

Recognising and Translating Knowledge: Navigating the Political, Epistemological, Legal and Ontological

James Leach and Richard Davis¹

What does it mean to call something ‘knowledge’ today? What does this recognition or translation require? And what does it entrain? This introduction makes a novel synthesis of contributions to the Special Issue and advances observations regarding the ‘mythic’ qualities of intellectual property law, the precipitation of ‘nature’, and the importance of attending to what is lost when things and practices are also called ‘knowledge’. The papers cohere around a timely set of observations and critiques: critiques of the way the knowledge economy makes demands and defines expectations about value; of how intellectual property law lies behind and shapes exclusions, inclusions, and inequalities; of the ‘mythic’ status of assumptions informing laws about ownership; and the implicit hierarchy contained within types of knowledge as understood through the categories of western epistemology. By taking up effect rather than veracity and certainty, contributors leave the definition of knowledge to ethnographic subjects. That is, they attend to where and how things come to be called knowledge, and for what reasons, noticing how equivalences across practices, made for the purpose of creating the possibility of exchange value (and thus of encouraging circulation) does its work at the expense of multiple aspects, values, and relations that are also discernable in social processes that produce ‘knowledge’.

Keywords: Knowledge; Translation; Knowledge Economy; Myth; Intellectual Property

Knowledge is everywhere around us in the contemporary world. Yet we never seem to have enough. In recent decades ‘knowledge’ has become a value term in its own right, denoting something people strive to produce, strive to have recognised, to evaluate,

Correspondence to: James Leach, School of Social Science, King’s College, University of Aberdeen, Aberdeen, AB24 3QY, UK. E-mail: james.leach@abdn.ac.uk

ISSN 0066-4677 print/1469-2902 online
© 2012 Discipline of Anthropology and Sociology, The University of Western Australia
<http://dx.doi.org/10.1080/00664677.2012.724007>

rank, and transact (Strathern 2004; Ong and Collier 2005; Camic, Gross and Lamont 2011). In the set of papers that make up this Special Issue, scholars from anthropology, law and innovation studies, philosophy, and history and philosophy of science investigate 'knowledge' as a contemporary cultural and legal denomination. Across a range of situations they ask, '*what is it that is being called knowledge?*', '*what does this recognition depend upon?*', and '*what does it entrain?*' In doing so, the contributors attend to a current, and many would say dominant, production-centred view of knowledge; and trace some of the consequences of organising laws and institutions around this view. One common observation that they make is that hoping to see knowledge (potentially) everywhere, and in anything, results in a loose but encompassing notion of what 'knowledge' is, one that has come to include such diverse phenomena as indigenous practices and environmental relations, heritage, scientific results, the scientific research behind ubiquitous technologies, artistic practices, content and creative industries, drug recipes and business innovations (to name a small selection).

As old industrial economies invest heavily in innovation and research to become (or maintain their position as) 'knowledge economies' (Drucker 1969; Castells and Cardoso 2005; Rooney, Hearn and Ninen 2005), developing nations gear up to supplant them as knowledge producers. A major proportion of US export income is derived from 'knowledge producing' content industries: software, film, music. Current government policies in the United Kingdom, Australia, Canada and the United States narrow the register for value in academic work to instrumental knowledge production judged with economic measures (Saunders and James 2005; Marginson 2007; Geiger and Sá 2005). Is it any wonder then that people everywhere seem to search for, and find 'knowledge' in all sorts of practices and places? As Strathern observes there is now 'a sense that it can be quantified, whether in terms of sufficiency or through multiplying different compartments of it' (2006, 192). The contributors here interrogate the conditions and consequences of these processes. We point to a certain ubiquity (of the impetus to produce, or recognise things as knowledge) in order to highlight a confusion around the production and recognition of knowledge.² It turns out that very little pressure needs be applied to the application of the term 'knowledge' before its ephemeral and shifting references become apparent.

While we talk of recognition and translation, the contributors have not focused on defining knowledge so we can see when it has been transformed. In undertaking this collective endeavour, we did not set out looking for definitions (definitive statements about what knowledge is) and we do not seek to develop normative parameters for where and when a practice can or should be recognised as knowledge. Others are engaged in such tasks for all sorts of good reasons (for example, see Sillitoe 2010). Instead, each contributor is concerned to examine what the recognition of something (be that a social process, an art work, an agentive effect, an indigenous practice, and so on), *as* knowledge, *does*. This means that we are especially attentive to noting when a thing, process, practice or relationship that is not otherwise characterised as knowledge shifts register and becomes treated as knowledge.

If the issue is how we and others come to recognise knowledge, then we cannot say that we know what knowledge is at the outset. We are interested in movement and circulation, in exchange and retention, in transformation and translation; in value and its realisation in one form and then another. The papers in this volume put pressure on 'knowledge' as a thing that circulates. We suggest that in doing so, whatever 'it' is takes a form that also conditions the forms of interaction around it. One thing we might say is that when things are called knowledge, they are made available. They are recognised as something with a particular potential. What does this 'recognition' entail? What effects does it have? Use is a form of recognition of course, perhaps the most pertinent because it implies circulation and transaction. Things gather or shed value, gather or shed meaning and effect, in their transmission and circulation. Sometimes this is a matter of translation, sometimes a matter of abstraction, and sometimes a matter of misrecognition.

