

## 4 'Step inside: knowledge freely available'

### The politics of (making) knowledge-objects

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#### Introduction

A large advertising sign hangs outside the new British Library building on Euston Road in London. It reads 'Step Inside. Knowledge Freely Available'.<sup>1</sup> A good slogan, but what does it imply about the way knowledge is thought of in contemporary society? Obviously the Library is a repository for a huge number of books, recordings, manuscripts and so forth. One would have to say that it is *these* that are freely available (and it is wonderful that they are of course). But in what sense are they *knowledge*? Or rather why it is that the advertisers decide to promise, by the emphasis of that term, something already a *value*, already more than the papers and inks themselves: something people can take away as 'knowledge'?

The theme of this chapter is a contemporary global politics that makes it important to call bound papers, objects, and other media that a library holds *knowledge*. The reference points are not libraries and their holdings specifically, but rather artistic practices from the UK, Indonesia and Melanesia, interdisciplinary research projects in the UK, and current intellectual property law. Clearly these are meant as examples of a wider phenomenon. My contention is that a trend that renders diverse objects, practices, effects, relationships, and forms of information into a single category – that of 'knowledge' – establishes the conditions for two further moves. Each has political implications. These moves are, first, a normative impetus for knowledge to take forms that make its ease of transmission paramount and often in the process prioritise narrow utility over wider effect. This in turn validates an impatience on the part of policy makers with complexity and dispute (Strathern 2007). Second, that the current image of knowledge as a detachable, circulating object sets up the possibility for a false scale of accounting in which comparative judgements about value are made to the detriment of recognising wider diverse, social benefits. This is most obvious in the current drive towards measuring 'impact', a particularly inappropriate register for arts and humanities research.

The impetus to view practices, relationships, performances, inscriptions, the emergence of particular and skilled persons and so forth as

knowledge-producing activities with transactable object production as the aim of the endeavour suits the formulation of a certain political economy. I suggest that in this contemporary use, 'knowledge' has come to be a normative term denoting something that can be abstracted from the context of its production, and to carry value with it. We should ask ourselves what the effects of imagining there is something called knowledge that, if not always freely available (as in the Library's promise), is always available to move in transactions of the kind appropriate to commodities. As Strathern writes:

One effect of the self-avowed knowledge economy has been to turn information into currency. Use value appears to depend on exchange value. Many certainly hold this view of scholarly knowledge. People openly state that there is no point in having such knowledge if one cannot communicate it, and they mean communicate it in the same form, that is, as knowledge. (Arguably, 'knowledge' is communicated as 'information,' but insofar as it is meant to be adding to someone else's knowledge, the terms can be hyphenated.)

(Strathern 2004: 2)

My argument is not that knowledge is always and inevitably commodified – that it always has a price attached to it – but rather that the *form* in which diverse processes come to have recognised value in current regimes is through producing objects with analogous qualities to commodities. That is, objects that can be abstracted from their context of production and nevertheless carry the value of that production as an intrinsic element of the object itself. Knowledge as a fetish object, if you like.

In many contemporary situations, processes which create value by positioning persons and things in generative relations are judged narrowly dependent upon the 'knowledge' they produce. Looking across a range of ethnographic situations suggests we must widen the frame. All too often, policy and precedent focus on an object and its value to the detriment of the processes whereby wider social value is created. Thus universities are increasingly concerned with 'knowledge transfer', producing 'useable knowledge', while the protection of 'cultural knowledge' (Brown 2003) and intellectual property (Lessig 2004; Vaidhyanathan 2006) threaten to stifle creativity itself. A recurrent theme emerges. The emphasis for claims, for calculating recompense, and for describing value, locates value in objects produced, not in the processes of production. It is control over and access to those objects (and by this I do mean to include formulations and expressions) that concerns people.

My objective here is to highlight the work that calling vastly disparate things 'knowledge' does towards that objectification and formulation of value, primarily as object-value. I question what it means to call such diverse phenomena as cultural property, computer software, traditional

1 arts, Papua New Guinean's use of plants, books, new technological processes  
2 (and so on) 'knowledge'. What effect is that move having on the  
3 social and political worlds in which these things come into being? One  
4 clear effect is that the outcomes of different social processes appear the  
5 'same' across contexts, with ongoing implications for strategies to control  
6 them as resources, policy decisions with regard to the administration of  
7 institutions, and so forth. This needs to be opened up to scrutiny. My  
8 method is to suggest that the key to unlocking the problem lies in a conceptual  
9 move towards analysis of the relations in which persons and  
0 objects come to have their existence and effects.

1 I approach this from the perspective of having studied various claims  
2 and modes of ownership in relation to the realm of intellectual and cultural  
3 property. It is as well to be clear about this from the start. The focus  
4 on ownership does give what I have to say a particular slant. Thinking of  
5 ownership has taken me down the route of describing the claims people  
6 make over knowledge productions, and how those claims describe or build  
7 upon diverse ways of recognising value.

