Tidescapes: notes on a *Shi* (勢)-Inflected STS[1]

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1. Introduction

This paper takes a Chinese term and asks what would happen if it were treated as a concept in STS. That term is *shi* (shì, 勢).

The answer comes in three parts. First and most obviously, STS would look different. To attend to *shi* (勢) would be to explore new and different questions about the *propensities of things*. Second, for reasons we will explore below, it would undo the relations between theory and case study in STS. And third, it would illuminate a troubling asymmetry between Taiwanese (or perhaps 'Chinese'[2]) and English-language STS. Thus despite sustained attempts to create alternatives modes of theorising,[3] STS theory mostly comes from the English-speaking world. Perhaps this is okay – STS grew up in Europe and North America – but perhaps it is not. For while STS is scarcely a major imperialist project in its own right, its intellectual terms of international trade nonetheless substantially reproduce dominatory forms of Euro-American ordering. This – or so we suggest – is in need of interrogation.

To make our argument we need to chart a course that avoids substantial terminological, conceptual and political difficulties. As is obvious we are writing in English, and Law has worked at the centre of STS for many years. Thus, though the paper is collaborative, it would be disingenuous not to recognise that it is written from a privileged intellectual and institutional location. There are many pitfalls here. Other difficulties have to do with terminology and scale. It is tempting, for instance, to draw on binaries such as 'North and South', 'East and West', 'Chinese and English' or (and differently) 'theory and data'.[4] Indeed it is nearly impossible to avoid doing so. But such binaries fall victim to what we might think of as the *temptations of scope*. For instance, they frame what it is to compare and contrast in a particular way.[5] They also generalise by homogenising each half of the opposition and overstating their separation.[6] So, for instance, 'China' and 'Europe' have long histories of asymmetrical exchange and each is

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[2] Taiwan has a long history of blending people of different ethnicities and their cultures, including immigrants from China at various historical conjunctures. Thus while Taiwan and China are separate countries, they share traditional Chinese culture. Written Chinese has been simplified in the People's Republic of China though not in Taiwan (The Republic of China). In this paper we use the traditional Chinese characters used in the classical texts and Taiwan and the term 'China/Chinese' refers to intellectual heritage rather than country.

[3] For example, the question of the distinctiveness of East Asian STS and theory has been continual concerns and issues in the East Asian STS community (Anderson 2012; Chen 2015; Chen 2012; Fu 2007).

[4] Some talk, indeed, of southern theory, or its analogues, see Connell (2007), Comaroff and Comaroff (2012). Others talk of the postcolonial, or East Asian STS. See, for instance, Fu (2007), Anderson (2012), Lin and Law (2015b) and Chen (2010) on Asian/Taiwan context specifically.

[5] See, for instance, Marilyn Strathern (2011) on the framings of highland Papua-New Guinea.

[6] There are substantial literatures on the use and misuse of binary categories such as 'North' and 'South' or 'Chinese' and 'European'. See, for instance, Anderson (2002), Kovach (2009), Smith (2012), Farquhar (2012a), Farquhar and Zhang (2012), Lin and Law (2014), Law (2015), Salmond (2014), Zhan (2009) and de la Cadena(2015).

internally heterogeneous.[7] Again, the term 'post-colonial' has many virtues but also has its drawbacks.[8] For instance, unlike Taiwan China was never substantially colonised, and the term also points to an important but specific tradition of critical work.[9]

Central to our endeavour is the issue of translation. *Shi* (勢) (roughly pronounced 'shrr') explores events by understanding their propensity to particular kinds of change. The term translates only poorly into the major Western languages. This is unsurprising. Questions of mis/translation are politically and analytically central to many disciplines including anthropology, history, pedagogics, Sinology and cultural studies.[10] In STS it is a cliché that to translate is to betray,[11] and recent work in STS has started to ask what would happen if terms drawn from Indo-European languages such as Dutch or Portuguese were taken into its English-dominated practice.[12] Drawing on Amerindian classifications, anthropologist Eduardo Viveiros de Castro notes that in translation the same word (homonym) refers to different objects – and different notions of relations or cuts – in different worlds. He calls this *equivocation.*[13] He adds that most equivocations are used without much thought, and that the differences in the realities to which they are referring simply get lost. Against this he argues that anthropology should control its equivocations and betray its own categories rather than those of the people it is studying. More generally, the idea that the vocabulary or the common sense of other cultures might be used to inflect anthropological reasoning has a long history (think of Mauss' appropriation of the Melanesian term *hau*.[14]) In particular, Marilyn Strathern has worked with a carefully reified version of the non-binary relationality of Hagen comparative reasoning in order to offer a sustained non-scalar reworking of English understandings of kinship.[15] In this paper we adopt a version of Strathern's logic to tell an STS story about a UK case in terms of a version of *shi* (勢). If there is a difference between this and Strathern's unsettling work, it is perhaps that to work collaboratively draws even sharper questions about the intellectual terms of trade. To oversimplify, it points to the possibility of 'Chinese' STS analyses of 'Western' phenomena.

But what might this mean in practice? The first answer is that purity and authenticity are out of the question. There is no pristine cultural past. There were always equivocations and syncretic

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[7] On: Japanese anthropology see Jensen and Morita (2012); rivers and property rights in New Zealand see Salmond (2014); pachamama and mountains in the Andes, de la Cadena (2010); and Chinese medicine, Farquhar (2012a).

[8] See Chen (2010) and 孫歌 (2011) for the complexities of thinking about/from Asia.

[9] See Hall (1996).

[10] See Chakrabarty (2000) , Verran (2001; Verran 2002) , Jullien (1995; 2004), Escobar (2008), Smith (2012), 孫歌(2011) and 楊儒賓 (2012).

[11] Callon (1986) and Serres (1974).

[12] See Mol (2014) and van de Port and Mol (2015).

[13] Viveiros de Castro (1998).

[14] Mauss (1990). For recent discussion see Salmond (2014).

[15] See, for instance, Strathern (1991; 1992, 2-11) and for recent discussion in an STS context, Jensen and Morita (2012) and Morita (2014).

patchworks, and the interchanges between the worlds of China and Europe go back millennia. So everything is a patchwork, though at least in English-speaking academia recent patchworks tend to look eclectic.[16] An STS- *shi* (勢) translation will obviously, then, both be and look impure. A second answer is that such patchworks are the product of unavoidably difficult judgements about what to betray and how. So for instance, in the present paper we have overturned the context from which *shi* (勢) comes in at least three ways.