Recognising Knowledge

In a recent volume entitled *Ways of Knowing*, anthropologist Mark Harris asks, 'what counts as knowledge and knowing?' (2007). Similarly, a recent Special Issue of the *Journal of the Royal Anthropological Institute* (Marchand 2010) was devoted to examining 'situated practice, embodied cognition and learning' as making or transmitting knowledge, and to demonstrating 'the processes and varieties of human knowledge' (Barth 2002). This anthropological attention to 'knowing' seems both timely, and of its time, one might say. In his (excellent) collection, Harris (2007) chooses to situate 'practices' and 'ways' against a more standard and hegemonic definition of knowledge. To demonstrate that things not usually recognised as knowledge *are knowledge* of course requires a working definition. And for Harris that comes from Peter Berger and Thomas Luckmann who understand knowledge to be 'the certainty that phenomenon are real and that they possess certain characteristics' (1971, 13 in Harris 2007, 4). In this Introduction and the papers that follow, as stated above, we have asked contributors to follow another route, and that is to think about transformations and effects around a recognition that things are or could be knowledge. Our reason for this focus is that it allows us to see what it is that people call knowledge, to be led by that, and investigate what the appearance of knowledge does, or is, as a social moment.³ In doing so, we establish a series of concerns about what effects certain kinds of actions and immaterial things have, and for whom.

One thing that the Berger and Luckmann's definition achieves is to continually invite contextualisation of a particular kind. 'Real for whom?' one must ask, 'characteristics in what circumstances?' The papers collected here alert us to the contested nature of knowledge, asking us to consider carefully for whom certain understandings, or observations, or practices are 'knowledge', and what translations have to occur for them to be formally or officially recognised as such. This then is one core question, and the organising theme, of the papers to follow. By taking up effect rather than veracity and certainty, the contributors are drawn into the contestations

that have always surrounded ‘knowledge’ (under what conditions is anything thought to be real and to have effects?) without removing the work of definition from those making claims or feeling the effects of something appearing as ‘knowledge’. That suggests that the contests we need to be focusing on are not over truth value as such, but over transformations from one kind of effect, for certain actors, to others.

As Crook has pointed out (2007), as professional academics, it is quite possible that we have difficulty in being reflexive about the form that knowledge takes. Its ‘production’ is our own reason for action and the moment we use the word, we abstract it and potentially obviate the possibility for examining what happens in that moment of its use. But noticing that fact is just to reiterate the initial point that, as editors, we are not looking to define knowledge so we can see when it is being transformed, but instead look at the transformations that occur when a social process or thing is called knowledge. As ethnographers, the point is to watch for when someone else defines something as knowledge and see what work—social and cultural work—goes on around those moments.

Not all the authors in this Special Issue would identify themselves primarily as ethnographers. The contrast in one case is very apparent, with Damjamovic following his disciplinary impetus as a philosopher and looking at definitions of knowledge in the abstract. His paper however does draw on a hypothetical kind of ethnography that amounts to the application of abstract philosophical analysis to ‘real world’ situations. His question is whether actions in that world demonstrate something that a philosopher would recognise as ‘true knowledge’, or just ‘belief’. Other contributors demonstrate the possible difficulties that arise from considering knowledge as something that is not always situated and socially embedded: highlighting that what Damjamovic describes could never actually be ‘knowledge’, precisely because the recognition of something as knowledge (or not) is always complexly situated, and dependent upon politics, history and power. Yet Damjamovic flows with the other contributions in his move towards that very realisation. His paper shows particularly that much of what is recognised or translated into knowledge may not actually be that, if subjected to philosophical analysis. It may be ‘true belief’ but that is not knowledge.

That alerts us to something else vital for the purpose of this volume: that there is a transformation of value in the contemporary world when something is labelled, ‘knowledge’ (whether accurately or otherwise). As Damjamovic states, ‘although I can’t argue it here, I think we value knowledge because it reflects the fact that we have formed a true belief not as a matter of luck. Since we value knowledge, we also seek to protect it and reward those who have successfully produced it’ (Damjamovic, this issue). Observing this process is central to our interest. The attention to detail in his argument points directly to the problem that definition poses in the realm of practice.

Commodities, Fetishes, Magic and the Myth of Intellectual Property

The volume overall develops some meta-elements—conceptual tools, descriptions, and approaches—that help with the thorny issues involved in recognising and

translating knowledge. For one thing, behind the contributions is a common critique: one that undoubtedly draws on Marx and his notion of commodity fetishism, and applies those insights to knowledge production. The common element in the papers is to notice how equivalences across practices, made for the purpose of creating the possibility of exchange value and thus of encouraging circulation, does its work at the expense of multiple aspects, values, and relations that are also discernable in any social process (and see Leach 2012).