### Arts, process, effects

1 The first example of translating social processes into knowledge-objects is  
2 from contemporary Indonesia, where I was fortunate enough to work with  
3 colleagues in 2005 to 2006 (Jaszi 2009), and particularly to collaborate  
4 with Lorraine Aragon (Aragon and Leach 2008). The research was with  
5 people the Indonesian state designates 'traditional artists' for the purpose  
6 of proposed legislation designed to protect cultural heritage. Given the  
7 basis of this legislation in Western intellectual property law,<sup>2</sup> the concept  
8 of authorship was central to our investigations. However, we were also concerned  
9 with the value traditional arts have to their practitioners, and the likely  
0 effects of the legislation with its assumptions of authorship and rights  
1 on their practices. In fact, the proposed legislation had a rather  
2 pressing element: it proposed the ownership by the state, in perpetuity, of  
3 any cultural expression without an identifiable author.<sup>3</sup> The intention was  
4 that the introduction of intellectual property laws would prevent the  
5 appropriation and distortion of valuable traditional arts by 'outsiders'.  
6 Using intellectual property law highlighted the rights of creators and  
7 authors, but disenfranchised those who could not make such claims.

8 Given this structure to the law, what should we make of it when traditional  
9 artists in Java and Bali stood in line to deny that they are the creators  
0 of the objects and performances by which they live? Or, when they say  
1 that the innovations they have introduced to their practices to make them  
2 more appealing and relevant to their audiences should not be viewed as  
3 emerging elements within the tradition? These are not innocent questions.  
4 For the logic of denying individual authorship for aspects of a tradition,  
5 while claiming that one's innovations are one's own and not subject to

claims by others, fits closely with the current impetus in the arena of world trade negotiations and international bureaucracies. These organisations seek to offer protection to communal heritage, and/or to offer rights to individual creators, through historically specific, if now widespread formats (Strathern 2006; Vaidhyathan 2006). Copyright law seems to be tailor made to protect the interests of innovators in the arts, while ‘cultural property’ advocates often see creating inventories of traditional material as the most promising way forward in assuring correct attribution to indigenous and subject populations (Daes 1997; Sedyawati 2005) and see Brown (1998).

The increasingly global application of intellectual and cultural property law is based on assumptions about the individual as a self-contained creative entity, and about artistic works – and by extension cultures – as potentially alienable and commercialisable assets which should be attached to these creators or their surrogates through legal rights. These assumptions were formalised first in the national laws of Europe and the United States, and then in statements of international institutions such as the World Intellectual Property Organization (WIPO) and the United Nations Educational, Scientific and Cultural Organization (hereafter UNESCO) (see UNESCO 1978, 1984, 2001, 2003). Concepts of intellectual property have been developed within the discourse of these multinational organisations into a vision of cultural patrimony without which emergent nations lose part of their ‘personality’ and thereby appear incomplete (Handler 1991; Harrison 2000). But it is important to question on a number of levels whether artistic communities, much less states, are properly analogous to individuals within whom creativity and identity are said to lie internally resident (Leach 2003a, 2003b); or more pertinently still for the current demonstration, whether creative works and their stylistic elements are best conceived of as isolable property (knowledge objects) properly subjected to formal legal ownership in this mode.

In Indonesia, both Hindu and Muslim traditional artists to whom we listened were reluctant to define themselves as their artwork’s ‘creator’, or to say that their work will become part of their art tradition’s future canon. Artists often comment that they are just ‘followers’ (*penyusul*) of their ancestral tradition and that the term ‘creator’ (*pencipta*) is applicable only to God. More than just a humble attitude or a theological dogma eliminating individual innovations, Indonesian artists’ elaborating comments and actions entail a challenging vision for current moves to make such practices into objects that may be governed by laws applying to intellectual *property*. These were visions of what their art is, and what it does.

Indonesian artists whom we met repeatedly made claims, but these claims could only be taken as ownership claims over their creations in the most roundabout sense. The notion of cultural property has come to stand in international policy arenas for a variety of objects, places, and indeed practices, which may be attributed to a cultural or ethnic group. In this

1 sense, it covers things which, although tangible or intangible 'objects' (the  
2 latter being made into objects through their expression), are not appro-  
3 priate for alienation from that group. They are elements of their internal  
4 identity (UNESCO 2001, Preamble) and thus cultural property debates  
5 have a distinctly moral and ethical cast (Leach 2003b; see e.g. UNESCO  
6 1978, 2001; Greenfield 1990). But in order to be viewed in this way, such  
7 items have to be existent and thereby tangible. One cannot own a distinc-  
8 tive form of creative practice, only the expressions of that practice. It is  
9 these that UNESCO, the prime movers in defining and developing the  
10 notion of cultural property, focus upon to the extent that they recom-  
11 mend that 'to ensure identification with a view to safeguarding, each State  
12 Party shall draw up, in a manner geared to its own situation, one or more  
13 inventories of the intangible cultural heritage present in its territory'  
14 (UNESCO 2003).

