Provincialising STS: postcoloniality, symmetry and method [1]

John Law [a] and Wen-yuan Lin [b]

[a] Department of Sociology, The Open University, Walton Hall,
Milton Keynes MK7 6AA, UK, John.law@open.ac.uk.
Centre for Science Studies, Sociology, Lancaster University,
Bailrigg, Lancaster, UK LA1 4YW

[b] Centre for General Education,
National Tsing-hua University, No.101, Kuang-fu Rd. Sec.2,
Hsin-chu 300, Taiwan, wylin1@mx.nthu.edu.tw

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The Problem

STS is not short of studies in postcoloniality. Collectively the discipline has explored how technoscience works differently in different global locations, and there are fine case-studies that explore postcolonial forms of domination. So we have, for instance, learned about: Indian nuclear power; sub-Saharan therapeutic inequalities; the extractions of bioprospecting; how broken-down European technologies achieve an afterlife in the South; the complexities of transnational movements of Chinese medicine; how psychotropic drugs open people to spirit attack in Chile; about mapping and crafting as alternative modes of knowing; and about the entanglements of dogs and people in colonial histories.[2] These are just a few of the many postcolonial case studies in STS – and since EuroAmerica is not a monolith, there are also many analogous studies of the 'post-colonial' within the colonising countries.[3]

At the same time the discipline has usually made use of EuroAmerican analytical terms. There are exceptions. Warwick Anderson's beautiful study of the Fore and kuru which draws in part on Melanesian gift exchange is a case in point.[4] So too is the writing of Judith Farquhar and Mei Zhan, both of whom ask what it would be to think through Chinese medicine.[5] In this paper our concern is to follow these writers, and scholars such as Marilyn Strathern, Casper Bruun Jensen and Atsuro Morita. We argue for forms of postcolonial investigation that use non-Western analytical resources.[6] Our major concern is thus to ask what might happen if STS were to make more systematic use of non-Western ideas.

The language needed to make this kind of argument is all contested. In particular, unsatisfactory binaries are difficult to avoid. These include 'theory' on the one hand, and 'practice' or 'case-study' on the other. They also include such large geopolitical terms as 'Western' and 'EuroAmerican' versus 'Southern' or 'Oriental' or 'Chinese'.[7] The well-recognised difficulty is that postcolonial relations of exchange and extraction are complex, not dualist.[8] More strongly, the term 'postcolonial' is itself

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[2] See: Abraham (1998) on the Indian atomic bomb and physics in India (2000); Rottenburg (2009) on the limits of the therapeutic domination hypothesis; Hayden (2007) on bioprospecting; Beisel and Schneider (2012) on the transmutation of a German ambulance into a Ghanaian tro-tro or collective taxi; Zhan (2009) on the transnationalism of Chinese medicine; Bonelli (2012) on psychiatry and spirit possession; Turnbull (2000) on different modes of knowing, cartographic and otherwise; and Haraway (2008) on dogs and their people. On the issue of differential hybridity see Seth (2009) and Adams (2001).

[3] For work on difference within see Mol (2002; 2008), Moser (2008), Mol, Moser and Pols (2010), and Singleton (2013).

[4] Anderson (2008). And perhaps Shiv Visvanathan's call for 'cognitive justice' also counts. See Visvanathan (2003; 2006), SET-DEV Project (2011), and Bijker (2013).

[5] Farquhar (2002), Farquhar and Zhang (2012) and Zhan (2009).

[6] The use of non-Western ideas has been explored in anthropology. The notion of 'the gift' (Mauss 1991) comes from Melanesia. More recently, Marilyn Strathern (2011) has systematically used non-binary modes of comparison from highland Papua New Guinea to rethink EuroAmerican topics including kinship (1992) and binarism (2011). See also Farquhar and Zhang (2012), Jensen and Blok (2013), Morita (2014).

[7] For recent examples of warnings about the dangers of binaries see Schiebinger (2005) and Abraham (2006, 217). In the context of Chinese medicine see Zhan (2009) and Farquhar (2012).

[8] So, for instance, in his kuru study Warwick Anderson (2008) describes an economy of extraction Papua-New Guinea, He writes about medical scientists and anthropologists and colonial administrators. Many were entirely well-motivated. But the anthropologists and the biologists went to the Fore. With more or less difficulty they

contested and unsatisfactory. [9] In what follows, so far as possible we also avoid writing about 'theory', but before we abandon this term it will be useful to cite Itty Abraham. 'Simply put,' he writes, 'in the metropolis they 'do theory' and in the colonies they gather data.'[10] He is commenting on George Basalla's account of the spread of Western science. But the resonance between Abraham's words about theory and data in technoscience and those of Daiwie Fu, founding editor of East Asian Science, Technology and Society (hereafter EASTS), is noteworthy:

> 'Haven't we taught our students STS with good case studies still mostly coming from the West? And haven't we theorized our East Asian STS case studies also mostly from established Western theoretical perspectives: SSK, SCOT, ANT, Social World, cyborg feminism, bio-medicalization and all that?'[11]

Fu's question – 'how far can East Asian STS go?' – stands before us as a challenge and a provocation. It has been a continuing focus of attention for the authors and editors of EASTS, and it is also our point of departure. Thus in most of technoscience, but also in STS we have case studies, EuroAmerican and Southern, on the one hand. And then we have theory on the other. But the latter – together with the theory/case study division itself – comes from EuroAmerica. To frame the problem in this way is neither to detract from the importance of the work of the East Asian STS community in general, nor to question the significance of EASTS in relation to that work. Indeed, as we have just implied, since Fu's 2007 words, EASTS has become one of the major non Euro-American platforms for exploring and developing STS alternatives.[12] Our particular focus, however, is on what one might think of as the analytical-institutional

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extracted stories and brains. And then they removed these to places such as Bethesda, Maryland, or Adelaide, South Australia. And there they were transmuted into scientific claims, monographs, and academic reputations. Indeed, they were transformed into a diagnosis, if not a cure for this dreadful prion-based disease.

[9] Some areas of the world including parts of China were never subjected to direct colonisation. Settler states such as Australia, New Zealand and the US vary, though as Anderson pithily puts it, in such countries indigenous people 'can have 'culture' or government health services, but not both.' (Anderson 2007, 151). Whether colonisation has given way to postcoloniality is unclear in many locations. For instance, in Sápmi in northern Scandinavia, partial recognition of Sámi indigeneity is matched (as is common) by the imposition of science-based ecological policies insensitive to local practices (Sara 2009; Sara 2013). The term 'postcolonial' (and terms such as 'decolonisation') have been rejected for these reasons by some indigenous activists and scholars, but also because they inappropriately centre relations of coloniality (Smith 2003). Quite differently, but again raising questions about the large categories of coloniality, the specificities of 19th and 20th century colonial medicine have given way to those of 21st century bio-prospecting. On the latter see, e.g., Hayden (2007).

[10] Basalla's (1967) account of the spread of Western science is fifty years old, but Abraham's words still pretty much hold. Abraham (1998, 35).

[11] Fu (2007, 1-2).

[12] For a recent post-colonial erosion of the theory-empirical divide, see Zhan (2014). In EASTS this asymmetry has been examined on many occasions. For example Gregory Clancy (2009) has argued the importance of taking local materials up into the STS rubric, while Togo Tsukahara (2009) has highlighted relations of dependent-independence; Ruey-Lin Chen (2012b; 2012c) and Chia-shin Chen has reflected on the distinctiveness (2012a) of East Asian STS/theory; Fa-ti Fan (2012) has suggested the need for critical regionalism, Susan Moon (2012) has foregrounded the importance of intuition, and Warwick Anderson (2012) has tentatively talked of Asia as method. Despite the strong influence of American STS in East Asian (Nakajima 2007), analyses of journal publications show that EASTS is only partly influenced by 'mainstream STS' theory and has developed 'theoretical creolization' (pīn zhuāng, 拼裝) (Chen 2012c; Fan 2012; Fu 2013; 陳瑞麟 2014).

complex of STS, how this works to reproduce postcolonial intellectual asymmetries, and what might be done to tackle the latter.[13]

Dipesh Chakrabarty describes how these asymmetries are particularly difficult for Western-trained Southern intellectuals.[14] In 1856 15,000 tribal people were massacred by the British in Bengal. After the first deaths the victims kept on coming. Why? The survivors said that their God had told them to fight. He would protect them. The story is horrific, but Chakrabarty's particular concern is this. As a Western-trained historian he knows that Gods are not really powerful. But as an Indian this makes him deeply uneasy. Here, then, is the question. To which should he give priority? Western historiographic convention? Or a world in which Gods (not just beliefs about Gods) cause actions?