However, the importance of not defining knowledge is apparent here again: the commodity itself is a moving target, and Biagioli describes (for example) a transformation from material, to specificity, as the basis for making a patent claim. He alerts us to the rapid transformations in both knowledge forms and commodity forms (that are closely allied to them). Hayden in turn asks us to consider what sameness is, and how the production of sameness also proliferates and generates kinds of difference. Indeed, drugs as commodities in Mexico are a similarly moving target, bound up in both knowledge claims, and shifting commodity forms. One suggestion then is that the form of analysis and critique that we use in approaching knowledge production and recognition needs to change in the face of current developments around knowledge. As a case in point, in Cruikshank's paper, stories about people and glaciers do not fit with a commodity form of knowledge, nor do they easily fit with a simple critique of it. We see then in this collection that an analysis of where knowledge is recognised, and what is entrained, is far more complicated than just reiterating that calling things knowledge distorts or diminishes them by abstraction. In this vein, Leach suggests in his paper here that we need to see knowledge 'as if' it were a social relation in order to think about how knowledge practices and concerns set other relations in motion. And the papers in this volume point time and again to the need to be specific and particular in our attention to what translating social practices into knowledge does in any given moment.⁴

Several of the papers also deal with something we could call magic, or magical effect, and several refer in one way or another to myth. Magic, as Leach suggests, is worth taking seriously in wider discussions than merely where people claim to practice it. Magic is there all the time in the manner in which what is recognised as 'knowledge' has ongoing and complex social outcomes. Biagioli asks us to consider what happens when the text describing a simple formula becomes the repository for such valuable knowledge that merely reading (or coming into the vicinity of it) has serious ongoing implications for the (legally recognised) person of the reader. There is a kind of magical effect at work here, an influence at a distance, which makes an instructive contrast with Leach's argument. Leach points out that magic is also at work in the effective use of plants among Rai Coast people, and that this 'magic' is similarly about the effective positioning of persons in relation to one another. Yet in this case, those (magical) procedures have to be omitted from the description of the processes for those processes to appear as 'knowledge' to outside observers. Cruikshank develops the theme, demonstrating how recognising certain narratives about glaciers as 'knowledge' for climate scientists and government agencies means

leaving out that which makes them effective for native people in the Yukon. The effect of the recognition of these practices as knowledge in both cases is to make them less effective, or render them incomprehensible and useless, as the definition of knowledge employed by those in a position to make the recognition is not only narrow, but colonising in the sense of only admitting certain sources of effect. Biagioli's magical patent texts speak of a different tolerance for kinds of 'magic' depending on how close to power an actor is situated.

There is a wider conjunction in the papers here then, one which suggests that when it comes to recognition or translation of knowledge, positivistic correspondences between cause and effect may miss the subtle but important processes at work. Biagioli exposes the way a previous logic in the analysis and commentary on patent law gives a logical trajectory in itself as it were, for the evolution of claims towards intangible and immaterial effects. In this case, 'actions' that are purely immaterial process are already situated because of their potential effect of (economic) value creation, and that is always attributed to a particular owner. Far from 'leaving the magic out' (contra the Rai Coast or Yukon cases), the US Supreme Court is embracing immaterial effect, and something like sympathetic magic (in that having contact with a piece of text can pollute one to such an extent that the viewer may be removed from society *in toto*) is emergent. The patent applications that Biagioli discusses work as magical formulae in their own right as well, (as well as the text of the patent application being magical). The patent application makes active the text, which in turn then has material and social effect on those that come within its vicinity. He argues that this means we have to reconsider what we have meant by 'material' and 'materiality' in our analyses to date, analyses that allow such an interpretation to be countenanced by the supreme court. Like other contributors then, Biagioli makes us critically examine the structure of the human world and action that makes such a development possible. How does this come about, and how has intellectual property (IP) the kind of inexorable force or logic that produces these amazing instances of distortion? Is that also an aspect of calling something 'knowledge'?

It is interesting how intellectual property law is there in the background to the debates in the papers, as well as in the foreground. IP then, for all that this volume is *not* explicitly concerned with intellectual property or its critique, shows the interconnections of state, law and value recognition that constitute the backdrop to, and reason for, many translations and recognitions of 'knowledge'. Indeed we suggest that we think of IP as a kind of 'structuring myth', following Leach, one that prefigures and thus situates things *as if* they were or could be understood as knowledge. It also pushes that process (of recognising value) into certain forms. For example, Leach dwells on the consequences of a divide between expression and utility, a structuring principle both within and through IP law. This division is also pertinent to the Biagioli paper (dealing with wholly different material), where the utility element of a process has overtaken its material manifestation as the core principle in recognising a patent. Cruikshank mentions something apparent in other scholars' analyses of Aboriginal art (for example) when she refers to the

transformations and transitions in use, usability, and connection that things labelled 'knowledge' have when preserved or organised in archives and collections. As Anderson argues, archives have the function of holding things of undetermined value against the possibility of future use or interest by as yet unspecified persons. IP is foundational to their basic organisation: the information they contain is classified by named author (for example), there is automatic copyright in things deposited whether or not such copyright was appropriate or applicable in their original trajectory. There is thus a double transformation through recognition of material in an archive. Its very existence there transforms its status into information or knowledge with a named author, and thus with certain restrictions upon its use. Secondly, such restrictions themselves then transform relations around the appearance or preservation of the item.⁵