15 In this way, cultural property follows the logic of intellectual property as  
16 current US and UK legislation defines it: existent objects that demonstrate  
17 creative work, or innovation and added value. Social forms and the vitality  
18 of communal use are not protected. This particular way of defining not only  
19 what can, and cannot, be owned through an opposition of creativity and  
20 practice (Hallam and Ingold 2007) to the objects and forms which emerge  
21 also obviates the possibility of recognising alternative modes and outcomes  
22 of creative practice and value generation. In the ethnographic material we  
23 collected, a significant group of senior and successful traditional artists  
24 across a range of genres in Indonesia understood communication and crea-  
25 tivity (coming from both knowing, and innovating upon disciplined prac-  
26 tices) to be where value is generated. Their emphasis on the coherence and  
27 importance of tradition stemmed from a sense that to be in a position of  
28 knowing allows more creative engagement. This is an achievement of rela-  
29 tional positioning. It cannot be pinned down to things already made.

30 UNESCO have recently come close to articulating a similar logic  
31 (2001),<sup>4</sup> yet their continued emphasis on preventing alienation and on  
32 repatriation makes it appear as though it is the objects themselves that  
33 allow creativity. Value still lies in objects, sites, or codifiable (that is, static)  
34 practices. In the cultural property rendering, claims people make over  
35 owning tradition are viewed as claims to objects in order to maintain their  
36 internal integrity and thus their possibility for entering into innovation  
37 and development with all their faculties intact, as it were.

38 Aragon and I suggested that artists were seeking to make claims over  
39 achievements not so much in the realm of material productions, but  
40 rather in achievements of relational positioning, vis-à-vis their human  
41 fellows (sponsors, hosts, colleagues, kin and audiences) as well as deity  
42 (Aragon and Leach 2008). Their physical art is not the key achievement.  
43 Rather, their work – as either material art or performance – is both the  
44 communicative sign and physical realisation of their social or relational  
45 accomplishment, and thus a sign of their power.<sup>5</sup>

Of course, objects have effects on and within social relations (Gell 1998). The difference that Aragon and I highlighted is between a focus on an object as the outcome of artistic endeavour, and on ongoing transformations in relationships. We pointed then to something at a more fundamental level of difference to the idea of knowledge as contained in and ownable as objects, one which is if anything more apparent in Melanesia, the site of other investigations into creativity (Leach 2004) and its relation to cultural property (Leach 2003b; Sykes 2001). The arts in these Melanesian contexts, just as in places we visited in Indonesia, tend to obviate the distinction between making, product and effect; between the process of making, and having an effect through the finished object that is made (Leach 2002). Yet this distinction is crucial to intellectual property law, as it amounts to the distinction between idea and expression, with the expression as that which can be protected. Under this logic, such protection is appropriate because it is the expression, not the idea or the process of making, which has the value (value creation in transaction determined by consumer market). However, in Melanesia and Indonesia, we saw that tradition is not objects, nor fixed rights of people over objects. Rather, it is abilities in relation to deity, predecessors, and others with whom one sits in relations of mutual obligation (Leach 2006), and through the whole recognition and engagement, the person themselves emerges.

### **Knowledge and social effect**

Recent (and not so recent) scholarship in the social studies of science suggests that it is not just in Indonesia and Melanesia that the value generated in the social processes around what we call 'knowledge production' is not limited to the value that the knowledge has as an object, attached to an individual. That is, the processes of production are just as clearly examples of the emergence of certain persons and positions of power, hierarchy, influence, and so forth. Yet the very different emphasis on which aspects of the process create transactable value in Melanesia and Indonesia allows a clear critique to emerge of the way in which other kinds of value are created and retained in knowledge-based and knowledge-making relationships.

I pause for a moment here to put a little pressure on what we might mean by 'effect' in thinking about processes in which knowledge emerges. I draw on a formulation by Marilyn Strathern: a simple hierarchical classification for data, information and knowledge (Strathern 2005). Strathern suggests that data is what comes into the senses, it is unprocessed stuff. Information is that data organised in some way. Data made comprehensible, grouped according to some logic or other. But knowledge is more than information, it is data organised in a way that has an *effect*. To know something is to have to take it into account (Strathern 1992, 1999), often to have to act because of it, in the light of it, or around it (if only to consider it irrelevant).

1 I draw then on an anthropological understanding that knowledge is  
2 information that has an effect. Where and how does knowledge have its  
3 effect? As above, it is in social worlds that knowledge has its effects. New  
4 knowledge about a historical figure may change not only what books say  
5 about that person, but the way the time was understood, the presence or  
6 absence of that person's thought in others decisions, etc. Even for a lone  
7 scientist interacting wholly with the material world, this same is true. For  
8 what her investigation is aimed towards, how the work is supported, where  
9 it can and is recognised, the impetus to discover, and so forth, are all  
0 socially constituted. The effects of new information, even in my lone sci-  
1 entist example, are never directed primarily to the physical world, as we  
2 may like to imagine. Through technology, information knowledge may  
3 come to have utility, but utility too is a socially defined value. Knowledge  
4 may be about the material world, but it is directed and made relevant by  
5 socially constituted values and interests. The effect is not limited to  
6 mechanical applications.