The principle of symmetry catches a part of this. STS treats all beliefs, 'true' and 'false', in the same terms. But this only catches a part of the problem because it tacitly assumes that it will stick, fairly much, with its own theories. To say this is not to complain. Symmetry between true knowledge claims and those that are false was crucial to SSK. Its ANT extension to human and non-human actants by Michel Callon was equally significant.[15] But our suggestion is that it is time to extend it again. Some caution is needed. Related writing in anthropology reveals that there are pitfalls as well as opportunities for those who take this route. It is possible to imagine, for instance, in a version of exoticising Orientalism, that knowledges from outside EuroAmerica offer special or privileged access to reality. Alternatively, it is possible to get caught up in chauvinist 'national science' projects.[16] Even so, we want to suggest that STS should explore a third and postcolonial version of the principle of symmetry. In this the discipline would explore the politics and analytics of treating non-Western and STS terms of analysis symmetrically. This means that it would stop automatically privileging the latter. It would abandon what Warwick Anderson and Vincanne Adams aptly call the '"Marie Celeste" model of scientific travel' in which analytical terms (or laboratories or facts) travel silently and miraculously from metropolis to periphery.[17] Instead in this postcolonial version of symmetry the traffic would be lively, two-way, and contested. Or, better, since there is no single postcoloniality, there would be multiple centres, a variety of post-colonial symmetries, and a series of different STSs.[18] As a part of this STS would need, as Casper Bruun Jensen and Atsuro Morita have argued, to think about translation and its betrayals – both linguistic and social.[19]

But how might this work in practice? To think about this we want to describe how postcoloniality as an STS issue has unfolded in the work that we have done together.

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[13] To talk of the analytical-industrial complex is to play with Londa Schiebinger's (2005) 'European colonial science complex'.
[14] Chakrabarty (2000).
[15] Bloor (1976); Callon (1986).
[16] For a sense of the opportunities, see in particular Viveiros de Castro (1998), de la Cadena (2010) and Blaser (2009b). And for a related series of experiments, Strathern (2011; 1992). For the difficulties, consider the collection edited by Henare, Holbraad and Wastell (1998) where indigenous categories are sometimes taken to offer special access to reality. For similar positions in alternative idioms see Kohn (2013) and Bennett (2010). For comment on the difficulties see Abrahamsson et al. (2015).
[17] See Anderson and Adams (2007, 182).
[18] In this regard what we are hoping for differs from Sandra Harding's otherwise similarly motivated project. See, for instance, Harding (1994; 1998; 2009)
[19] Jensen and Blok (2013), Morita (2014).

Disconcertment

In 2009 Law was invited to Taiwan to lecture on ANT and its successor projects. The invitation came from Lin, who had worked with Law at Lancaster University as a PhD student. So Law travelled to Taiwan and talked about heterogeneity, relationality and other aspects of actor-network theory and its successor projects. At the end of the seminar series he told his Taiwanese audience that the world is not coherent, and argued that it can only be understood if STS uses methods that are also themselves multiple and non-coherent. For good measure he added a lesson that he originally learned from Donna Haraway[20]: that since what we write is politically performative, in a postcolonial world it is important to do this in non-coherent and tension-ridden ways.

The seminar discussion that followed was disconcerting both for Law and his audience. Hsin-Hsing Chen, a professor interested in religious studies, told the participants that he had just taken his students to the final day of the annual outing of the Goddess Mazu. Mazu is popular in Taiwan and an impossible number of people – around a million – had tried to get into her Taizhong temple. Chen and his students got nowhere near the temple, but the crush and the noise was unbearable.

> 'religion [said Chen] … is a theoretical construct, but this isn't a religion. It is a ritual that 'doesn't have a name for itself … it is just the way we live.' '[T]his [is a] massive event without a straight or coherent narrative for itself.'[21]

He went on:

> 'I was particularly attuned to the messiness of the whole event … and … I think I [want] to argue that messy method at this moment here in Taiwan, the struggle against grand narrative in general, is not that productive.'

Helen Verran talks about 'disconcertment'. This, she argues, arises in embodied form when different metaphysical systems collide. This first happened for her in the form of a belly laugh when she realised that quite different systems of Western and Yoruba numbering were at work in Nigerian classroom practices.[22] For Law and his audience this happened as we reflected on Hsin-Hsing Chen's comments. To say it quickly, these crystallised the following obvious difficulty. STS was telling Law that what we know is situated. But he was talking to a Taiwanese audience as if the need for messy method was a decontextualized truth. To put it mildly, this was uncomfortable.

Perhaps Law should have seen this coming. But what to do about it? It is possible to treat the problem as a formal paradox: to say that the claim that all knowledges are situated is tautological. But more productively, we can also think of it empirically. And this is what we have been exploring since 2008. We have tried to think about the relations between Taiwanese and EuroAmerican English-language STS. And we have also tried to think about what a Taiwanese or a Chinese-<u>inflected</u> (huá wén,華文) STS, might look like (which, to repeat our earlier warning, is <u>not</u> a Chinese national (zhōng guó, 中國) STS.)

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[20] Haraway (1991)

[21] This comes from Law and Lin (2011, 140) The present argument is developed more fully in that paper.

[22] Verran (2001). But see also her work on different firing regimes in (Verran 2002).