Contributors attend to the reification of the beginnings of knowledge in a concern with origins and attribution, a process that shapes future interactions and uses, and concretises a relation to creator or origin that IP law also instantiates. So, unsurprisingly perhaps, the cultural logic which is manifest in a distinction between utility and expression runs through much of what we see here as processes of recognition; that distinction being a manifestation, as it were, of the deeper series of divisions and distinctions structuring the social world of IP's origin. Intellectual property law then has power to reorganise people's relations with one another. Leach suggests that we can learn from Rai Coast people about how myth situates action, making it human, concurring with Biagioli that IP law might in fact be working at a 'mythic' level in that sense, bringing Euro–American assumptions about knowledge into its recognition at a very basic level.

Knowledge, Abstraction, Entanglement

To reiterate then around one of these examples, it does not matter *for our purposes in this volume* whether the Nekgini speakers Leach works with in Papua New Guinea do or do not have abstract category 'knowledge' or a word in Nekgini that we can translate as knowledge. Our point is that they, along with many others in the contemporary world, are currently being approached (and not only by their anthropologist) as 'knowledge producing' (Strathern and Hirsch 2004; Leach 2004). That is having effects, and it is those effects we wish to understand. The publication about plants that Leach refers to in his paper represented them as having 'knowledge about plants'. But we should think very hard about what we set in train when we call what they do with plants 'indigenous knowledge' or 'traditional knowledge' (or just 'knowledge'). Doing so makes what Rai Coast people do, as a complex and embedded series of practices, into abstract entities that are available for others' appropriation.⁶ This observation is made without judgment as to what that appropriation might entail or result in; but rather, to notice that this is an effect of the work.

Frederick Barth (2002) asks if knowledge is best understood as a thing or a relationship. While he decides both are sensible, we do feel the need to remember that

anything we call knowledge is always already part of certain relations. That calling it knowledge may be to abstract it from those and imagine it has validity (as a kind of fetish). As soon as we use the word knowledge, then, we run the danger of thinking of an entity that can be grasped without attention to those relations. Hayden's paper demonstrates that pharmaceutical chemicals have their effects for much wider reasons than merely the interaction of the molecular form that the drug takes with human bodies. For her case in fact, calling access to the narrow chemical composition of a drug 'knowledge' initiates all sorts of social and relational consequences, including the intervention of governments to prevent the monopoly use of such compounds. Large pharmaceutical companies are left complaining that what they do and know is so much *more* than merely producing a chemical formula (when asked to compete with the producers of generic drugs). The point of similarity, the chemical formulae, is not all they 'know' either.

The notion of perspectivism coming from the work of Viveiros de Castro figures in both Cruikshank and Leach's contributions, as is reflected later in this Introduction. As a conceptual or analytic tool, Viveiros de Castro's concept shows how the category of knowledge requires a notion of nature, and that in turn structures the work of IP regimes because the world of knowledge over nature is the very world in which IP claims are grounded. So even though this volume consciously avoids reiterating familiar and established critiques of IP (for example, Biagioli, Jaszi and Woodmansee 2011; Lessig 2004), IP itself is something of a 'juggernaut', the ongoing trajectory of which is part of the reason for wanting to see what, where, and how things are recognised as knowledge.

A number of papers—Biagioli, Hayden and Cruikshank—reveal something about IP that is not always apparent when it is treated as largely a matter of property. In these papers there lies the recognition that it is not always inappropriate reproduction that IP law seeks to contain, but the possibility that processes or activities that transect knowledge are themselves possessed of qualities, and that these qualities may adhere to knowledge. Take the archiving of indigenous Australian materials discussed by Jane Anderson (2011) referred to above as an example. She demonstrates how the act of archiving changes the qualities of the materials. They move from being notes, or images, or recordings, to being knowledge, with new value, new usability. The physicality of placing notes in an ordered manner does this, much as looking (a seemingly immaterial activity, as we have already noted) at Biagioli's text can pollute, or transform the very intent of words. In both instances, an activity brings its quality to bear, order in the one, awareness in the other. The pharmaceutical companies Hayden discusses are always warding against unauthorised reproduction of drugs; generic drugs undermine appeals to distinction, to the process of discovery and the rearranging of available knowledge into chemical formulae. IP exists to uphold the seemingly self-evident nature of distinction, but as Hayden makes clear in regard to drugs, similarity is already present in distinction. When generic drugs are placed next to their distinctive counterparts on a shop shelf it is not a distinctive encapsulated knowledge that defines each version of the drug, it is

their similarity that characterises them all. There is not much that is consistent about the qualities (order, awareness, resemblance) an activity (cataloguing, looking, reproducing) might extend to something that goes by the name of knowledge, except to say that whether these indicative qualities are made implicit or explicit should tell us something about the registers of value that gather around a knowledge item.