7 Indeed, crucially, much of the effect of knowledge production is on  
8 the person of the producer. That is, the effect of their engagements is  
9 apparent in changes in their status, their visibility in their discipline, or  
0 the wider academy, in senses of self, in ability to act and have an influ-  
1 ence on others' behaviour. The fact that I want to define knowledge as  
2 information which is organised in a way that has an effect, does not  
3 mean I am arguing that all knowledge is useful, or usable, and certainly  
4 not that it ought to be. Utility and effect are very different things. The  
5 'effects' we discerned as vital in Indonesia and Melanesia are *also* vital in  
6 arts and sciences closer to home. The consequences of investigation, or  
7 generating knowledge, are unpredictable. It is multiple and non-  
8 instrumental. Utility is a much narrower concept about a particular  
9 effect of an object on the material world.

0 There is a complexity then to the production of knowledge which  
1 involves changes in the producer, the context of production, potential  
2 utility and adoption by others (with ensuing debates over control and  
3 ownership). Effects upon things, effects upon other people, effects  
4 upon the producer. All such effects are dependent upon each other in  
5 a complex system of relations between objects, persons, skills, tech-  
6 niques, contexts for reception (Hirsch 2004) and so forth. It is this that  
7 we gloss as 'knowledge'. But having put it like that, is it any wonder that  
8 the outcomes from different processes produce not only different kinds  
9 of person, but different modes of communication, different elements to  
0 be transacted between parties? Knowing things never happens in a  
1 vacuum.

2 Having provided this frame, let me take the discussion forward by  
3 describing interdisciplinary projects which demonstrate that in the s of  
4 'knowledge production' many different effects are apparent, again vitally  
5 creating different persons and different kinds of knowledge.

### Value generation in art and science collaborations

In recent years there have been a series of conscious innovations in government-influenced academic practice to encourage interdisciplinarity. For example, in 2003, the United Kingdom Arts and Humanities Research Board<sup>6</sup> and Arts Council England established an 'Arts and Science Research Fellowships' scheme with the aim to support collaborative research in arts and sciences. The application material drew on a report published by the Council for Science and Technology on the arts and humanities in relation to science and technology which concluded that

the greatest challenges for UK society ... are all ones in which the arts and humanities and science and technology need each other.... In the circumstances of modern society and the modern global economy, the concept of a distinct frontier between science and the arts and humanities is anachronistic ... the relationships between the arts and humanities and science and technology need to be strengthened further.... Many of the most exciting areas of research lie between and across the boundaries of the traditionally defined disciplines.<sup>7</sup>

The Arts and Science Research Fellowship Scheme aimed then

to support collaborative research specifically between the fields of the creative and performing arts and science and engineering which [were] likely to have a wider impact within the subject communities and beyond, as well as ... seek[ing] to explore wider questions about whether and how art and science can mutually inform each other.

Running science up against art in the experiential way that this scheme did highlighted the conceptual distinctions and similarities between arts and sciences for the participants. They seemed to take as given certain characteristics of each. My analysis pursued an exploration of the way distinctions between art-as-knowledge making and science-as-knowledge making were constituted for the participants by their conjunction in the scheme.<sup>8</sup> It is worth summarising some of this investigation as it demonstrates the different modes and kinds of 'knowledge', and how the processes of its creation have a wider effect than captured in knowledge objects.

The Fellowships were shaped by assumptions that scientists work with entities that are external to themselves, while artists create their work from within themselves. This in turn may be linked to the recognition of the two distinct kinds of material. As an observer, it was possible to see that there are effects of having 'the world' as on the one hand an external reality, ontologically independent of the perceiver prior to action, and on



1 the other hand, the world as a social reality to which all perceivers are  
2 responsible for creating. Those were effects in how the scientist as a  
3 person or the artist as a person could see themselves as connected to the  
4 outcomes of their labouring, to the knowledge objects they produced. The  
5 scientists who agreed to participate in this art and science collaboration  
6 did so (and said they did so) because they were interested in an opportu-  
7 nity to better 'align' their perception of themselves and of their work; that  
8 is, to make their individual and internal sense of self apparent in their pro-  
9 fessional outputs. What is interesting is how scientific knowledge making  
0 did not leave room for these aspects. I link this below with the notion of  
1 the *utility* of science in contrast to the perceived 'expressiveness' of art.  
2 Both succumb to the overall impetus to make knowledge objects. Yet the  
3 mode of making those objects is different, and has different effects on per-  
4 ceptions of their value, and on the person producing them. The artists  
5 were interested in engaging with the scientists in order to access a specific  
6 kind of material for their making processes, and not with making visible a  
7 sense of themselves as additional to, and necessary for, the particular  
8 objects they produced as 'art'.

9 The differences were perceived as necessary to science and art – with  
0 science working on an objective external reality which demanded an  
1 absence of subjectivity in the results. Objective reality demands an objec-  
2 tive method of investigation. Thus the person of the scientist is 'purified'  
3 (Latour 1993) from the form in which their work appears. Artists, on the  
4 other hand, did not have to purify subjective perspective from their  
5 outputs: they were expected and valued as an integral part of the form of  
6 the object itself. Scientists saw themselves as involved in a highly technical  
7 process of revelation of what is not perceived as artifice itself, but is consti-  
8 tuted as real in the social/cultural process of its emergence (Latour 1999),  
9 and in the claims that are possible in relation to it, whether those be legal  
0 or personal. The purification demanded by the context of claim making  
1 meant that scientists had less personal scope for influencing the output as  
2 people themselves. Artist's *outputs*, instead, remain associated much more  
3 closely with them as unique, individual persons. Scientists were thus repre-  
4 sented as not being creative in a subjective sense, but as establishing rela-  
5 tions between things already there. It is the reorganisation of things  
6 already there that creates something they can claim as knowledge. Scien-  
7 tists had to show that their knowledge was not a function of their subject-  
8 ivity. In scientific authorship, the claim is an epistemological claim, a truth  
9 claim, and it is valued as such (Biagioli and Galison 2003). In artistic  
0 authorship there is also a claim to truth, but a subjective (or intersubjec-  
1 tive) truth which may or may not communicate to others (have utility).