- We have written an *academic paper*. Academic writing can be assimilated to Chinese practices of knowing[17] but this history is little more than 150 years old in China. Chinese traditions of knowing in the past more often worked through lineage, example, correlative paradox (zhèng yán ruò fǎn, 正言若反), and apprenticeship[18]. This difference extends to writing style which in classical Chinese philosophy was often aphoristic or took the form of anecdotes and suggestions from a possibly mythical past. So, for instance, the classical philosopher Lao Tzu (lǎo zǐ, 老子)[19] crafts ironies and contradictions to illuminate what lies between. In the present paper we experiment with a Lao Tzu-inflected style, but stay relatively close to most STS English-language academic conventions.

- We have inserted our argument into a particular *international network*. This is both an achievement and a form of violence[20]. Chinese knowing practice, for instance in medicine, has worked otherwise in the past and in some measure still does. It is situated and, as we have noted, transports quite differently in apprenticeship and a classic literary canon. This is partly because what is known about circumstances can only be known in those circumstances and does not readily transfer elsewhere. To write for an international journal is thus a second departure, albeit one that has been adopted widely and successfully in both Taiwan and the People's Republic of China. (In our own field the *East Asian Science, Technology and Society* journal is a case in point.) There are also many successful Chinese language journals. Nevertheless, to write in a Western English-language journal is to enact particular Western ways of knowing.[21]

- Third, we are implicitly claiming something about *truth*. In theory STS says otherwise, but in practice our academic writing characteristically enacts something like the possibility of representational truth. We warrant what we write in citations, while referees and readers ask whether what we have written counts as a reliable report. But in the world of *shi* (勢) truths don't work this way. First, as we have just noted, knowing

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[16] Wyatt and Balmer (2007) and Law et al.(2014).

[17] Lin (draft)

[18] See 錢穆 (1989), 牟宗三 (1983), 徐復觀 (1999) and Volker Scheid (2007) for instances.

[19] Transliterations of Chinese into English are variable. Lao Tzu appears as Laozi in some of our references.

[20] Latour (1987), Law (1986), Connell (2007) and Smith(2012).

[21] On Chinese ways of being international, see Lin and Law (2015a) and Lin (draft).

is about local circumstances and the world is always on the move.[22] Second, a point we explore below, the idea of 'truth' is displaced by something akin to 'efficacy' (gōng xiào, 功效). To insert *shi* (勢) into an STS truth regime is therefore to conceal an important *shi* (勢)-relevant Chinese reality.

These three stylistic asymmetries reflect the fact that we are deeply embedded in academic disciplinary structures.[23] However, by engaging in these mixtures we hope to shift the way STS is done in some small measure. Our concern is that current academic work in countries such as Taiwan, innovative, critical, and important though it is, also reproduces asymmetries that deserve exploration.[24] Our hope is that alternative Chinese or other less English-language provincial forms of STS might be more easily imagined.[25]

In other writing we have used Chinese criteria to reinterpret Taiwanese medical practices. We argued that the apparent subjugation of Chinese medicine by biomedicine is much less obvious if Chinese medicine is understood in its own conceptually correlative terms[26]: that what looks like domination within an STS framework turns into Chinese medical 'business as usual' when understood in this way. In what follows we shift the focus from Taiwan to the UK and use *shi* (勢) to reinterpret parts of the 2001 UK foot and mouth epidemic. The move to European material is deliberate. Though to put it this way implies a theory/practice divide that betrays Chinese sensibilities, following Strathern and authors such as Farquhar, Jensen, Blok and Morita[27], we want to show, as we have indicated above, that it is possible to *reverse the terms of trade* by translating Chinese terms and using them to understand European materials.

In what follows we tell three brief stories about foot and mouth disease. The first is a quick and standard STS empirical summary that acts as context for what follows.[28] The second is a non-standard attempt to write a 'light' and non-explanatory *shi* (勢)-inflected account of a foot and mouth episode in a manner that reflects the concerns of the classical philosopher Lao Tzu. And the third is an even less standard narrative, again Lao Tzu-inspired, written in a mode that mimics his aphoristic normativity. The notion of *shi* (勢) is widespread in many contemporary Chinese and Taiwanese practices (for instance in Chinese medicine), but in our text we draw on Chinese classical philosophy. First we borrow from Sun Tzu's, *The Art of Warfare (孫子兵法)*, to

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[22] A thought that is obviously well-rehearsed in another mode in STS. See Haraway (1991).

[23] For discussion see Smith (2012), Law (2016, forthcoming).

[24] See Law and Lin (2016).

[25] Chakrabarty (2000). But there are also dangers if such projects are themselves pressed with hegemonic intent. See Chen (2010) for the case of Taiwan and 孫歌(2011) and 葛兆光 (2014) for the case of Chinese imperialism and essentialised 'Chineseness'.

[26] Lin and Law (2014), and Lin (draft).

[27] Farquhar and Zhang (2012), Jensen and Blok (2013), Jensen and Morita (2012).

[28] It is not a proper STS empirical account because it draws on previous STS literature. See, for instance, Law (2006).

comment on the UK's attempts to control the disease. Since parts of Sun Tzu's logic fit easily with European common sense this is an easy way of introducing *shi* (勢) as *strategy*. But at Lao Tzu's hands *shi* (勢) becomes a form of *knowing* and a way of *living* far removed from that common sense. We explore this by discussing parts of the seminal Daoist text, the *Dao de jing (道德經)*. We conclude the paper by considering the limitations and implications of our proposal.

A final preliminary observation. The paper is an experiment to see what a *shi* (勢)-related STS might look like. Other ways of thinking about *shi* (勢) in STS are possible and might be better, and there are obviously endless other Chinese (and non-Chinese) ways of thinking that might equally be mobilised in multi-lingual forms of STS. Though we hope our proposal has merits, we are therefore less concerned with whether our particular use of *shi* (勢) is successful than in showing that more symmetrical forms of STS can be imagined.[29]

Stories about foot and mouth (1): a brief standard account

Foot and mouth disease is out there in much of the world but it is not endemic in Europe. So it was a shock when it was discovered in an abattoir in Essex on February 19th, 2001. An infectious notifiable animal disease not seen on a large scale in the UK since 1967, it attracted immediate large-scale state action and intervention. Movements of animals were halted, and state veterinarians traced the disease to a pig farm close to Newcastle-upon-Tyne. The farmers should have reported the infection but they hadn't, and it had been going on for weeks.