Importantly this is an entirely collaborative process. Post-colonial STS's can be done in all sorts of different ways, but in our work the benefits of a bi-lingual collaboration have been crucial. Perhaps even more important is the fact that we are immersed in two different worlds: common sense in Hsinchu is often unlike common sense in Lancaster. Indeed Lin sometimes feels that his head and his body are in different places: as if he has been intellectually beheaded.[23] Or, and to put it less dramatically, he feels that his head is full of EuroAmerican theory and knowledge, while his body inhabits Taiwan. Perhaps Hsin-Hsing Chen and Dipesh Chakrabarty were feeling this too. Similarly wrenching bifurcations have been explored in feminist writing – and they crop up routinely in other forms for those who work in languages other than English.[24] But, and importantly here, this sense of difference has taken us to what we called above the 'analytical-institutional complex' and how this might be reimagined. Thus it has taken us to theory, that is to the possibility of Chinese-inflected concepts in STS (though the notion of 'theory' works poorly in many Chinese contexts). It has raised questions about methods and writing: these too are starting to look different. It has led inexorably to metaphysics, for the Chinese language world often rests on assumptions quite unlike those current in much of EuroAmerica. It has taken us to institutions and career patterns. And, as a part of this, it has taken us to modes of circulation and exchange: to the movements between different versions of STS, and in particular to relations in STS between Taiwan and EuroAmerica.

Nothing that we propose can be treated as a general truth. But our suggestion is none the less that these are the kinds of issues that any postcolonial STS might need to attend to. Not just in Taiwan or China but, for instance, in the Spanish or Portuguese or Hindi speaking worlds. Our suggestion is thus that this is likely to be a direction of travel needed for many postcolonial versions of STS.

Institution

So what does this mean in practice?

One answer takes us back to Verran and Chakrabarty. It has to do with metaphysics, embodiment, disconcertment and the 'intellectual beheading' which we mentioned above. We will return briefly to metaphysics below. But these in turn are necessarily related to matter-of-fact features of institutional contexts. So here are some simple but familiar – indeed almost mundane – observations about institutional structures. (We are talking of Taiwan because this is the non-EuroAmerican context that we know best, but similar observations might be made of many other locations.)[25]

- One, in Taiwan most social science academics undertake PhD study in EuroAmerica. In practice this means that most travel to the US or the UK, and this usually in turn means that they are writing and working in English at least during the period of their doctoral study.

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[23] 身首異處. 身:Body, 首:head, 異:different, 處: place.

[24] See, for instance, Dorothy Smith (1987). On language see Mol (2014) and van de Port and Mol (2015).

[25] In the academic communities of Taiwanese science, engineering and medicine the importance of 'catching up and converging with global/American trends' is taken for granted (Lin 2009b; 林文源 2012; 林文源 2013). However, in the social science community this is not necessarily taken for granted, and raises questions, concerns and debates (Chen, Chien & Hwang 2009; Chu 2009; Kang 2009; 反思會議工作小組 2005; 鍾耀華 2015c).

- Two, as a part of this they become affiliated with, and expert in, the particular theoretical approaches (for instance social constructivism or actor-network theory) that are considered important in their PhD departments.
- Three, this means that they are well-related to international STS, but it also has several less fortunate side-effects. It means, for instance, that the (already small) community of STS academics in Taiwan tends to be theoretically fragmented. Separately, it also means that while these researchers may well be responding to Taiwanese concerns including theoretical creolisation, and publishing with local presses and journals, they are also likely to find themselves on the margins of their particular international academic networks.[26]
- Four, recently in order to upgrade the country's university ranking and facilitate internationalization of local research achievements, the Taiwanese government has encouraged all academics to publish in well-ranked SSCI journals. In practice this means that they are being encouraged to write in English. This in turn means that they have little choice but to write in ways that respond to the intellectual and social agendas of English-language journals and publishers.[27]
- And finally, five, educational structures are variable around the globe, but the pressure on academics in locations such as Taiwan is towards a model of learning and scholarship that mimics those found in EuroAmerica and more particularly in North America, and therefore reproduces the same kinds of pressures and incentives.[28]

This is a broad-brush picture needs to be nuanced. So, for instance, some of these conditions are particular to Taiwan and as we have observed above, some academics have been resisting these for decades.[29] Elsewhere, for instance in Hong Kong, the analytical-institutional complex works differently.[30]

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[26] On 'theoretical creolization' see (Chen 2012c; Fan 2012; 陳瑞麟 2014).

