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Publisher: Routledge

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## Anthropological Forum: A Journal of Social Anthropology and Comparative Sociology

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/canf20>

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Version of record first published: 30 Nov 2012.

To cite this article: James Leach (2012): Leaving the Magic Out: Knowledge and Effect in Different Places, *Anthropological Forum: A Journal of Social Anthropology and Comparative Sociology*, 22:3, 251-270

To link to this article: <http://dx.doi.org/10.1080/00664677.2012.723611>

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# Leaving the Magic Out: Knowledge and Effect in Different Places

James Leach<sup>1</sup>

*In 2010, Porer Nombo and I launched a book about indigenous Papua New Guinean plant knowledge to a large audience at a university near to his village on the north coast of that country. Members of the audience commented that the book made a record of important practices. But they asked if those practices were dependent on secret magic to be effective? What gave us the right to include such secrets? Or, if there was in fact something fundamental missing from the book (magical formulae to activate the processes described), then what was the use of publishing the book? Thinking through their questions suggested the need to analyse what ‘knowledge’ is in different places, and why plants might be effective in some, but not others. In this paper I attempt an explanation that does not rely on a ‘social’ explanation of magic but instead suggest that what we call ‘magic’ are mechanisms whereby a gardener (or healer, or hunter) positions an action, or a thing in relation to other things. I liken the way myth works in these systems to the way intellectual property law provides a comparable ‘mythic’ structure that locates effect in the places that have developed ‘knowledge economies’ and I conclude by asking; if places embody their history and politics, and generate different understandings of effect, then what are the implications of calling Porer’s practices with regard to plants, ‘knowledge’?*

*Keywords: Knowledge; Magic; Plants; Myth; Intellectual Property*

In their own way universal models are another set of local formulations. (Stephen Gudeman 1986, viii)

## Introduction

This paper addresses the recognition of knowledge through a topic of long-standing interest in anthropological debate: how we approach and understand ‘magic’ (e.g. Malinowski 1922; Evans-Pritchard 1937; Levi-Strauss 1966). Here, following a venerable tradition, I make an argument against seeing magic as a matter of erroneous belief; but specifically in this case, against seeing it as something that may

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ISSN 0066-4677 print/1469-2902 online

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<http://dx.doi.org/10.1080/00664677.2012.723611>

follow its own cultural logic but whose *effect is confined within a symbolic register* (and see Holbraad 2012). I suggest that tethering our understanding of the practice of magic to a familiar logic of cause and effect in one way or another (Malinowski 1922, 394–95; Evans-Pritchard 1937, 18–23), or seeing it as a manifestation of the myths that provide a normative structure for primitive society (Malinowski 1922, 303, 328), means we are forced to see the ‘social’ effect of magical beliefs detached from the practical effects of physical acts. I seek a way to reunite these separated elements, and thus consider what ‘knowledge’ means (or can mean) when not viewed through a reductive, relativised set of social constructs. I move back and forth between ethnographic material from the Rai Coast of Papua New Guinea and analytic considerations of knowledge and effect.

Here, I make a departure from previous analyses, and suggest that we can usefully turn the Malinowskian analysis of magic (as myth made tangible through everyday practices) in primitive societies on its head. I suggest that myths provide a set of principles that structure relations in *both* Rai Coast and Euro–American modes of understanding knowledge, and I consider intellectual property as a form of myth that Western knowledge producers tell themselves to situate their actions. Far from finding myth relevant only to knowledge in ‘primitive society’ then, an examination of the oft-mistaken analogy of myth (primitive) with law (modern) by anthropologists suggests that what *does* link Rai Coast practices with Euro–American knowledge is that judgements of effect are necessarily *placed* by history and thus part of consciousness given shape by myth, an aspect of what *we* call social relations.

### **The Magic Garden in Reite: Anticipating Effect**

Before dawn a gardener rises and without eating, smoking, chewing betel or conversing with anyone, he goes to his garden, collecting along the way a set of plants, barks and leaves with which he will imbue the ground itself with the power to grow tubers. The ground has already been prepared: his siblings and their wives and children have all laboured to clear trees and scrub. He has fired the remains, and divided the garden into blocks and paths, all already allocated areas to particular members of his family and to particular purposes (especially the exchanges and life-cycle ceremonies that he knows will demand his or their input in the coming year). The garden is already full of other people, anticipating the growth and transformation of their bodies in its very conception. It makes their future connections and transformations possible.