Having understood this, we also promote the question of *what happens if we stop calling these things knowledge?* What would we see instead? In following Strathern, Leach makes plainest this strategy: of making knowledge disappear to see what emerges in its stead. Some of the things the authors see emerging are vision and seeing, fixity and movement, sameness and difference, capacity and potential for engagement, kinship relations, storytelling. We have tried to set these against a 'terrifying and generative moment in which IP is on a teleological expansion with consequences we do not yet know' (Hayden, this volume). Contributors are interested in how processes, objects, effects, and so forth are made into things that can or cannot circulate, and the conditions under which those circulations occur. But that is only interesting if they are also other things, made into different kinds of objects than those defined by law at other times, in other ways.

When Damjamovic and Cruikshank talk of the problems of recognition, we are drawn to the shifting topographies under which things come to have effect. Calling something knowledge shifts our attention to the topography of the engagements that happen around it. Hayden's core question: that of what it is that makes things similar or different, is key to revealing these shifting topographies. Howard Morphy (for example) has documented how Aboriginal people have been approached during the last century as 'art producers'. Yet he tells us that in their own terms, what they thought they were producing was 'knowledge' of country and of history (Morphy 2011, 264). There are ongoing consequences for the descendants of those who produced it from its preservation and existence in a form that was not recognised at the time as knowledge, but is now seen as a source of vital information by both indigenous communities and by the state. Cruikshank is likewise concerned with the effect of anthropological field notes and recordings when seen as knowledge, in archives. Their preservation has complex implications for reputations, for current relationships, and between groups and the state. Once recognised as knowledge, they are subject to court subpoena and can be forced into the open, whatever the wishes of those who made them might have been.

Things that are called 'knowledge' are regularly seen to point to their origin and this again relates to the structuring of intellectual property. Knowledge, constructed in a particular way that includes a notion of its attachment to its origin, and its ability to speak about that origin, has ongoing relational effects that may be both a mystification of the creator's intention and a prefiguring of relations between persons, institutions and data. Assigning unique origins to knowledge qua intellectual property looks, from one point of view, like pollution. When applied to trade protections for goods, the manner of their making and their singular geographic

location, makes (unlawful) reproduction a violation of origin and hence a contagious act (Davis 2011); out of place knowledge as sympathetic magic, as it were.

Hayden is and is not concerned with origins. The origin of the drugs in one regime of production and recognition makes the 'knowledge' they embody valuable, but in doing so, establishes the conditions for their proliferation as copies. Like, but unlike, the copies are not exact replicas because what constitutes any drug, and any effective piece of knowledge in fact, is more than the thing itself. There is no thing itself, Hayden makes us realise, only things as parts of other things, as constituting one domain or another by their participation or exclusion. Knowledge appearing always invites thoughts about similarity and difference. Noting similarity precipitates its own background of difference and vice-versa. Hayden's great skill is in showing how each thing appears out of, is related to, and precipitates its others.

The power of Cruikshank's contribution is in both describing how stories are good to think with, and in thinking through them in reaching its conclusions. As she states, following Walter Benjamin, stories have a slow release kind of effect, a sustained energy that transforms gradually and progressively, generating cumulative understanding rather than transmitting static information. Expression is then utility, confounding (until one reads Biagioli on recent developments in US patent law) the logic of IP, and in doing so, working subtly and persuasively against the logic that relegates narratives, myths, (the whole of indigenous knowledge) to the realm of cultural rather than scientific validity.

All these contributions show how stories, or collections or objects may be alive, how the objects or things stored within them can have dynamic life in the effects they continue to have, or can potentially have in the future, as 'knowledge' whether they were constituted as such or not. Their life may be positive or negative for those in their vicinity, but they are unlikely to be neutral. Equally there may be no relations for an object at a particular moment in its existence: with no relational effect, things are rarely counted as 'knowledge'.

Knowledge, Culture, and Nature

This leads us back to considering briefly the recent movement in anthropology to define various kinds of practice as 'knowledge' and the contribution we think we offer with this collection: that the impetus to redefine things as knowledge or knowledge producing is exactly the process we should be interrogating. To return to the opening of this Introduction, and to use the current work being done in anthropology to recognise various kinds of practice as knowledge, we return briefly to Mark Harris's (2007) book. Harris is, of course, concerned with the problem of recognition as well: of the difficulty of recognising experience and bodily practice as knowledge. Just as Damjanovic does here, the question posed is: Is bodily practice and experience 'knowledge'? How can it be seen as such? Harris calls this the 'general problem of translation, between languages, and also between experience and linguistic form' (2007, 6). We discern in this question a familiar worry that much of what people know

and do is not called 'knowledge' because it is not abstracted and made discursive, but remains implicit in action. The worry is similar to the concerns that the 'critique of the author' (see Woodmansee and Jaszi 1994) literature addressed in the following sense: that there are so many more actors and creators in any literary work than the named author. That is not a problem until intellectual property law, or other systems of recognition and reward distort the author function. It is also the worry that motivates those who argue for indigenous knowledge to be given the status it deserves (calling it in one recent instance 'indigenous/local science' (Sillitoe 2007)).