Further investigations found almost sub-clinical signs of infection on neighbouring farms. One of the neighbouring farmers, suspecting nothing, had sold a few of his sheep. These had been mixed with nearly 25,000 other animals, gone to auction, had been bought by 181 farmers and been transported to farms all over the UK. The result was a major disease outbreak. Within three weeks there were infections on 67 farms and by the time the epidemic was brought under control in September 2001 over 2000 farms had been infected. More than six million animals had been slaughtered in large part to prevent further infection, and the disease had cost around £6bn.

This was a national emergency. Government ministries took control. There was no thought of vaccination. Instead, the slaughter policy went through several iterations. There was political pressure since this was major headline news. The numbers of infections grew very fast through March and April. Burning pyres of animal carcasses were on the television news every night. There was also farming pressure for a quick response. And, in the heart of government rival epidemiological models lined up with political disagreements about how to handle the crisis.

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[29] For more extended discussion of 'post-colonial symmetry' see Law and Lin (2016).

The story of policy change is complicated and there were important regional and national variations, but roughly it ran so. Initially animals on infected farms were killed and those on neighbouring farms were watched. From 15th March, as the epidemic grew, sheep on neighbouring farms in the major epicentre of the disease were also killed. But still the number of infections went on rising. At this point insider administrative conflicts and the differences between epidemiological models became important. Some (and one of the models) said that the epidemic was under control. It was just a matter of waiting and the numbers would drop off. Others (and the other major model) said that the epidemic was still growing, and that if it was to be stopped then all the animals on neighbouring farms needed to be slaughtered. The need, then, was for a major escalation. The latter argument prevailed, and on 27th March policy changed. The result was a large increase in killing, except in Scotland where the guidelines were interpreted differently and culling was conducted round the overall edge of the infected region rather than round each farm.

A few terrifying and distressing weeks passed and then the epidemic peaked and slowly started to decline. At this point the policy of slaughter was somewhat relaxed. However, even after the epidemic ended the arguments about policy, epidemiological models, the perceived incompetence of the slaughter, and the general effects on rural communities continued. The pain went deep. And, though this is controversial, the statistics quite strongly suggest that the big increase in killing was indeed unnecessary: that the disease would have been controlled without this escalation.[30]

2. *Shi* (勢) as Strategy: thinking from Sun Tzu

Flexibility

The brief account of foot and mouth tells us that it flooded the UK. But what happens if we think about this in a 'Chinese' manner by drawing on Sun Tzu's *Art of Warfare*? One answer is that it resonates with the fluid metaphors that run through his writing:[31]

> '[w]ater configures its flow in accord with the terrain.'[32]

Writing for King *Ho-lu* of *Wu* (吳王闔廬) in the warring states period about 500 BCE, the author advises his prince at a time of great instability in China, that like water, an army should be able to change its form as circumstances demand:

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[30] This argument is explored in Law (2008).

[31] This has been translated many times into English. We use several translations in what follows, as well as the original (itself variable) Chinese text. Most often, however, we depend on Roger T. Ames' 1993 translation. See Sun Tzu (1993).

[32] Sun Tzu (1994, Chapter 6, 193ff).

'the army controls its victory in accord with the enemy. Thus the army does not maintain any constant *shi* [勢, strategic configuration of power]'[33]

So here is a first Sun Tzu-inspired question. *Was the 2001 foot and mouth strategy sufficiently flexible?* As we have seen, this evolved as the epidemic progressed, and there were smaller variations between different locations as well as in Scotland. But policy-making was also centralised. People in the regions were given little room for manoeuvre. There was a strong in-principle presumption that there was a single optimal policy, in part because policy depended on epidemiological models. There were several of these – another sign of flexibility – but a Sun Tzu-informed sceptic might note their similarity. Each combined a 'spatial kernel' (a link between distance between farms and the likelihood of disease transmission) with 'heterogeneities' (other factors reflecting differences between farms.) This suggests a fixed framework for understanding the conditions for transmission, and by implication the appropriate strategy for fighting the disease.

Does any of this sound like Sun Tzu? His enthusiasm for the flexibility of propensity or *shi* (勢) suggests that this is unlikely.

Fluidity

So what of fluidity? At the beginning of *The Art of War* Sun Tzu writes:

'.. to gauge the outcome of war we must appraise the situation on the basis of five criteria … [bringing] the thinking of people in line with their superiors, … climate, … terrain, … command, and … regulation.'[34]

Read simply, this says that an accurate understanding of context is needed, that some things are fixed, and others are manipulable. Again in this reading, things are heterogeneous: cultural, natural, and various mixes of the two. Perhaps this explains why Sun Tzu travels easily into English language policy applications. The 'heterogeneities' of the models included climate, terrain and different animal species, while the policies for control reflected these together with command and regulation. But if this sounds like Sun Tzu, it is also an equivocation that betrays *shi* (勢) by resting on two binaries: between *homogeneity* and *heterogeneity* on the one hand; and the *fixed* and the *malleable* on the other. Neither is appropriate. We will return to the second below, and simply note here that the homogeneity/heterogeneity divide didn't exist in Sun Tzu's world. Things were neither pure nor impure. [35] This means that to say, as actor-

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[33] Sun Tzu (1994, Chapter 6, 193ff).
[34] Sun Tzu (1993, 103).
[35] As an example, the 'nature/culture' binary does not exist in classic Chinese philosophy or practice, and there are large literatures on this. See, for instance, Hall and Ames (1995; 1998), Farquhar (1994), Scheid (2008), Sivin (1987), Kuriyama (2002) and 楊儒賓 (1996). Indeed this division seems to be a rather particular invention. See, eg, de la Cadena (2010), Escobar (2008), Haraway (2007) and Verran (2002).

network theory might, that strategy is 'heterogeneous' is also misleading.[36] The propensities of different things take their shape in continuous and varying intersections and relations. The *shi* (勢)- relevant English-language metaphor we need for context will have much more to do with *fluidity* than heterogeneity.

Subtlety

And what of strategy?

> 'The expert at battle seeks his victory from *shi* (勢, strategic advantage) and does not demand it from his men. He is thus able to select the right men and exploit the *shi* (勢). He who exploits the *shi* (勢) sends his men into battle like rolling logs and boulders.'[37]

Strategy is about positional relations and these are always on the move, so strategy is situated too. It is also crucial to minimise the cost of warfare.[38] This demands total foreknowledge of the ten thousand things (*wan wu*, wàn wù, 萬物).[39] The general knows how they are positioned and (crucially) how they will *move* in relation to one another. This leads to the most distinctive feature of Sun Tzu's strategic doctrine. This is the idea that artful early manipulation of small things will secure major subsequent advantage as they move in relation to one another.