[27] For more specific exploration see: Kuo-Hsien Su (蘇國賢 2004) on the fragmentation and marginalization of the sociological community in the citation network; Hou-ming Huang (2009) on the influence of the SSCI system; and Wen-yuan Lin (林文源 2014) for the biasing and shaping of local medical sociology. For general criticism of the 'analytical-instructional complex' and its problems and difficulties, see Chen, Chien & Hwang (2009), Chu (2009), Kang (2009), 反思會議工作小組 (2005), 陳光興, 汪暉, 瞿宛文 & 馮建三 (2004), 劉紀蕙, 管中閔, 曾孝明, 張茂桂, 張小虹 & 陳光興(2003), 鍾耀華 (2015c). At the same time, note that related effects are also at work within EuroAmerica. Even European, including native English speaking British STS, academics find that North American publishers ask for books and edited collections to be made more international, where 'international' in practice means more oriented to North American concerns and/or the inclusion of North American case studies. No doubt such market-oriented parochialism is also at work in other locations.

[28] Again, though we write of 'EuroAmerica' as if this were a single whole, North American models have been exported not only to other regions of the world, but also to Europe. Over the last three decades the so-called 'Bologna' model for doctoral study has displaced alternative European doctoral practices in a single model of 'best practice'.

[29] In the Taiwanese social science community, there have been enduring decade-long efforts as well as critical works on the 'Sino-isation', indigenization and localization of social science (傅大為 1991; 傅大為 1995; 楊國樞 1993; 楊國樞 & 文崇一 1982; 葉啟政 2001; 鄒川雄 & 蘇峰山 2009; 蔡勇美 & 蕭新煌 1986). See also the ongoing press and policy debates in a countersignature website created by Taiwanese academics to resist the government policy since 2010 (政大教師會, 教改論壇 & 台灣競爭力論壇 2015). The Taiwan-initiated and –based

Perhaps it works differently for Spanish- or Portuguese-language STSs too.[31] There are no doubt many other exceptions. But here is our guess. As we briefly noted above, the conditions of academic production and exchange that we have just spelled out are not confined to Taiwan. To the extent that STS is an international discipline, they are at work in many places outside English-speaking EuroAmerica. Indeed this is precisely why it is important to articulate them, and why we think that they are important. The message, then, is that to think well about postcolonial forms of STS the discipline will need to think simultaneously about theory and empirical research and subjectivities and materialities, but also about some pretty matter-of-fact, not to say crass, institutional practicalities. And somehow it will have to shift all of these together. Otherwise it will carry on reproducing a theory/case-study postcolonial divide, and it will continue to divide minds from bodies for those who do not dwell in the English-speaking world – at times including those who work in other European languages.[32]

Explanation

If this is right, then institutions and asymmetrical modes of circulation tend to lock Taiwanese STS – and those in similar situations – into positions of subordination within EuroAmerican-ordered disciplinary structures. Indeed, and as a part of this, they have also tended to erode alternative modes of knowing and learning that predated the arrival of the first EuroAmerican adventurers.[33] That is our first point. Point number two is about alternative non-Western explanatory logics. As STS theories get carried to locations such as Hsin-chu we want to say that such alternatives get locked out of the discipline, both in Taiwan and elsewhere, and that this has real explanatory consequences. To show what this might mean we turn to an ethnographic moment in a Taiwanese consulting room.[34]

Dr Lee is a distinguished Chinese medical practitioner who is popular with her patients. Like many new generation practitioners, she has been university trained in both Chinese medicine and Western

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EASTS, albeit working in English in order to facilitate intra-Asian communication, can be seen as one of the more recent attempts at resistance. See also footnote 12.

[30] See the press report (鍾耀華 2015a; 2015b) and Angel Lin (2009a).

[31] We cannot read Spanish or Portuguese, but the English language publications of authors such as Mario Blaser (2009a), Marisol de la Cadena (2010), Arturo Escobar (2008), and Ivan da Costa Marques (2014) suggest that this may be the case.

[32] See Mol (2014) and van de Port and Mol (2015) for analytical differences between different European languages. One of the many inconveniences of binarising EuroAmerica and its Others is that both categories get homogenised. But just as there are multiple practices in technoscience, so too are there endlessly many practices within 'EuroAmerica'. See Latour (1993), Mol (2002), Stengers (2008), Singleton and Law (2013), and Waterton and Tsouvalis (2015).

[33] Shiv Visvanathan cites Dharampal who devastatingly argued that 'agriculture in India was an epistemology that the colonial British destroyed.' Visvanathan (2006, 167). Perhaps there is a case for breathing life into a term that has only rarely been found in STS. This is the notion of 'epistemocide'. See Scholte (1983, 250) and Bonelli (2014, 108). Perhaps, however, the complexities of non-binary exchanges suggest that often the fate of ways of knowing and being, albeit embedded in dominatory relations, is more subtle. Practices, knowledges, and the grounds for knowing – the argument is that all of these were undone together. For the complex struggles in medicine to come to terms with the professional, political, epistemic and metaphysical requirement of relating to western technoscience and its versions of reality see Farquhar (2012; 2015) (for the People's Republic of China) and Adams (2001) (for the People's Republic and Tibet). Also see Lin and Law (2015) for an alternative understanding of 'international.'