2 These different forms of knowledge and the aesthetic demands of each  
3 form meant that the place where collaboration and exchange were pos-  
4 sible was in the realm of the personal for the scientists, and in the realm of  
5 the material for the artist. I suggest that the idea of commonality which

made the scheme plausible in the first place as a collaboration which involved knowledges which could somehow be combined was made possible by precisely the contemporary notion of 'knowledge' as intangible objects which can be externalised from their producers, and which appear to carry their value despite this abstraction.<sup>9</sup> The emphasis is on production: that both arts and sciences *produce* things.

For those sponsoring the scheme, art and science provided an interesting counterpoint to each other. Combining them had the potential to offer more in the way of possibility than either on their own could. But as Strathern has pointed out (although in a different context altogether (Strathern 1988)), in order to act, people must be one thing or another. In any action involving knowledge which another is supposed to make use of or respond to, the actor must commit to one form of appearance. So what happened in the scheme was that the artists and scientists became like caricatures of themselves: the scientists found themselves deeply committed to their method of objectivity, while the artists were continually reiterating their need for individual understandings, subjective combinations of ideas and so forth.

Of course, what the Council for Science and Technology was attempting to set up was the possibility that science or art could extend the effectiveness of their actions and objects through including other kinds of knowledge form in their constitution. But that version of extension, including another knowledge object within a hybrid output, suits and reinforces the possibility that such knowledge is produced *as objects*. They appear extractable from the producers. As art objects or scientific discoveries, they would take on the status of an object that can be abstracted from their context of production, and carry their value elsewhere.

What is interesting is precisely the contrast of science and art as two ways of generating different types of knowledge objects and persons. The analysis shows that science is not the only form of knowledge making in Western societies and that other forms of producing knowledge, like art, matter politically insofar as they entail different modes of generating relationships between objects and persons.

A second example of interdisciplinary collaboration demonstrates exactly the process whereby social processes are narrowed to produce recognisable object outputs as knowledge. In this case, the process was intended and managed as a facilitation of complex collaboration precisely so that participants could justify their involvement by attachment to visible objects. The project was organised by an experienced arts researcher. It involved psychologists and neuroscientists and the innovative contemporary choreographer Wayne McGregor. Sessions and meetings took place in both scientists' laboratories and in the dance studio. McGregor had a clear aim in mind. His established method of working is to expose himself to a lot of stimulation, often through forays into various disciplines, and then make his dance pieces as a kind of reprocessing of his impressions and

1 understandings. The collaboration with five very different psychologists  
2 was his research period for a piece before it was made. Each psychologist  
3 was given the opportunity to join in group discussions, observe dance  
4 material being made, and to talk with Wayne and his dance company in  
5 depth. Some used the time allocated to them in the overall structure to  
6 perform experiments: motion capture equipment was used by one pair to  
7 investigate motor control. Others asked dancers to perform movement  
8 tasks while also speaking, or reading, etc. to generate data on which parts  
9 of the brain control which kinds of activities.

10 The project was widely seen as a great success. There were multiple  
11 outputs, including the critically acclaimed dance work *Ataxia* and scientific  
12 papers (deLahunta and Shaw 2006).<sup>10</sup> The agenda was clearly to  
13 provide a collaborative space in which people felt comfortable to practise  
14 their own form of expertise – and to view the collaborative time together  
15 as producing a commonly constituted resource from which each party  
16 could then draw data and undertake analysis, or make dance, in their own  
17 sphere and through their own skills and techniques. So although there  
18 was a collaboration, and many outputs from the project, there was never a  
19 suggestion that there would be a common outcome, a single object or  
20 event which would encompass all of the participants and represent all  
21 their different expertise and input. People worked together to generate  
22 data through their interactions. This was then organised into information  
23 by particular disciplinary players. It was useful to other participants to see  
24 processes of its organisation in specific disciplines. But it was not until this  
25 information took specific forms appropriate to certain social spheres of  
26 recognition and reception (Hirsch 2004) that they became *knowledge*.

27 These processes had multiple effects through multiple forms of  
28 outcome, many of them valuable, but not recognisable as knowledge  
29 objects. There was the performance that demanded hard work of dancers  
30 and choreographer to produce not just the piece but themselves in relation  
31 to an audience, a body of critics, and to each other. A becoming not  
32 of knowledge object, but of a person who, through practice and skill, has  
33 an external effect on others *as* they are being constituted as that person in  
34 the gaze of those others. The wider collaboration encouraged immersion  
35 in unfamiliar forms of practice and action, without demanding that all the  
36 outputs were recognisable as ‘knowledge objects’. It was actually a very  
37 similar process for the psychologists. Here, although they produce (papers  
38 in scientific journals) are more ‘knowledge-like’, more transactable anyway  
39 as object forms in order for them to have effects, these outputs had to be  
40 tailored to very specific contexts of reception. It is that very specificity  
41 which makes the value of the endeavour.

