as a transitional and even pathological phenomenon caused by the weight of tradition. Therefore, one of the major challenges is to identify the functionality and positive value these medical traditions conceived of as living traditions have in contemporary society. This may be achieved by reorienting contemporary histories of traditional medicine away from a focus on how people do things differently and toward investigating how these differences make a meaningful and valuable contribution to the global history of medicine.

4 Newly Created Risks

Fourth, once we recognize practices like Asian medicines to be living traditions, we can no longer unreflexively attribute to them characteristics such as authenticity, time-testedness, empirical groundedness, and thus, by definition, safety. Rather, this new understanding demands of everyone involved that they take responsibility for that which is newly created. No different than emerging technologies in other domains of practice, traditional medicines as living traditions are capable of generating brand new risks through the novel ways in which they create phenomena and intervene in the world.³ Vice versa, as Paul Kadetz's article clearly demonstrates, "risk" and "benefit" themselves are not neutral concepts but emerge within specific discourses and practices as phenomena that, once created, take on a life of their own.

5 On the Articles in This Issue

The six articles collected in this special issue respond to these challenges from different perspectives. Each writer examines a specific context or situation in which traditional medicines comes to be articulated—or not—with some aspect of what collectively defines the modern: nationalism and the nation-state, the standardization and regularization of life, technoscience, biopower, and the management of risk. Relating their analyses to a wider interdisciplinary literature within and beyond the medial humanities, we believe they rise to the task that we as the editors of this special

³ For example, the Chinese herb *mahuang* (*Ephedra*), traditionally used in China to treat respiratory congestion and now a prescription medication for treating asthma, has been marketed as a dietary aid in the United States and used as a legal way to get intoxicated. This new way of using *mahuang* has resulted in a list of adverse effects and reports that its "over dosage led to at least a dozen deaths, heart attacks and strokes" (World Health Organization 2003).

issue set for them: namely, to examine Asian medicines as living traditions that are relevant to the field of science studies broadly conceived.

The articles by Sonya Pritzker, Ayo Wahlberg, and Paul Kadetz examine how traditional medicines in Vietnam, the Philippines, and the global West respond, or have been compelled to respond, to processes of modernization and regularization at national and global levels. Wahlberg begins by asking how and when traditional medicine in Vietnam became “Vietnamese.” He observes that if, at one level, the nationalization of traditional medicine in Vietnam resonates with similar processes in mainland China and South Korea (the only three countries, according to a WHO report, that have succeeded in creating truly plural health care systems that give equal weight to traditional medicines and biomedicine), each case needs to be read in light of its own unique history. In both mainland China and South Korea, traditional medicine had to define itself against a Western medical other within cultural and political contexts of biomedical hegemony. In Vietnam, instead, traditional medicine was from the very beginning intimately tied to anticolonial struggles and the fight for national self-determination. Central revolutionary figures were intimately bound up with medicine, and “a narrative of rejection of traditional medicine by the colonial powers formed an important part of the platform against which revolutionaries would launch their campaign to reclaim a Vietnam that had been lost.” Using traditional medicine thus became itself a revolutionary act, unlike in China, where its ties to the old society made modernization of tradition a priority. Starting from such a fundamentally different position, the process of integration with biomedicine in Vietnam always had traditional medicine on the front foot, whereas in both China and South Korea, traditional medicines even now face consistent challenges of being outdated and unscientific.

Sonya Pritzker’s article studies a crucial dimension of what scholars have characterized as the globalization of Asian medicine, that is, the standardization of its terminologies so as to accelerate its integration into a global health care framework. Treating standardization as a strategic site, Pritzker shows why this seeming technical endeavor caused heated debates and struggles at international, national, and interpersonal levels. By way of four ethnographic “snapshots,” she calls readers’ attention to both the lived experience and the moral concerns of the various actors involved in the struggles to create such a standardized system of terminologies. On the structural level, she discovered the surprising phenomenon that various efforts at standardization have resulted in the further fragmentation of the field of Asian medicine. As Pritzker commits herself to stepping midstream into these debates by way of ethnography, her article provides an example for both studying and remediating the ongoing process of standardizing Asian medicine.