[34] What follows draws on Lin and Law (2014).

biomedicine. And, unlike some of her older colleagues, she <u>works</u> with both too. We take this from our field notes:

> 'Your pulse is like a guitar string. That means you have 'depleted-fire' (xū huǒ, 虚火) in the liver (meridian). ... You are busy and stressed; you're exhausted and irritable. Your emotions relate to fire in the liver (meridian), because the liver (meridian) is like the general in the body. It governs your emotions and your determination.'[35]

This is in a world that belongs to Chinese medicine. Our notes continue so:

> 'The [patient's] biomedical scan revealed no sign of arteriosclerosis. .... Dr Lee [says that] 'The tests have eliminated some possibilities. ... We'll stick with my previous diagnosis, ... the pulsation at the "chi" position (chě, 尺) ... shows that you are constantly drawing out energy to keep your body going on a daily basis … The pulsation tells us about the overall dynamics and function of the meridians, but it doesn't tell us about all somatic morbidity. So we can also make good use of biomedical tests...'[36]

Note the last thing she says. 'We can <u>also</u> make good use of biomedical tests.' This is important because it tells us that Dr Lee's practice <u>includes</u> biomedicine but that it does not fit with its <u>logic</u>. For, and to state the obvious, there is no room for meridians or <u>chi</u> in biomedicine. Since they cannot be found anatomically or physiologically, they simply don't exist. But in Dr Lee's world it is different. Here there is room for both scans <u>and</u> meridians. This tells us that the logics of the two systems are profoundly different. To make the argument quickly, biomedicine is <u>reductive</u>. The practice of biomedicine is probably different,[37] but in principle it takes it for granted that the body of a patient is a particular way, it tries to describe this, and it searches out background <u>causes</u>. Medical anthropologist and STS scholar Judith Farquhar puts it so:

> 'A signifier must be supplied for the signifier, an object must come forward for every noun to make the technical term consistently meaningful to a large group of interlocutors.'[38]

In a beautiful phrase she describes this as <u>epistemological foundationalism</u>.[39] This is a way of knowing and being in which 'facts are facts are facts'.[40] And that is the end of the story.

In contrast with this, by EuroAmerican standards the Chinese system is <u>syncretic</u>. (This English-language term is scarcely neutral, but we cannot discuss this here[41]). It works by <u>hybridising</u>. It looks for <u>patterns</u>

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[35] Lin and Law (2014, 812).
[36] Lin and Law (2014, 809).
[37] For this argument, see Mol (2002).
[38] Farquhar (2015).
[39] Farquhar (2012).
[40] Farquhar (2015).
[41] Law et al. (2014)

of association by seeking out analogies. It searches for contextualised propensities and imbalances. And it is situated, in the sense that objects are contextual. They are 'gathered', as it were, relationally:

> 'Duixiang things', writes Farquhar describing the work of PRC practitioner Guangxin Lu, 'are our partners in perception, not the mere objects of our perception.'[42]

None of this is news. Post-colonial anthropologists such as Mario Blaser and Marisol de la Cadena have worked on analogous issues.[43] And sinologists and medical anthropologists such as Farquhar and Mei Zhan have explored these kinds of differences and considered their Chinese-inflected explanatory potential.[44] Indeed both these authors draw on STS language to articulate Chinese medicine for a EuroAmerican readership.[45] And, as we noted in the introduction, both have explored the question we are asking here: what might it be to understand the world through the lenses of Chinese medicine?

But what would happen if STS also started to think symmetrically? What would happen if this way of thinking were absorbed into our academic work? No doubt there are all sorts of possibilities. But one answer is that a Chinese-inflected STS would not go looking for causes or strong explanations. Instead it would observe what goes with what. Situationally. And (if we push the argument a step further) it would ask questions about whether what it is observing is in balance or not. It would, in short, work more like Dr Lee's Chinese medicine than biomedicine.

So what might this mean in practice?

Again this is for discussion. But one answer is that it gives us two radically different postcolonial STS stories about the intersection of biomedicine and Chinese medicine in Taiwan. We know that biomedicine is being taken into Chinese medicine in Dr Lee's practice, but we can understand this in at least two ways. On the one hand, we can treat it as an expression of biomedical, colonial and post-colonial power. This story is pretty persuasive. It's even more convincing if we add that after fifty years of Japanese colonisation, a post war period of Americanisation,[46] and the subsequent creation of a public health insurance system, 96% of Taiwan's health care budget is spent on biomedicine, with just 4% allocated to Chinese medicine. The argument is that Chinese medicine has been pushed to the margins. And (as in Dr Lee's practice) where it is hanging on, it is under pressure to absorb biomedical realities.