42 So where did the narrowing of these generative processes to definable  
43 ‘knowledge objects’ become problematic? Ownership of knowledge and  
44 attribution relating to outcomes are often a source of tension in such  
45 collaborations. To follow my argument so far, and as I elaborate below:

knowledge has its effects in specific systems of social relations, among specific groups of people. Work that artists and scientists undertake together may well produce an artistic outcome that can be shown in dance venues. But that context, that arena of reception, or to be consistent with my language, that system of relationships in which effect is registered, is different for the scientist. The output in that form does not realise the same value for each party. This makes disputes over the control of value produced by collaborative work common.

In the Choreography and Cognition Project, where each party was expected to go off with the commonly made resource (data), and make what they would from it, such conflicts did not occur. As the organiser wrote: 'Relationships with chosen collaborators grew as the first three hour conversations turned into long-term commitments and dialogue gave rise to agreements on concepts, sharing of aims and objectives and acceptance of different goals and needs' (deLahunta 2006: 480). Choreography and Cognition was organised in order that the outcomes were always going to be within each party's realm of effect. An 'acceptance of different goals and needs' was stated at the outset. Thus there was never any suggestion of conflict over outcomes. It is in situations where a common outcome is desired or produced that such issues become more obviously problematic.

I hope it is by now clear that these conflicts arise when we see knowledge as an object which is context free, abstracted and discrete from the relations of its production and effect. As Mitchell and Latour (Latour 1987; Mitchell 2002) have both shown in different ways, science, and its claim to universality, exportability, and expertise independent of context, is the image for knowledge that exacerbates such problems for other kinds of practice, other kinds of 'knowledge'. It encourages a view of knowledge as transactable in a straightforward sense – as an object in the image of a commodity. Maybe it is the term *knowledge* itself then which is troublesome as, in current usage, it suggests that things produced in very different arenas, for very different purposes, for very different kinds of effect, are commensurate with one another.

Now I *have* made knowledge forms comparable to one another by following Strathern and suggesting that what we mean by knowledge is information organised to have effect. But I have also suggested that there are more or less radical disjunctures between the reasons that effects occur, and that many effects of 'knowledge' may not be intended, maybe by products of productive endeavour (or rather, that production is a by-product of relationships). Knowledge really is only knowledge when it has effects. And that depends on a metaphysic, on a series of assumptions and expectations about what effect will look like, what will be valuable, and so forth.

It is this last point, about value, that returns us to the notion of utility and the demand that all 'knowledge' take a specific transactable that is useful to others. What I have pointed out through the interdisciplinary

1 examples is that effect does not mean utility, and use-ability by another  
2 kind of practitioner may well not be dependent upon utility in its expected  
3 sphere of reception. McGregor's successful dance *Ataxia* actually drew  
4 more from conversations with and observation of a woman who suffered  
5 from the condition than it did from the technical information the psychol-  
6 ogists were able to provide about which bits of the brain were affected, but  
7 that surely does not make their knowledge useless. In general, a lesson  
8 here is that utility cannot be specified in advance. But the overall point is  
9 that when we call things which are really complex systems of persons,  
0 skills, contexts, objects, ideas, and so forth 'knowledge', we are in danger  
1 of making widely different productions and intended effects as if they were  
2 commensurate with one another.

3 In any production there is an objectification of social processes. Making  
4 all the things that come out of academic work or interdisciplinary collabora-  
5 tion into 'knowledge' can have the effect of reifying those productions as  
6 value in their own right. Knowledge seen as one kind of thing, easily  
7 exported from the context of its production and its effect, is to mistake the  
8 value of creative and relational processes for one possible aspect of them.

9 The philosophical roots of Euro-American intellectual property law are  
0 generally located in Locke's exposition of labour-based individual owner-  
1 ship rights, in conjunction with a vision of individual creative genius  
2 traced to eighteenth-century and early nineteenth-century Romantic  
3 authors (Jaszi and Woodmansee 2003). The Lockean view imagines the  
4 value of art, or any created work, as emanating from the individual, via  
5 labour, and entering the artwork through the mechanical process of its  
6 creation. Romantic authorship as a model suggests that individual genius  
7 transforms ordinary human experiences into extraordinary original art.  
8 The artwork, now a detached possession or event, is considered inanimate,  
9 perhaps representing, but not containing, the creativity of its producer.  
0 What is more, its source of value can be translated, through the notion of  
1 labour, into economic recompense. In this model, the artwork or perform-  
2 ance may 'move' those in the audience, but its greater effects, or revela-  
3 tion of a deeper reality is, in the Kantian philosophical tradition, an  
4 interior experience, individual to each perceiver. The relation that is high-  
5 lighted by such formulations is between artist and created object, and  
6 between perceiver and world beyond, not among makers, collaborators,  
7 audiences, perceivers, and creations as aspects of each other.<sup>11</sup>