> '… a victorious army is like weighing in a full hundred weight against a few ounces … it is a matter of strategic positioning (hsing, xíng, 行) that the army that has this weight of victory in its side, in launching its man into battle, can be likened to the cascading of pent-up waters thundering through a steep gorge.'[40]

Flows are channelled by manipulation, not brute force.

> 'To win a hundred victories in a hundred battles is not the highest excellence; the highest excellence is to subdue the enemy's army without fighting at all.'[41]

So how does 2001 policy making look in this respect? Again there are various answers. Perhaps the first policy of slaughtering on infected farms and watching adjacent farms counts as efficient strategic moderation, but killing all the animals on adjacent farms surely doesn't: it magnified the number of battles, and if it was about multiplication then it happened late in the day and it wasn't efficient. Perhaps it is a little easier to imagine Sun Tzu recommending preventative

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[36] Though it fits better with Latour's (1988a, 162) suggestion in *Irreductions*: 'Nothing is, by itself, the same as or different from anything else.'
[37] Sun Tzu (1993, 120).
[38] Sun Tzu (1993, 107).
[39] Sun Tzu (1993, 169). See Farquhar and Zhang (2012) for contemporary hybridized manifestations in nurturing life in Beijing.
[40] Sun Tzu (1993, 116).
[41] Sun Tzu (1993, 111).

vaccination round infected areas – or indeed the Scottish policy in which animals were only killed on farms at the overall edge of the infected region. Or, and yet again, perhaps he would have resisted the EU 'no vaccination' policy for as he also said:

> 'the best military policy is to attack strategies.'[42]

Surely if slaughter is a way of attacking viral strategies, vaccination is a lot less costly. Then again, it is also possible to imagine him shaking his head at an agriculture dependent on the long-distance transport of animals or, and differently, on huge foot and mouth disease-free areas in a world in which other regions harbour the disease. It is difficult to imagine that Sun Tzu would have been impressed by the instability and vulnerability of such an agriculture.

3. *Shi* (勢) in the *Dao de jing*

Flexibility, position and relation, and strategy as manipulative amplification, all this makes sense in present day English-language academia, and this is why we start our discussion of *shi* (勢) with *The Art of Warfare*. But to translate *shi* (勢) in additional ways – and in particular to understand it as fluidity, we need to know more about the context of the term. We need to borrow from Lao Tzu.

> 'Tao gives birth to one,
> One gives birth to two,
> Two gives birth to three.
> Three gives birth to everything. [ten thousand things; 萬物][43]
>
> 'See the Simple and embrace the Primal,
> Diminish the self and curb the desires.'[44]

These citations come from the *Dao de jing* which was compiled by the possibly apocryphal Lao Tzu.[45] This work offers a vision of the cosmos[46] and a way of living, the *Dao* (dào, 道), which renounces complexity in favour of 'way-making' simplicity. The world view that it articulates has much in common with *The Art of Warfare*. Both recommend simple action, Lao Tzu talking of *wu*

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[42] Sun Tzu (1993, 111).
[43] Lao Tzu (2007, Chapter 42, 62ff).
[44] Lao Tzu (1989, Chapter 19, 39ff).
[45] There is dispute over the chronological relationship between Sun Tzu and Lao Tzu. The commonly accepted view is that Lao Tzu preceded Sun Tzu, but there is also evidence that the *Dao de jing* was an expansion of Sun Tzu's military ideas into philosophy and politics (何炳棣 2013, 185-284).
[46] Hall and Ames (1995) resist the notion of a Chinese 'cosmology' with its Greek overtones of a complexity ruled by an underlying order.

wei (wú wéi, 無為), roughly translatable as 'doing not doing'[47], and both imagine the world as *flows*.[48] Crucially, however, these are *proper* forms of flow:

> 'The highest form of goodness is like water. Water knows how to benefit all things without striving with them.'[49]

Crucially, good flows course not simply in one direction but move to and fro:

> 'Return is Tao's motion. Yielding is Tao's practice.'[50]

The *Dao de Jing* predates the formal elaboration of *yin* (陰) and *yang* (陽) but its sensibility is similarly cyclical. Importantly, the ebbs and flows are non-dualist because the opposites are rooted in one another:

> 'Heaven's way (tiān zhī dào, 天之道) is like stringing a bow: drawing down the higher, raising the lower.
> Possessing abundance? Diminish it. Not enough? Supplement it.
> Heaven's way reduces surplus and supplements insufficiency.'[51]

Movements are continuous but at the same time circumstances never repeat themselves. Self-organising, movements are not driven from outside. Immanent and underdetermined, they emerge in particular ways in particular contexts and are shaped by those caught up in them. At the same time, as the citation above suggests, the *Dao de jing* tells us that left to their own devices things will find an unfolding and shifting equilibrium, balance (zhōng, 中), or harmony (hé, 和) ('heaven's way').[52] For both Sun Tzu and Lao Tzu the art is thus to know both how things will move within those flows, and how to respond well to these cycling shifts.

In this cosmology things shape and displace themselves, web-like, in relation to one another, a sensibility that has resonated in the academic imagination since the invention of systems ways

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[47] 'The softest things in the world rise roughshod over the hardest things. Only the least substantial thing can penetrate the seamless. This is how we know that doing things noncoercively (*wu wei*) is beneficial.' (Laozi, Ames & Hall 2003, Chapter 43, 145ff).

[48] 'The great Dao (道) is universal like a flood. How can it be turned to the right or to the left?
All creatures depend on it, and it denies nothing to anyone.' Lao Tzu (1989, Chapter 34, 69ff).

[49] Lao Tzu (1989, Chapter 8, 17ff).

[50] Lao Tzu (2007, Chapter 40, 59ff).

[51] Lao Tzu (2007, Chapter 77, 113ff).