That is postcolonial story number one. But in version number two – in a Chinese inflected STS – the story starts to look quite different. Why is this? The answer has to do with hybridity, the refusal to embrace reductionist forms of explanation, and the assumption that objects are relational, not given. So, for instance, two thousand-plus years of Chinese medical history reveal that this has always worked by absorbing newcomers. When something new came along this did not overturn previous practices or

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[42] Farquhar (2015). Emphases added. Farquhar is drawing on Bruno Latour (2005).
[43] Blaser (2009b); de la Cadena (2010); see also Hetherington (2009); for commentary from an STS perspective see Law (2015).
[44] Farquhar (2002), Farquhar and Zhang (2012), Zhan (2009) and Zhan(2014).
[45] Here she is drawing on Bruno Latour (2005).
[46] See 黃金麟, 汪宏倫, and 黃崇憲 {, 2010 #5741}

ideas. Instead it was <u>added</u> to the canon. So, for instance, the classic <u>Yellow Emperor's Inner Canon</u>, assembled between two and five centuries before the Common Era, and the oldest major Chinese medical text, is itself a hybrid of five schools of ancient medical practice.[47] And this is a logic of addition that has been at work ever since.

So what does this history of accretion imply? The answer is that biomedicine is nothing very special. Indeed, from a Chinese medical point of view, it is nothing more than the most recent arrival. And like its predecessors it has found its place within the syncretic and non-reductive and object-as-relation world of Chinese medicine. The conclusion is that if we do away with the epistemological foundationalism described by Farquhar, then what we are seeing in Taiwan has as much to do with Chinese medical business as usual as with biomedical domination.

There is much more that might be said.[48] But at its simplest, we are suggesting that there are two kinds of postcolonial STS at work here. We are in the presence of two versions of understanding.[49] To be sure, neither is pure. In this conjoined world both work by bringing STS and Chinese realities together. But they do so in very different ways. One absorbs a Chinese explanatory sensibility. Chinese-inflected, it does Chinese-related explanatory business as usual. And it starts to undo Anderson and Adams' 'Marie Celeste' mode of theoretical travel. It starts to undo the centre-periphery distinction. While the other, by contrast using STS explanation as usual, does not.

Method

Most recently – though this is work in progress – we have sought to explore this postcolonial symmetry one step further by asking what would happen if we were to reverse the STS terms of analytical trade. What would happen if we used a <u>Chinese</u> term to make sense of a <u>European</u> case? Again there are complexities. For instance, the term 'theory' – and the theory/empirical divide – simply fails to work in Chinese medicine. For reasons explored by Zhan and Farquhar and at which we have hinted above, the terms of art of the latter are essentially practical[50]. But this suggests in turn that a Chinese-inflected STS might be quite unlike its English language cousin.

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[47] Anonymous (2002).

[48] Interesting, here, for instance, is the issue of scale. It is tempting to say that the 'macro-social' distribution of the Taiwanese health care budget tells the real story, while particular practices, such as those of Dr Lee, though interesting, are microsocial phenomena and thus tell us little about domination or hegemony. This argument works well, but only if we also buy into the scaling assumptions – the macro-micro distinction – upon which it depends. But scaling can itself be understood an effect of practices, and it is not clear that it works in this way in many Chinese – and indeed EuroAmerican – practices. For discussion see Law (2000).

[49] See also Lin (2013) for a similar double reading of patients' actions from ANT and displacement theory. A related way of reading the result of the analytical-institutional complex mentioned above is between (passive) intellectual subordination and (active) 'theoretical creolisation.'

[50] This is somewhat ironical, because the theory-empirical should not really work in EuroAmerican STS either. STS practitioners usually argue that theory and practice cannot be teased apart. But here (forgive us) our disciplinary practice trails behind our theory.

In order to get a sense of the possibilities we have taken a Chinese term of art, shi (shì, 勢),[51] moved it to Europe, and used it to explore the 2001 UK foot and mouth disease epidemic.[52] The term shi means something like 'propensity'.[53] In many Chinese contexts including medicine, things have propensities to shift and change their form. If the changes and the flows that run through them are blocked, this leads to imbalance. Such is the basis of much Chinese medicine: diagnosing and undoing blockages and imbalances. But propensities aren't fixed. Things don't 'have' propensities. Instead, the latter are situated and relational, ebbing and flowing between non-binary opposites. (For EuroAmerican readers it may be helpful to think of yin and yang). There is a methodological point here. The art of knowing and intervening well is the cultivation of a sensibility to propensities and their changing ebbs and flows. And working with these rather than against them.