8 In contrast to this logic, this chapter drew a critique from the analysis of  
9 Melanesian and Indonesian traditional artists including musicians, compos-  
0 ers, dancers, textile designers and theatre performers who locate the primary  
1 value of their artistic activity within a set of human and cosmological relation-  
2 ships that are realised, or sometimes transformed, through artistic perform-  
3 ances and works. The artists and scientists I described above are doing similar  
4 things. They are working within certain procedures and expectations to  
5 produce not just knowledge objects, but themselves as persons, the

disciplines they work in as distinct and complementary, methods and techniques, connections and relationships. It is for this reason that knowledge is not simply transferred, nor should it be. In Indonesia, the artists' claim was over the work of relational positioning. That is why we get no strong statements over the ownership of the object created.

I am suggesting that we can learn something about what we currently call knowledge from thinking about value in a wider sense than tends to happen when it is the object produced which is of concern, not the process of production.

### **Conclusion**

These case studies elaborate my statement that there is a commonly observable phenomenon across many contexts in which 'knowledge' is produced. It is a move that renders multiple values generated by complex social processes into simple and often commodifiable value located in objects, as if those objects retained their value shorn of the social relations in which they have effect. In other words, knowledge becomes a matter of economy. I am not naïve about this. I understand that transformations in the description of entities such as those currently covered by the term 'knowledge' mean that those entities can have different effects, and indeed can sustain the generation of social relations and values of different kinds. Capitalist knowledge economies are a form for social relations after all. However, what I have described here is a common series of transformations in which reifications of knowledge objects may clearly be seen to make transformations in the kinds of value that the social processes they are abstracted from generate, and that these transformations contribute to the wider emergence of 'knowledge economies' with their social audit practices, impact assessment for research and universities, state ownership, and bureaucratic control over cultural production and appropriation of traditional and indigenous knowledge. This serves certain interests. That is a matter of politics.

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### **Notes**

1 January 2010.

2 In which the creator/author receives rights over the material expression while allowing that object to circulate.

- 3 Traditional and cultural practices would thus be owned by the state, not by the  
4 groups within the state who practise them.  
5  
6 Article 8 – Cultural goods and services: commodities of a unique kind.

In the face of present-day economic and technological change, opening up  
vast prospects for creation and innovation, particular attention must be  
paid to the diversity of the supply of creative work, to due recognition of the  
rights of authors and artists and to the specificity of cultural goods and serv-  
ices which, as vectors of identity, values and meaning, must not be treated  
as mere commodities or consumer goods.

- 7 The idea that traditional arts in Indonesia, particularly in Java, are relational is  
not unexplored. See, in particular, Keeler's sophisticated ethnography of Javanese  
puppet theatre and its sometimes inattentive audiences (Keeler, W. 1987.  
*Javanese Shadow Plays, Javanese Selves*. Princeton, NJ: Princeton University  
Press).  
8 AHRB – which was soon to become a full Research Council – the AHRC – in  
2004.  
9 Council for Science and Technology. 2001. *Imagination and Understanding. A  
Report on the Arts, Sciences and Humanities in Relation to Science and Technology*. UK  
Government/Department of Trade and Industry.  
10 Leach, J. In prep. *Constructing Aesthetics and Utility: Art, Science and the  
Purification of Knowledge*.  
11 See Leach. Forthcoming.  
12 www.choreocog.net/.  
13 Aragon and I believe that such generalisations about what is in reality a highly  
complex and contested series of philosophical positions is justifiable because  
our comment is upon the simplification, the rendering of complex realities as  
all following the same logic, that intellectual property law effects.

## References

- Aragon, L. and J. Leach. 2008. Arts and Owners: Intellectual Property Law and the  
Politics of Scale in Indonesian Arts. *American Ethnologist* 35, 607–631.  
Biagioli, M. and P. Galison (eds). 2003. *Scientific Authorship: Credit And Intellectual  
Property in Science*. New York; London: Routledge.  
Brown, M.F. 1998. Can Culture Be Copyrighted? *Current Anthropology* 39, 193–206.  
———. 2003. *Who Owns Native Culture?* Cambridge, MA: Harvard University Press.  
Council for Science and Technology. 2001. *Imagination and Understanding. A Report  
on the Arts, Sciences and Humanities in Relation to Science and Technology*. UK Gov-  
ernment/Department of Trade and Industry.  
Daes, E.-I. 1997. *Protection of the Heritage of Indigenous People*. (Human Rights Study  
Series). New York: United Nations.  
deLahunta, S. 2006. Willing Conversations. The Process of Being Between. *Leon-  
ardo* 39, 479–481.  
deLahunta, S. and N.Z. Shaw. 2006. Constructing Memories: Creation of the cho-  
reographic Resource. *Performance Research* 11, 53–62.  
Gell, A. 1998. *Art and Agency*. Oxford: Oxford University Press.  
Greenfield, J. 1990. *The Return of Cultural Treasures*. Cambridge: Cambridge Univer-  
sity Press.  
Hallam, E. and T. Ingold (eds). 2007. *Creativity and Cultural Improvisation*. Oxford:  
Berg.