But this is not the primary aim of this volume. The papers collected here put pressure on *why* we would want to call such things knowledge? Where does that impetus arise from? Harris's question is akin (in both its cultural roots and contemporary nature) with some of the ethnographic subjects that Leach has been talking to for the last 10 years: contemporary choreographers and dancers who are engaged in making contemporary dance practice visible as a 'knowledge'-producing practice through 'scores' which record the creative work involved in making dance, or through online tools that reveal its structure, that describe and make available 'choreographic thinking'. These choreographers' contention is that there is something called choreographic thinking, that this is a form of knowledge that is valuable, but that remains latent in performance and movement. In an attempt to place contemporary dance more centrally in public affairs, they ask for the recognition of their practice as relying on more than flexible bodies and skilled performances, but on thinking and knowing about space and time, structure and pattern, energy and conservation, and so on. The move is from a practice of making and doing to more formal representations of these processes, and thus making 'knowledge' appear as their contribution to culture.⁷

Now Harris, talking about Amazonian river dwellers' daily routines and skills, locates history and identity as 'silently embedded in... practical knowledge'. He writes: 'the fact they perceived I was not carrying out the skills in an effective way was evidence that I did not share their identity. I could come to know them through their skills and our shared humanity but I could not be one of them' (Harris 2007, 7). In highlighting this experience, he seems to be driven by the same impetus as the choreographers. Polanyi long ago called this kind of knowledge 'tacit knowledge'—the kind of acquired, taken-for-granted skills that are essential to using computers for example (Polanyi 1958). But precisely because tacit knowledge is acquired almost unconsciously it can only be expressed with very careful introspection. Harris argues that practical or bodily knowledge, skill, is the basis for recognition and identity. In that, it is in fact more abstract and cultural than it first appears. And by finding cultural knowledge in skilled action, Harris asserts that apparently culture-less peasants living along the Amazon have cultural knowledge after all. They are a people, they have a culture. It is just not one that is articulated as such because it is not abstracted from experience.

Among the many things we might take from such rich examples, we also see how knowledge and culture are intertwined in our own analytic approach, where for

things to be valued (such as another culture), 'knowledge' has to appear. Anthropologists' own theorising about how we can recognise difference fetishises knowledge then. Just as there is a conscious attempt on the part of contemporary dance to elevate itself in public perception through transforming its processes into 'knowledge production', to make it a practice commensurate with other valued spheres of action in the 'knowledge economy', as anthropologists we value other people's ways of being in their worlds as cultural, as, in fact, *knowledge* of a different kind, but equivalent to our own.

Very soon, however, we run up against the fact that this apparent equivalence is highly problematic: that some knowledge is valued more highly than others. Some is superstition, narrative, 'cultural', or artistic. Some is real and effective, resultant in modern technologies or wealth creation. Recognition or not of others' knowledge comes to be something akin to what is there in Berger and Luckmann's definition: an issue of veracity not just within a system, but between and beyond them. Effectiveness here comes to mean power over nature—that Western science and technology are more true than other forms of knowing because of their effects in that sphere. One is in constant danger of assuming an inevitability to the dominance of one culture over another (see Errington and Gewertz's critique of Jared Diamond [2004]).

Many (for example Strathern 1980, 1995; Viveiros de Castro 2011; Ingold 1992) would say the problem lies deep, and that is in assuming other people have 'culture' in the first place. That they have something akin to what we call 'knowledge' in fact, and that this is what is codified as 'culture'. Doing so relies on a universal notion of nature—a common humanity, a common baseline against which culture emerges and with which it engages. The quality of that engagement then is discernable against the practical quality it has—its baseline utility or applicability or effectiveness (Cruikshank). And here we flag a final issue or concern that is at the heart of some of the papers in the volume. That is the problem of context, and the work that the notion of context does in situating, locating, and thus establishing conditions for the ranking or judgment of the effectiveness of 'knowledge'. Of course context is vital, but it is attending to what is set in train when something is recognised as knowledge, not contextualising a thing that is called that, to which we devote attention here. Recognition then is not a synonym for understanding context, but for the transformations in relations around an object, practice or understanding that are entrained by that recognition. Why do we insist on this? Well, putting knowledge into its context means we can acknowledge its effectiveness in a 'social and cultural' sense, but not in a 'real or scientific' sense without taking it out of the context of its particular cultural production, and testing it against the common baseline of nature—how effective are practices that might be called 'knowledge' in manipulating nature? A default baseline for judgments on whether knowledge is 'real' (universally effective).