Methodologically the implications of this shift are potentially profound if we take them into STS. Representation becomes relatively less important, and sensibility more so. A relational version of 'the empirical' is important in Chinese medicine, but Farquhar's 'epistemological foundationalism' is not. And the sensibility is not simply about bodies – it is at work in social and material relations too. It is easy to see this at work in classical Chinese philosophy. Here accounts of the world – usually in the form of advice to princes – look quite different. Indeed, they don't look like descriptions at all. So, for instance, the Daoist Daodejing is paradoxical, aphoristic, allusive and poetic.[54] This is because the world and its propensities are not fixed, cannot be pinned down, are contextual and therefore elusive to representation. Our thinking about this is work in progress, and we do not wish to create an STS based on the world of classical Daoism which has many analytical and political inconveniences. Nevertheless, we have been experimenting with Daodejing-inflected accounts of the British foot and mouth epidemic, and some of these look as much like aphorism as empirical story. The conclusion, then, is that in a Chinese-inflected STS the empirical might be quite profoundly unlike the current STS case study.

But there are also more straightforward potential methodological implications. For instance, Sun Tzu's Art of Warfare is one of the few Chinese classics to be found on the bookshelves of Western business schools.[55] For Sun Tzu military strategy was about maximising advantage by detecting and working with propensities/shi rather than against them. Once again subjectivities are on the move. Putting this logic into practice, a great general becomes someone who cuts an unheroic figure. He (always 'he') does not flaunt himself but turns himself into an invisible, subtle and flexible manipulator. He influences circumstances precisely in order to avoid battle. Indeed, in this world, slaughter in warfare is always a sign of failure. Applied to the 2001 foot and mouth epidemic the story that emerges is distinctive. The disease was eradicated, yes. But in this shi-inflected way of thinking the mass slaughter immediately

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[51] Bearing in mind the notorious dangers of orientalism, we appreciate that 'culture' might not be the most favourable candidate for thinking STS by other EASTS researchers (Fu 2013). Nevertheless, we mobilise the cultural resource of shi in order to treat it as a practical conceptual tool. Our object is to experiment with it to see how an alternative logic of practice might re-image Anglophone STS. See Lin (shi and STS manuscript) for an empirical examination of how to think about Chinese medical practices in terms of shi.

[52] The following discussion sketches the argument. See Law and Lin (Tidescapes manuscript) for details.

[53] Jullien (1995).

[54] Lao Tzu (2007).

[55] Sun Tzu (1993).

tells us that the strategy was catastrophic. Effective but, as Sun Tzu might have said, inefficacious and unwise. And the supposed heroism of the politicians? This simply underlines the fact that they were second-rate generals commanding a strategy that was equally flawed. There are, of course, many people in the UK who would agree with this for other reasons. But the shi-inflected story starts to tell the story in a different way.

Conclusion

In this paper we join the decades-long efforts of Taiwanese social scientists and the more recent endeavours of East Asian STS community by imagining the creation of a Chinese-inflected STS. As a part of this – indeed a precondition – we also hope that scholars in similar situations might be able to find ways of levering themselves out of the grip of the EuroAmerican analytical-institutional complex and its attendant epistemological foundationalism.[56] But the point of the present paper is not to suggest that the rest of the STS community should take up a Chinese-inflected STS. Most of us in the discipline (one of the present authors included) do not speak Chinese, and such an ambition would make no sense in other contexts. Instead our broader object is to suggest that STS is surprisingly parochial, and show that it is possible to 'provincialise' it by imagining it in different modes in different contexts.

We are not, then, proposing separation or intellectual barriers. Indeed, we believe that STS should be proud of its collective work. It has developed powerful tools for understanding and raising critical questions about technoscience practices. As a part of this it has developed a healthy theoretical pluralism. It has studied and questioned postcolonial knowledges and practices. But what it has not quite brought into focus is the way in which the discipline remains a creature of place and time. Of course it is not wrong that it started in EuroAmerica. Neither is it wrong that it is now English-inflected, and makes use of English language tools and sensibilities. But our argument is that it would be wise to make our terms of international analytical trade a topic in their own right. The issue is not the creation of national STSs, or the generation of hegemonies in other forms.[57] Rather it is to think about the implications of exploring what we have called 'postcolonial symmetry': the idea that our terms of art might not simply come from English-language EuroAmerica. To think about STS in ways that are indeed Chinese- or Spanish- or Hindi- inflected.

This will not be easy. STS is currently dominated conceptually, linguistically, bodily, metaphysically and institutionally by provincial EuroAmerican and especially English-language practices. But if we were to succeed then we would have created a plurality of intersecting STSs and sensibilities, and we would be able to say that we have undone the provincialism of STS.

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[56] Despite the current situation, there are ways of doing East Asian multiple in different knowing practices, see Lin and Law (East Asia multiple manuscript).

[57] The point is made by Anderson (2009, 394) who is drawing on Abraham's (2006) where he talks of the dangers of Hindu nationalism in India.

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