- Handler, R. 1991. Who Owns the Past? History, Cultural Property, and the Logic of Possessive Individualism. In *The Politics of Culture* (ed.) B. Williams. Washington, DC: Smithsonian Institution Press.
- Harrison, S. 2000. From Prestige Goods to Legacies: Property and the Objectification of Culture in Melanesia. *Comparative Studies in Society and History* 42, 662–679.
- Hirsch, E. 2004. Boundaries of Creation: The Work of Credibility in Science and Ceremony. In *Transactions and Creations. Property Debates and the Stimulus of Melanesia* (ed.) E. Hirsch and M. Strathern. Oxford: Berghahn Books.
- Jaszi, P. 2009. *Indonesian Traditional Arts – Issues Articulated by Artists and Community Leaders and Possible Responses*. Washington, DC: American University.
- Jaszi, P. and M. Woodmansee. 2003. Beyond Authorship. Refiguring Rights in Traditional Culture and Bioknowledge. In *Scientific Authorship. Credit and Intellectual Property in Science* (eds) M. Biagioli and P. Galison. London: Routledge.
- Keeler, W. 1987. *Javanese Shadow Plays, Javanese Selves*. Princeton, NJ: Princeton University Press.
- Latour, B. 1987. *Science in Action. How to Follow Scientists Through Society*. Cambridge, MA: Harvard University Press.
- . 1993. *We Have Never Been Modern*. Cambridge MA: Harvard University Press.
- . 1999. *Pandora's Hope: Essays on the Reality of Science Studies*. Cambridge, MA: Harvard University Press.
- Leach, J. 2002. Drum and Voice: Aesthetics and Social Process on the Rai Coast of Papua New Guinea. *Journal of the Royal Anthropological Institute* 8, 713–734.
- . 2003a. *Creative Land. Place and Procreation on the Rai Coast of Papua New Guinea*. Oxford and New York: Berghahn Books.
- . 2003b. Owing Creativity. Cultural Property and the Efficacy of Kastom on the Rai Coast of Papua New Guinea. *Journal of Material Culture* 8, 123–143.
- . 2004. Modes of Creativity. In *Transactions and Creations. Property Debates and the Stimulus of Melanesia* (eds) E. Hirsch and M. Strathern. Oxford and New York: Berghahn Books.
- . 2006. Out of Proportion? Anthropological Description of Power, Regeneration and Scale on the Rai Coast of PNG. In *Locating the Field. Space, Place and Context in Anthropology* (eds) S. Coleman and P. Collins. ASA Monograph. Oxford: Berg.
- . Forthcoming. Constructing Aesthetics and Utility: Art, Science and the Purification of Knowledge.
- Lessig, L. 2004. *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*. New York: Penguin.
- Mitchell, T. 2002. *Rule of Experts: Egypt, Techno-Politics, Modernity*. Berkeley: University of California Press.
- Sedyawati, E. 2005. Senu Pertunjukan Tradisi dan Hak Cipta. *Jurnal Seni Pertunjukan Indonesia* 13, 49–54.
- Strathern, M. 1988. *The Gender of the Gift. Problems with Women and Problems with Society in Melanesia*. Berkeley: University of California Press.
- . 1992. *After Nature. English Kinship in the Late Twentieth Century*. Cambridge: Cambridge University Press.
- . 1999. *Property Substance and Effect*. London: Athlone Press.
- . 2004. The Whole Person and its Artefacts. *Annual Review of Anthropology* 33, 1–19.



- 1 —. 2005. *Kinship, Law and the Unexpected. Relatives are Always a Surprise*. Cambridge:  
2 Cambridge University Press.
- 3 —. 2006. Intellectual Property and Rights: An Anthropological Perspective. In  
4 *Handbook of Material Culture* (ed.) W.K.C. Tilley, S. Kuchler, M. Rowlands and P.  
5 Spyer. London: Sage.
- 6 —. 2007. Useful Knowledge. The 2005 Isaiah Berlin Lecture. In *Proceedings of the*  
7 *British Academy*. Oxford: Oxford University Press/British Academy.
- 8 Sykes, K. (ed.). 2001. *Culture and Cultural Property in the New Guinea Islands Region:  
9 Seven Case Studies*. New Delhi: UBS Publishers Distributors.
- 0 United Nations Educational, Social and Cultural Organization (UNESCO). 1978.  
1 *Contribution to the Implementation of the International Convention on Economic, Social  
2 and Cultural Rights in Light of the Decisions of the Economic and Social Council and of  
3 the Human Rights Committee Executive Board*. UNESCO.
- 4 —. 1984. *Protection of Movable Cultural Property*. UNESCO.
- 5 —. 2001. *UNESCO Universal Declaration on Cultural Diversity. Adopted by the 31st  
6 Session of the General Conference of UNESCO, Paris 2 November 2001*. UNESCO.
- 7 —. 2003. *Convention for the Safeguarding of the Intangible Cultural Heritage, Paris 17  
8 October 2003*. UNESCO.
- 9 Vaidhyanathan, S. 2006. Afterword: Critical information Studies. A Bibliographic  
0 Manifesto. *Cultural Studies* 20, 292–315.