Indeed, as a final reason for why we choose to hold any definition of knowledge in abeyance, Leach reminds us that our idea of knowledge emerged alongside the idea of nature (Shapin and Shaffer 1985; Latour 1993). That for us knowledge is its effect on nature, because the notion of knowledge we operate makes no sense without 'nature'

on which we can see its effects. When something is recognised as knowledge, the papers gathered here demonstrate that we need to enquire into what *contours it is being seen as effective against*, because it may be that to ally knowledge to context is a mystification of a process whereby hierarchies and distinctions between kinds of knowledge are made on the terms of one society, one historical trajectory of being human. To assume that knowledge emerges in a unique context is to accept these contours as an unexamined given (Wagner 1977, 1981).

We have organised these papers and put together this Special Issue because we do not believe these to be small or parochial issues. They lie at the heart of knowledge economies, the possibilities of knowledge transfer, of sustainability and appropriate environmental planning, of intellectual property, and of relations between indigenous people and others. The particular relevance of this Special issue then is to look at how something might appear as knowledge, and at how that recognition facilitates its subsequent circulation outside the context of its creation. In this process things that may not be thought of as knowledge in one context gain value in another context through their rearticulation and transformation. This entanglement in context produces different kinds of value and, like our approach to knowledge, we attend to the processes and transformations that attach value to knowledge. Different registers of value locate knowledge in relation to something else and this can create hierarchies, appropriation, replacement or elision of pre-existing values. While knowledge may create value, new value does not always supersede previous value, sometimes an entity carries more than one value, more than one set of relationships. We think this an important point, mainly because it alerts us to the trap of an economic-accountancy approach to value, which must, of necessity create hierarchies in order to arrive at an appraisal of worth.

To reiterate then: the simplest way through the minefield of tautology involved is to leave the definition of knowledge to ethnographic subjects. That is, attend to where and how things come to be called knowledge, and for what reasons. We do not attempt an exhaustive inventory of what could come under the remit of knowledge, and neither do we wish to hone a universal definition of knowledge, but to see what occurs to, in, and around social relations where 'knowledge' is a focus of attention in one way or another.

Notes

- [1] We have many people to thank for bringing together the authors in this volume. The Institute of Advanced Studies at the University of Western Australia in the guise of Susan Takao and Audrey Barton organised the original workshop, an event that was much enhanced by the contributions of Ross Chadwick, Katie Glaskin, Sean Martin-Iverson, Barbara Matters and Ana Vrdoljak. In addition, Katie Glaskin has gone far beyond the call of duty as Journal Editor in her generous engagement with the editing process. Catie Gressier similarly deserves thanks for her consistent and important efforts. Three of the original paper givers (Jane Anderson, John Stanton and Richard Davis) do not appear here, yet their contributions were vital to developing this introduction collection. We thank them sincerely.

- [2] See for example Turnbull and Chambers (2011).
- [3] Including the current anthropological drive to expand the definition of knowledge.
- [4] The editors gratefully acknowledge Hayden's discussant contribution to the original workshop in shaping this introduction.
- [5] See Anderson (2011).
- [6] This argument is elaborated at some length at the end of that book (see Leach and Nombo 2010, 149–71),
- [7] See Leach and deLahunta (in preparation).

References

- Anderson, J. 2011. Framed networks: The social entanglements of intellectual property. Paper presented at the Workshop 'Recognising and Translating Knowledge', February 14–15, Institute for Advanced Studies, University of Western Australia.
- Barth, F. 2002. An anthropology of knowledge. *Current Anthropology* 43 (1): 1–18.
- Berger, P. L., and T. Luckmann. 1971. *The social construction of reality: A treatise in the sociology of knowledge*. Harmondsworth: Penguin.
- Biagioli, M., P. Jazsi, and M. Woodmansee, eds. 2011. *Making and unmaking intellectual property*. Chicago, IL: University of Chicago Press.
- Camic, C., N. Gross, and M. Lamont, eds. 2011. *Social knowledge in the making*. Chicago, IL: University of Chicago Press.
- Castells, M., and G. Cardoso, eds. 2005. *The network society: From knowledge to policy*. Washington, DC: Center for Transatlantic Relations.
- Crook, T. 2007. *Anthropological knowledge, secrecy and Bolivip, Papua New Guinea: Exchanging skin*. British Academy Postdoctoral Fellowship Monograph series. Oxford: Oxford University Press.
- Davis, R. 2011. Interrogating context. Paper presented at the Workshop 'Recognising and Translating Knowledge', February 14–15, Institute of Advanced Studies, University of Western Australia.
- Diamond, J. 1998. *Guns germs and steel. A short history of everybody for the last 13000 years*. London: Vintage.
- Drucker, P. 1969. *The age of discontinuity: Guidelines to our changing society*. New York: Harper and Row.
- Errington, F., and D. Gewertz. 2004. *Yali's question: Sugar, culture and history*. Chicago, IL: University of Chicago Press.
- Geiger, R. L., and C. Sá. 2005. Beyond technology transfer: US state policies to harness university research for economic development. *Minerva*, 43 (1): 1–21.
- Harris, M., ed. 2007. *Ways of knowing: New approaches in the anthropology of experience and learning*. Oxford: Berghahn.
- Ingold, T. 1992. Culture and the perception of the environment. In *Bush base: Forest farm. Culture, environment and development*, edited E. Croll and D. Parkin, 39–56. London: Routledge.
- Latour, B. 1993. *We have never been modern*. Brighton: Harvester Wheatsheaf.
- Leach, J. 2004. Modes of creativity. In *Transactions and creations: Property debates and the stimulus of Melanesia*, edited by E. Hirsch and M. Strathern, 151–175. Oxford: Berghahn.
- Leach, J. 2012. Step inside: The politics of (making) knowledge objects. In *The politics of knowledge*, edited by P. Beart and F. Rubio, 79–95. London: Routledge.
- Leach, J., and S. deLahunta, eds. In press. *Choreographic objects: Dance knowledge and digital media*.
- Lessig, L. 2004. *Free culture*. London: Penguin.
- Marchand, T., ed. 2010. Making knowledge. Special Issue, *Journal of the Royal Anthropological Institute* 16, Issue Supplement S1.