[52] 'As an analogy to describe way-making [*Dao*, 道] in the world: The small creeks flow into the rivers and seas.' Laozi et al. (2003, 127). Many terms in the *Dao je jing,* including 和 (harmony, e.g., Chapters 2), 一 (yī, one/oneness, e.g., Chapters 10) and 中 (balance, e.g., Chapter 5), imply the harmony of the original Oneness (一) of *Dao,* virtue, or balanced status. Our tidescape neologism fits the flow metaphor (see note 51), though with some reservations (see A *Shi* (勢)-inflected STS below) we also talk of 'balance'.

of thinking and is reflected in parts of STS such as actor-network theory. But what is *not* shared in that tradition is the additional sensibility to patterned change as ebb and flow. If we are to understand *shi* (勢), propensity[53], this is crucial.[54] This becomes a matter of (local) disposition, direction of movement or change, predilection, inclination, all within non-dualist immanent and non-repeating ebb and flow changes that tend to fill and empty, grow and contract, or expand and withdraw. As a part of this it is also about the moving tendency of all things to seek shifting balance and subsequent rebalance. It is to appreciate the world as a constantly changing but non-dualist *tidescape* (xíng shì, 形勢): that is, as a patterned but never exactly repeating movement of flows and counterflows.[55]

So what is it to *act* and act well in this world? The answer is it is to follow the *Dao* (道) by cultivating sensibility.[56] You sense how the different propensities in the ever-changing field of experience might be appropriately fitted together. Action is never heroic. It is best to be quiet. Doctrines, cleverness, rites and politicians – these appear when the simplicity needed to sense and act on the changing propensity of things is lost.[57] This is *wu wei* (無為) again, the 'doing of not doing' by responding to propensity, *shi* (勢), and assimilating, reflecting and incorporating this in a way that works productively across the pattern of changes and 'follow[s]… their natural acuity'.[58] For Sun Tzu, more practical or perhaps more Machiavellian, it becomes the manipulation to secure multiplication discussed above. The good commander works quietly (*wu wei*, 無為) with propensities (*shi*, 勢) to secure advantage.

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[53] This term is explored at book length by François Jullien (1995).

[54] *Shi* (勢) is not the most common term used to explore manifold implications of the *Dao* (道). Nevertheless, as we saw above, for Lao Tzu (1989, Chapter 51, 105ff):
'Tao gives them life,
Virtue nurses them,
Matter shapes them,
Shi [勢, Environment] perfects them.'
Shi (勢) is therefore central and we mobilize it to explore the empirical manifestations of the *Dao* (道). In the lineage of Chinese classics, it is the legalists (法家) such as Han Fei (韓非子) and especially Xu Shen (許慎) who particularly elaborate the concept of *shi* (勢).

[55] In Chinese 'tidescape', (形勢) combines *hsing* (行/形) (form and condition) and *shi* (勢) as applied to water in both *The Art of Warfare* (e.g., Chapters 4) and the *Dao de jing* (e.g., Chapters 8). The changing propensity of things is like the configuration of the water's flow and tendency. We intend the metaphor without the additional Western assumption that tides are a function of external forces.

[56] Laozi et al. (2003, Chapter 21, 107-109).

[57] Laozi et al. (2003, Chapter 18, 103ff).

[58] Laozi et al. (2003, Chapter 27, 118ff).

4. *Shi* (勢) as Knowing

So what does this large *shi* (勢)-relevant context suggest for academic ways of knowing?

In one way the question is a non-starter: the *Dao de jing* famously rejects erudition[59]: it doesn't accord with the simplicity of the *Dao* (道) and may stand in its way.[60] We touched on a further difficulty in the Introduction. As François Jullien observes, the notion of 'truth', the idea of reliable representation of something elsewhere, makes little sense.[61] Large scale causal or explanatory schemes, epics and grand narratives don't work either.[62] If things are situated and specific and there are no causes or teleologies then the distinction between theory (the art of enunciating these as generalities) and practice melts away.[63] So what replaces or displaces these? As we also noted earlier, the answer is: *shi* (勢). *Sensing shi* (勢, disposition or propensity) replaces erudition. The *efficacy* (功效) of *shi* displaces truth. *Shi* (勢) is traced *locally* by examining and sensing circumstances without being pinned to claims about larger causal schemes. Rather than asking about the quality of representation, the question rather becomes: was the diagnosis (tǐ chá, 體察)[64] effective? Which means, did it operate with the tensions and the possibilities of *shi* (勢)?

So what might this signify for a discipline such as STS if we ignore what the *Dao de Jing* says about erudition? To explore this we offer a second foot-and-mouth story.

Stories about foot and mouth (2): lightness, efficacy, imbalance

Mr Waugh farms his pigs near Newcastle-upon Tyne. And his brother isn't well. He's going to and fro from the doctor. And the farm is doing poorly too. Bad prices for the pigs. Wait and see what happens if they don't get sold straight away. See if the price gets better.

And then working singlehandedly (the brother being so poorly), it is hard to keep things going. Feeding the pigs, cleaning them out, keeping the boars and the sows separate. The state vet calling round and complaining about the welfare of the pigs. Next time if there's something wrong it will go in the records. That the welfare of the pigs isn't being looked after.

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[59] Laozi et al. (2003, Chapter 81, 203ff).
[60] Laozi et al. (2003, Chapter 18, 103ff).
[61] Jullien (1995, 18, 75).
[62] Jullien (1995, 211).
[63] Jullien (1995, 38).
[64] Sensing propensity is not a matter of explicit knowing or control, but an implicit diagnosis of the timing and opportunity of the unfolding of tidescapes (形勢). It rests on cultivated experience, which makes it tempting to talk of 'tacit knowledge'. However we avoid this term because sensing propensity has as much or more to do with affect or comportment as with knowledge in a European sense (Farquhar 1994, 134; Farquhar 2012b; Jullien 2004, 46-83).

And then there is the feeding. Into the van. Off round the schools and the restaurants. Buckets of catering waste. Heave them up. Heavy. Dirty. Stinking. They need to be boiled. That's what the law says. But time is short. So no boiling. It's only a small shortcut. Straight into the barrows with the feed. Round the farm. The pigs get hungry. They eat greedily. Ah, good, more slop! But then again, the pigs are getting poorly too. Dribbling. Off their food, a lot of them. Lame. They've got something. They're all catching it. But they've been poorly and recovered before. Let's hope everything works out.

Lightness

How to tell stories in a *shi* (勢)-related STS? The answer is: this has to be invented. And with this second interlude we start to experiment with mixing modes of description. Pulled between the referential narratives of STS and the correlative epigrams of Lao Tzu, we need to imagine ways of writing that might be at least partially recognisable to both. Our first thought is that *crafting small but exemplary descriptive stories* might be one way of doing so. To think about this better let us return for a moment to the *Dao de jing*.