In his study of traditional birth attendants in the Philippines, Paul Kadetz presents us with one of the first productive attempts to engage with the topic of risk. He highlights the fact that these so-called traditional practitioners had been successfully assimilated into the Philippines’ public health system during the 1950s: they adopted some modern biomedical practices, developed a new identity by means of government-supplied sterile birthing kits, and made crucial contribution to the consistent reduction of maternal and infant mortality in the Philippines. Nevertheless, half a century later, international and national authorities considered their continued existence to be a source of risk to women’s health and decided to terminate their

training program so as to increase the in-facility birthing by biomedical practitioners. Providing powerful evidence from different sources—in-depth interviews, statistical analysis, field observations—Kadetz demonstrates why the biomedical notion of safety that underpinned these new reforms is problematic and why a policy based on that construction came to compromise the safety of the very community that it seeks to protect. This study has important policy implications for health authorities as it cogently shows the multifaceted connections between traditional practitioners and the sociocultural fabric of contemporary Philippine society. Moreover, it challenges readers to reflect on a general question: How does the discourse of “risk” and “safety” work in non-European contexts?

The following two articles, by Laurent Pordié and Jean-Paul Gaudillière and by Volker Scheid, consider how traditional medicines interface with cutting-edge bioscience and pharmaceuticals. In their paper on the creation of new drugs from ayurvedic medicine for an international clientele, Pordié and Gaudillière provide a penetrating analysis of the emergence of new medicines within the living practice of tradition. They characterize this new practice as a “reformulation regime,” because its emergence was accompanied by novel means through which “traditional knowledge–based pharmaceutical innovations are appropriated and protected by law.” As a manufacturing practice, this regime does not seek to purify the active principles of single plants but focuses on exploiting the properties of herbal polypharmacy. By way of “reformulating” compound formulas into ayurvedic proprietary medicine, this manufacturing practice provides “an escape” from previously dominant models of biopharmaceutical innovation. Moreover, because this regime seeks patent only on “reformulation” and not on the recipes included in classical texts, it potentially protects traditional knowledge from patenting, fostering the coemergence of alternative models of property rights. Pordié and Gaudillière’s analysis of this reformulation regime thereby signals a potentially strategic breakaway from what were hitherto considered the two main options for developing traditional medical practice: the reduction of Asian medicine to biomedicine and the reinvention of medical traditions in Eric Hobsbawm’s sense of the term as pieces of a wider, state-controlled field of plural health care. Their concrete case study alerts scholars to pay closer attention to different possible futures for Asian medicines as living traditions such as the emergence of a radically reconfigured and globally circulated Ayurveda.

In his article on the articulation between traditional Chinese medicine and the emerging field of systems biology, Scheid draws attention to the manner in which scientific practice, like traditional medicine, creates its objects of study through and within distinctive genealogical practices. In the present case, these center around the notion of *zheng*, commonly rendered into English as *pattern* or *syndrome*, which has become the most important boundary object in the practices analyzed; or, as the social actors involved call it, “a bridge between systems biology and Chinese medicine.” Scheid argues that the construction of this bridge depends on a very specific reading of *zheng*, a reading based on a sequence of prior historical transformations of the concept and the medical practices into which it was embedded. Yet, it is only by deleting these genealogies from present memories that systems biologists and their Chinese medical colleagues are able to forward their claim of connecting for the first time what hitherto were distinctive and unrelated practices. Scheid argues for the active engagement of humanities researchers with such research in order to bring these repressed memories

back into consciousness and allow for a more open and balanced assessment of the benefits and risks the creation of the new invariably involves.

If all of the previous articles focus on processes of fusion, synthesis, or integration, Judith Farquhar's article reminds us how and why traditional physicians frequently ignore the global discourse of "scientization" or technological "development," even if, on first sight, it appears to offer so many obvious benefits. To this end, Farquhar explores in some depth the nature of the clinical and its forms of knowledge through an examination of the practice of pulse taking. Pulse diagnosis is widely considered to be one of the most archetypical practices defining Chinese medicine, and modernizers have long aimed to render it more "reliable" by reading the pulse through "pulsometers" and other technical devices so as to liberate it from the distortions of human subjectivity. Yet, as Farquhar shows, the pulsometers gather dust while clinicians and their patients continue to place their trust in the "magic" of touch. They do so not because they reject technology but because they know that "the only good medicine is practiced by good doctors." Such knowledge and the practices it encourages and on which it relies, then, are as characteristic of the varied lives of living traditions as those that more actively seek to take tradition toward different futures.

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