- Marginson, S., ed. 2007. *Prospects of higher education: Globalization, market competition, public goods and the future of the university*. Rotterdam: Sense Publishers.
- Morphy, H. 2011. 'Not just pretty pictures': Relative autonomy and the articulations of Yolngu art in its contexts. In *Ownership and appropriation*, edited by V. Strang and M. Busse, 261–86. Oxford: Berg.
- Nombo, P. and J. Leach. 2010. *Reite Plants. An ethnobotanical study in Tok Pisin and English*. Canberra: ANU EPress.
- Ong, A., and S. Collier, eds. 2005. *Global assemblages: Technology, politics, and ethics as anthropological problems*. New York: Blackwell.
- Polanyi, M. 1958. *Personal knowledge: Towards a post-critical philosophy*. London: Routledge and Kegan Paul.
- Rooney, D., G. Hearn, and A. Ninan. 2005. *Handbook on the knowledge economy*. Cheltenham: Edward Elgar.
- Saunders, P., and W. James, eds. 2005. *Ideas and influence: Social science and public policy in Australia*. Sydney: UNSW Press.
- Shapin, S., and S. Schaffer. 1985. *Leviathan and the air pump: Hobbes, Boyle and the experimental life, including a translation of Thomas Hobbes, Dialogus Physicus De Natura Aeris*. Princeton, NJ: Princeton University Press.
- Sillitoe, P., ed. 2007. *Local science vs global science*. New York: Berghahn Books.
- Sillitoe, P. 2010. Trust in knowledge: Some implications of knowing in indigenous knowledge. *Journal of the Royal Anthropological Institute* 26 (1): 12–30.
- Strathern, M. 1980. No nature no culture: The Hagen case. In *Nature, culture and gender*, edited by C. MacCormack and M. Strathern, 174–221. Cambridge: Cambridge University Press.
- Strathern, M. 1995. The nice thing about culture is that everyone has it. In *Shifting contexts. Transformations in anthropological knowledge*, edited by Marilyn Strathern, 153–175. London: Routledge.
- Strathern, M. 2004. Laudable aims and problematic consequences, or the 'flow' of knowledge is not neutral. In J. Squires (ed.) Special Issue, *Economy and Society* 33: 550–61.
- Strathern, M. 2006. A community of critics? Thoughts on new knowledge. *Journal of the Royal Anthropological Institute* 12 (1): 191–209.
- Strathern, M. 2007. Useful knowledge. 2005 Lectures. *Proceedings of the British Academy* 139.
- Strathern, M., and E. Hirsch. 2004. Introduction. In *Transactions and creations: Property debates and the stimulus of Melanesia*, edited E. Hirsch and M. Strathern, 1–18. Oxford: Berghahn.
- Turnbull, D., and W. Chambers. Forthcoming. Assembling diverse knowledges: Trails and storied spaces in time. In *Subversion, conversion, development. diversity in the adoption, use, and design of ICTs*, edited by J. Leach and L. Wilson. Cambridge, MA: MIT Press.
- Viveiros de Castro, E. 2011. Zeno and the art of Anthropology. Of lies, beliefs, paradoxes, and other truths. *Common Knowledge* 17 (1): 128–45.
- Wagner, R. 1977. Scientific and indigenous Papuan conceptualizations of the Innate. In *Subsistence and survival*, edited by T. Bayliss-Smith and R. Feachem, 385–411. New York: Academic Press.
- Wagner, R. 1981. *The invention of culture*. Chicago, IL: University of Chicago Press.
- Woodmansee, M., and P. Jaszi, eds. 1994. *The construction of authorship: Textual appropriation in law and literature*. Durham, NC: Duke University Press.