> 'Though vague and indefinite,
>
> There are images within … [the *Dao* (道)].
>
> Though indefinite and vague,
>
> There are events within it.
>
> Though nebulous and dark,
>
> There are seminal concentrations of [energy, 精] within it.'[65]

Treated as methodological advice this suggests that we might look for 'images', 'events' and 'seminal concentrations of energy'. And this is what we have attempted in this *light and locally referential relational narrative patchwork*. STS knows about contexts and relations, but STS stories also take us to causes, teleologies or networks that lie behind the visible.[66] The STS project is to uncover deeper truths but, following Lao Tzu, this is a decomposition we have here tried to refuse – or at least to water down. This becomes visible if we ask what this patchwork is 'about'. It *might* be about the beginning of the foot and mouth outbreak, so tugging us to an STS-shaped and causally referential decomposition. But it might be about difficult lives and their problems. This account, then, is an attempt to write *lightly* and move across the surface without asking too many deep questions. It is an attempt to recognising the propensities of things *within* it rather than looking behind or beyond it. It is to move within the world – or the worlds – of Mr Waugh. It is to attend to a man who is sick; to where you drive to get feed for your pigs; to

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[65] We have substituted 'energy' for '*qi*' in this translation which comes from Laozi et al. (2003, Chapter 21, 107ff).

[66] Though actor-network theory and its successive projects propose an infra-physics rather than a meta-physics (Latour 1988b; Mol 2002)

struggle in adversity; to the price of a pig; to being a small farmer; or to being very, very tired and overworked.

Efficacy

This way of thinking opens possibilities that are not so relevant to the chase after causality, teleology, or network. But then we need to look for Lao Tzu-like *simplicity* too. The Waughs are exhausted, sick, selling at a loss, and faced with hungry pigs. How do they act? The answer is that *they tend to take the line of least resistance*. This is simple. Does this mean it follows Lao Tzu? The answer is 'no'. To see this we need to confront a seeming paradox. This is the fact that the behaviour of the Waughs is simultaneously lazy *and* it takes a great deal of effort to keep the old patterns stable when the latter actually want to change. Then we need to remember that for Sun Tzu or Lao Tzu description is not just – or mainly, or perhaps even at all – a representation of something that happened. It is a form of *advice*, an *exemplary* advisory story.[67] Such is the point of our locally referential narrative. This is a patchwork that isn't just about what was going on. It is also about what was *not* going on but should have been. *Shi* (勢)-relevant action would have been simple action that was also efficacious. It would have been action *responsive to contextually shifting patterns of immanent necessity* implied in the tidescape. It would not have rested on the boundary we discussed earlier between that which is given by context, and that which is manipulable.

This tells us that efficacious action is *not* the same as successful action. There are successful actions that are not efficacious (like the brutal policy for foot and mouth eradication.) Efficacious action works with less disturbance. It does not fix things, for to do so generates obstacles. It does not focus on a single dimension. Instead it responds to the fluidity of propensities and weaves these together in ways that are productively in balance.[68] Lao Tzu calls this 'heaven's way' (天之道), sometimes poorly translated as 'harmony' when it is rather about ebbs and flows. 'Harmony' can't be imposed. When things are allowed or encouraged to follow their propensities then the flows will balance themselves.[69] The implication is that a *shi* (勢)-inflected STS will be one that judges the efficacy (功效) of action. But how will it make that judgement?

Our locally referential relational patchwork offers three clues. One, the actions of farmers were inefficacious. Simple and lazy they may have been, but as we have just seen, it took inordinate effort to resist propensities. Two, as a part of this they also carelessly changed the composition

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[67] For a related argument about interference see Haraway (1991[1976]).

[68] Jullien (2004). This attention – and inattention – to propensity is also visible in, for instance, the difference between biomedical chemotherapy and the approach to cancer in Chinese medicine. See Lin (draft).

[69] To return (fǎn, 反) or to 'do not doing', *wu wei* (無為) is to return to 'heaven's way' by letting things spontaneously create and transform themselves and one another (*ziran*, 自然). See Laozi et al. (2003, Chap 25, 115ff and Chap 51, 156ff).

of local propensities. *Wu wei* (無為) this was not. And three, this carelessness was to lead to their own destruction, whereas efficacious intervention would not have done so. Like stupid generals they tried to stem an overwhelming flow rather than seeking to use that flow. They were insensitive to the propensities of relevant things

Imbalance

But then sometimes taking the line of least resistance does not lead to disaster. So what was special about this farm? The answer will take us to imbalance.

To think about this in a *shi* (勢)-related way we again need to avoid large scale causes or teleologies and look at the situated patchwork of the farm, the patterns of local propensities, and the tidescapes being expressed in those propensities. How to do this? Again we need to experiment, but one way is to ask what is flowing. Answers will include feed, pigs and money. The farm's character as a small enterprise demands their circulation, together with a whole lot more, including air, water and waste, market intelligence and official paperwork.

How well does this world of circulation map onto a sensibility of ebb and flow? Since accumulation forms no part of Lao Tzu's world view, and cause or telos are closely linked to economic metaphors this is an equivocation that is only partially controlled. Indeed, there are alternatives: we might, for instance, turn to *yin* (陰) and *yang* (陽). Nevertheless, the farm might have been in balance if feed had ebbed into pigs, and pigs had flowed first into increasing bodyweight and then ebbed into slaughter and money which had flowed into the wallet of the farmer and then ebbed back into feed. In this way of thinking the farm would have been a tidescape (形勢) with returns, and moving balances and things with propensities, *shi* (勢), here and now, because this was in their situated nature, *ziran* (zì rán, 自然).[70] It would have been a set of changes and complementary counter-changes. But this was not happening because the pigs were growing but not flowing from the farm, and money was not coming into the farm either. The flows had been interrupted.

Before we move on, note that individuals in the patchwork such as pigs or farmers do not themselves *have* propensities. This would imply the operation of somewhat stable background causes. Instead propensities are embedded in the local situation. We need to look for *shi* (勢) in (this)pig-and-(this)feed-and-(this)farmer-and-(this)market-and-(this)size. We are close to actor-network theory here, but also not, both because the latter decomposes, but also because it does not share the concern of a *shi* (勢)-inflected STS with balance or tidescape (形勢), or attend to contextually unfolding patterns of immanent necessity. There is no *shi* (勢) in ANT.

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[70] This is surely a key component in a *shi*-inflected STS (楊儒賓 2014a). We hope to explore this in the future.

With this thought, we move to our third experimental story.

Stories about foot and mouth (3): normativity and blocking

Dao gives things life. Virtue nurses them. Matter shapes them. *Shi* (勢) perfects them. The Waughs' farm formed the propensity for foot and mouth disease to flow with the ten thousand things.

From one pig to another, from pigs to sheep, and from farm to farm. What is it? Scientists can say it is a virus, the farmers find sick animals, the media hunts for striking images, the village finds itself confined and helpless, while epidemiologists and policy makers are called upon to control it.

Everything has its propensities. But viruses, fears, information, knowledges, animals, people, everything is now flowing at different paces and in different directions.

How to stop this and move back to ebbs and flows? No transportation, no contact, no regular flows any more. Is this heaven's way of benefiting without harming? (天之道利而不害) The answer is that we don't know. Slaughter is the last measure. Massive and radical, it is. Everything is halted. Life, love, fortune, peace and harmony. A brutal victory is a funeral (戰勝以喪禮處之). Indeed.

Waxing and waning. Flowing and ebbing. Halting the movement of the tides. Living with the ever-stronger changing tidescapes (形勢) of technology, markets and food production of the 21st century. The UK is not a simple country with a small population (小國寡民). The piled-up carcasses and the flames strike at us as well as the enemy. How many more drastic measures are we prepared for in the future? How might we live a life with or without the farms that have such propensities? Is it possible not to fight the disease but to live with its changing propensities? Has the epidemic also arrested the tidescapes (形勢) of our previous knowledge and strategies, the conventions we have drawn on before? Are we efficacious?

There are still lessons to be learned.

5. Shi (勢) as Living: Diagnosis

This third story combines empirical STS and *shi* (勢)-like normative epigram.[71] Again it is a moral referential tale. But here the experiment is different because it draws on language from both British official documents and Lao Tzu. It also follows the *Dao de jing* with its questions and paradoxes, and it does this in order to resist the decomposition that precedes the discovery of principle embedded in Western STS story-making. Finally, it is a moral tale too, one that is not general but specific and situated.

We appreciate that there is much at stake here. No doubt tinkering with English-language academic traditions of empirical description is not something to be lightly done. It's all, one might say, a matter of balance. But while we can tell a referential STS story about foot and mouth disease (as in our first story) if we follow Lao Tzu such a description is both too much and too little. It is too much because it reflects principles or patterns of cause and effect. And it is too little because it is not light enough to understand the disease as an expression of contexted and immanent flows and counterflows. And it is this sensibility that generates a shi (勢)-sensitive normative or diagnostic description. As in Chinese medicine, then, an examination will characterise particular and situated to-and-fro flows, a specific tidescape (形勢).[72] And then it will raise the question: is what we can see here and now an effect of moving balance, of continuing ebb and flow? Or were the flows out of balance, disrupted? And if so how?

Looked at in this way we need to say that the farmers carelessly and inefficaciously changed the balance of propensities on the farm. Then we need to add that to blame them for the catastrophe is to fight flies rather than tigers. Two points. One, the ground for the flows of foot and mouth disease was a slope – indeed a precipice – made by many. And two, if the farmers did not cause the problem then the epidemiologists and policy makers were not the people who solved it. For they, like the farmers, also violated the propensities of things. It's like this. Too much effort and simultaneous laziness disturbed the balanced flows of the farm and brought the disease in the first place. But the epidemiological models were just as effortful and idle because they exerted themselves to make general predictions while erasing many, often most, of the specificities of farms and regions.[73] National policy was similarly effortful and idle because it tended to treat infected areas in the same way. And the policy outcome, large scale slaughter, followed the same pattern too, dealing indifferently and at vast cost with completely different

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[71] In the *Dao je jing* many terms used to describe *Dao* (道) and virtue, such as *ziran* (自然, e,g., Chapters 17), *tender/soft* (柔, e.g., Chapters 10) and *weak* (弱, e.g., Chapters 3) are also normative (王淮 1998; 牟宗三 1983; 袁保新 1991; 陳鼓應 2008; 楊儒賓 1987; 劉笑敢 1997).

[72] Hsu (1999), Farquhar (1994) and Scheid (2014). Note that in Chinese medicine the flows are specific to context which includes the physician. .

[73] Law (2009).

ways of living and farming across the nation. It was effective, yes, because the disease was eradicated, but it was utterly inefficacious.[74]

So this is normative and it is also therefore a matter of action. For an account of *shi* (勢) and tidescape (形勢) is also a form of advice. If a slope has been produced in an ebb and flow then perhaps we simply need to fold our arms and recognise that even catastrophic propensities cannot be resisted. But it is different if the precipice was a product of artifice, of all-too-clever attempts to resist tidescape (形勢), or of heroic action to resist the movement of things and sustain a state of imbalance. Then the diagnosis becomes quite different. Its normativity is self-evident.[75] It is bad. In short our referential tale embeds a *diagnosis (體察)*. The principle of things (wù lǐ, 物理, Western physics) and normative principles (lún lǐ, 倫理, Western ethics) are not separated. The story is *value-laden*,[76] and it tells us that the ebb and flow of the disease was arrested internationally, kept out of the UK. Of course the policymakers had their reasons.[77] But if there was *no flow of disease,* then there was *no ebb and flow*. And the consequence? A precipice, such that when the flow started it carried everything before it. This is not heaven's way.

What follows? In practice we cannot go back to the past and live in a simple country as Lao Tzu might have suggested. The United Kingdom in the 21st century cannot return to the oneness of the *Dao* (道) of Lao Tzu's time. There are artifices and propensities in the form of technologies, knowledges, and complex ways of farming. We will find flows that are imbalanced. But what thinking through *shi* (勢) suggests is the importance of: imagining new ways of making room to live with the ten thousand things (萬物); understanding that things are not simply heterogeneous – not simply 'social' and 'material' – but *ziran* (自然)-like such that there is no possibility of such separation in the first place; detecting and manipulating imbalanced propensities in the ten thousand things (萬物) rather than fighting them; thinking less about finding definite causes, tracing networks, or finding theoretical and predictive models; and

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[74] Jullien (2004, 120-136).

[75] 'Possessing abundance? Diminish it. Not enough? Supplement it. Heaven's way reduces surplus and supplements insufficiency.' (Lao Tzu 2007, Chapter 77, 113ff) We cited this already. It also tells us is that artifice will never work, not in the long run.

[76] *Shi* (勢), the empirical manifestation of *Dao* (道), and *ziran* (自然) both have normative (倫理) implications. Before the translation and institutionalization of Western disciplinary categories in the late 19th century, the physical objects and norms were not separated in Chinese thought (楊儒賓 2014a; 楊儒賓 2014b).

[77] Diseased animals are less productive. This is costly. For poor farmers with 'unimproved' animals this may mean starvation. For farmers in a country like the UK with engineered animals and large amounts of added agrofeed it means smaller profits.

instead feeling, detecting and following the local and immanent tendencies of things as these pulse and flow.

6. A *shi* (勢)-inflected STS

We started by saying that for Sun Tzu strategy becomes *manipulation*, *wu wei* (無為), and we noted that his interest in manipulative multiplication and aversion to the cost of brute force translates easily into English. Following this we have explored description, theory, knowing and normativity in a possible Chinese STS by translating between Lao Tzu's *Dao de jing* and some standard STS conventions. This attempt to control equivocation has suggested the following for a *shi* (勢)-inflected STS:

1. Rather than describing things it will tell of *things-on-the-move*. It will deal in relationally and *immanently generated but shifting vectors*, with *shi* (勢), rather than with objects.
2. Knowing that movements take the form of non-binary counter-flows, it will seek *tidescapes* (形勢) and their flows and counter-flows whilst avoiding dualisms.
3. Being sensitive to movements of increase and decrease and to their *balance* (中), it will ask if they are balanced (heaven's way, 天之道), or whether they have been blocked.
4. It will distinguish between *effectiveness* and *efficacy* (功效), privileging the latter. Effectiveness can be measured from outside, but efficacy (功效) lies in its own unique course of unfolding and cannot be generalised.
5. It will therefore be *diagnostic* (體察), searching for flows and inappropriate blockages, distinguishing between effectiveness and efficacy, and suggesting contexted interventions.
6. Its descriptions will also be *normative expressions*, diagnoses of balance and imbalance, or efficacy (功效) and inefficacy.
7. Pure description and theory will evaporate, for there is nothing behind what there is. Instead, *paradoxical* (正言若反) *fable* may become important, creating space for sensing changing propensities, ebbs and flows. Though in such fables the morals will lie not behind the story but rather within it, its flows and its counterflows. For the paradoxical fable will not be about principles. It will be about what it is about, including us.

These suggestions offer the possible shape of a *shi* (勢)-*inflected* STS. But to what extent are they helpful? This is for discussion. At the same time, it is important to remember that they also betray *The Art of War* and the *Dao de jing*. Discussion of *qi* (氣), energy? On grounds of simplicity we've excluded this crucially important notion. Aversion to technology?[78] We have not

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[78] Laozi et al. (2003, Chapter 31, 68, 69, 80; 124-126ff, 184-187ff, 201-203ff).

brought this with us. The idea that people should be kept in ignorance because this makes for simplicity?[79] No thank you. The way the *Dao de jing* tends to imagine its world as a closed system?[80] No again. Avoiding 'theory' and 'practice' in favour of efficacy (功效)? We have only partially achieved this. An STS that imagines the world as immanent tidescape (形勢)? This no doubt has drawbacks too. Would STS be better if it was less obviously empirically referential – or achieved this in novel ways? This is for discussion. And is there a danger of creating an STS that is conservative? Even if we bypass the grim asymmetries – gender and otherwise – in ancient China, to translate heaven's way (天之道) as 'harmony' is to risk conservatism. And we have certainly not embedded a theory of post-colonial resistance in what we have written.[81] At the same time, however, alternative political projections are also possible. For instance, it is possible to reimagine tidescape (形勢), *shi* (勢), and imbalance as ways of thinking about *resistance* – good and bad.[82] Again, there is an appealing pragmatist and social democratic reading of the *Dao de jing* that treats way-making as a matter of *inclusion*, a kind of respectful social ecology.[83] This is attractive though it won't do for an STS that also attends to non-humans. Indeed, as we hinted above, there is a strong case for saying that *ziran* (自然), the term usually used to translate English language 'nature' into Chinese, takes us from a binary anthropocentrism to something quite un-Western: to the evolving self- and co-creation of the ten thousand things. As with *qi* (氣), however, and again for reasons of simplicity, we have not explored this here.

7. Conclusion: Provincialising STS

We hope that our paper has suggested ways of thinking new to STS. *Shi* (勢), tidescape (形勢), balance (中), efficacy (功效), and locally embedded descriptive normativity, none of these appear to have exact analogues in STS. Perhaps, then, they (or other terms) can be persuaded to do STS work. Our first suggestion is thus that there are terms of art in and beyond the Chinese world that might be used to change the scope of STS. Taken seriously (our second suggestion) terms such as these might also recast what it is to tell STS stories. They might, that is, reorganise empirical description on the one hand, and STS understanding of 'theory' on the other. And then there is our third concern, the issue of asymmetries between EuroAmerica and 'the rest'.[84] So we hope that our experiment in a *shi* (勢)-inflected STS has merits. However, if it is flawed this does not matter if others are encouraged to create Chinese-inflected alternatives. This is

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[79] Laozi et al. (2003, Chapter 3, 19, 20, 65, 80; 81-82ff, 104-106ff, 179-181ff, 201-203ff).
[80] Jullien (1995, 260-262).
[81] As recommended, albeit in different ways, by authors such as Smith (2012) and Connell (2007), Comaroff and Comaroff (2012).
[82] But not in the form of voluntary heroic actions (Jullien 2004, 46-60; Slingerland 2003). See, for instance, Taiwanese patients' displacement strategies (Lin 2013).
[83] Laozi et al. (2003).
[84] Lin (draft).

because our larger concern is to challenge the prevailing terms of intellectual trade in STS. We would like Chinese-inflected thinking to bend and shift its English-language counterparts. We would like to rebalance the intellectual flows between China or Taiwan and the 'international' English-writing academy. We would like to see Chinese ideas being used to think European or North American cases. And, in particular we would like to imagine multiple STSs, overlapping, in dialogue, but different in different locations. If this were to happen – as it has in some small measure in anthropology – then STS would be on its way to a new, multi-vocal and less imperial form.

What are the blockages that exclude Chinese ways of thinking from other intellectual spaces? What are the blockages which mean that what we call 'STS' is usually 'Euro-American STS'? Or 'English language' STS? And what might be done to undo those blockages? If we can work out how to meet the intellectual, political and institutional challenges posed by questions such as these we will be able to say that we have provincialised STS.

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