Standing at very first light in the centre, the gardener makes what is called the *wating* (‘garden-shoot’).<sup>2</sup> He demarcates a small area, and within it places the original strain of taro surrounded by cooling plants, plants that make sorcery and illness cold, plants that will imbue the taro in the whole garden with strength, with perfume and savour, with ‘bones’ so that it does not turn to mush when cooked, with colour and longevity. Other plants are included to encourage the taro to grow by their vigorous example. He includes plants that will guard the taro and the garden, causing hideous



**Figure 1** 'Wating' in a Reite garden, 2001. Photo by James Leach.

boils in any who step over them. Finally, he places a staff for the spirit mother of taro to hang her string bag from. Calling her name, he requires her to return from the distant places to which she has travelled (with taro in her womb) in the year since he last made a garden. The places she has visited are called by name, acknowledging her work in the growth of other people and taro there.

Breathing the tune and the name of the male taro deity over a tuber and shredding the same barks and leaves into the space around it in the earth, substances that the taro deity himself specified, the gardener finishes his work by chewing a stem of *Pennisetum macrostachyum* and spitting its juice in a fine spray from his mouth to 'seal' the work. He walks respectfully and quietly from the garden without disturbing the now sleeping and present taro. Later that day his wife and children will come and begin the task of planting 'baby' taro throughout the rest of the garden, noting for whom each block is planted, and asking the appropriate people to work there in each case. (If a block will contribute to a child's gift to her mother's brother for example, this child and her siblings will labour there.) The centre of the garden remains a very private place. People do not go to the *wating* as they go about their daily work.

Each place, each small group in this landscape, has a unique form of *wating*. The shape, the actual constitution of the mix that makes up what is planted and what grows differ from one hamlet to the next. They are handed down through the generations, and these differences are linked to the different shape and taste of taro from different places, and the different kinds of people who grow from eating them.

Gardening is an art in Reite, people take enormous pride in gardens and their produce. In the careful and intricate ritual and magical preparation of the garden, we see thought and effort directed to the future, to the anticipated and imagined outcome of the effort. What is being anticipated? Is it something mystical and unreal that will result from the application of all that magic? Of course not. It is, in fact, the generation and regeneration of the human world and its distinctions. No wonder

people are proud. No wonder they take trouble. But what are all those special plants and procedures in the *wating* doing?

I suggest in what follows that magic here is not about a retrospective concern over (explaining) cause and effect. It is certainly not a defective logic. It is about creating the conditions under which things have their particular effect. It does so by positioning the gardener and the plants, the growing tubers and their sweeteners, strengtheners, supporters and competitors, in the human world;<sup>3</sup> a world constituted by the history of the place and the people who inhabit it. Taro and yam are made human by being grown in this human world. They have their particular effects on particular bodies, making those bodies into Reite bodies.

In being grown at a particular and intricately prepared point in a series of relations between kinsmen who clear areas of land that is their own land, who labour in different ways in each other's gardens, who locate their particular style and form of planting in history by drawing in ancestors and names, tunes and practices that are part of the emergence of that place and not another, the tubers live within a world of plants and temporally unfolding processes of growth that give them a particular place and identity within and beyond the garden. The tuber is therefore an anticipation of effect in other bodies, and through those bodies, its own future reproduction and continuity. The intricacy of gardens and of garden magic is the intricacy of anticipation and realisation: the gardener anticipates the human world as produced through the tubers he grows and exchanges with other gardeners, anticipating carefully their effects in growing particular other bodies, and thus making those



**Figure 2** Reite magicians and garden produce, 2006.

bodies distinct and effective in their own right. Magic in the garden in Reite is not superstition or empty reference. It is knowledge and action that brings into being possible future effects.

### **Knowledge and its Contemporary Valuation**

A vast array of things, practices, processes and techniques are thought of as 'knowledge' these days. But it is quite obvious that when many different things are understood as versions of 'the same' class of thing, then internal differentiation, ranking and relative valuation become pre-occupations. This is particularly true for Euro–Americans who view 'knowledge' as the basis for human domination/control over the environment, the identification and exploitation of potential resources, and thus of wealth creation (Rubio and Beart 2012, 3). The scale against which the value of knowledge is currently judged is then one that places effectiveness as paramount. Indeed, things are judged as true or false, as knowledge or error, depending on various measures of effectiveness. Within this (obvious process of) classification and ranking, there may be room for understanding different kinds of effect, ranging from direct visible physical change (scientific and technological interventions), to the effective organisation of people and resources (management), the prediction of behaviour (economics), or moral, historical and aesthetic awareness (arts and humanities).

In these divisions, ones that seem natural to Euro–Americans, two assumptions are apparent. Firstly, that knowledge is something that can be and is regularly detached from the people who produce it and use it, that it can circulate without reference to those persons (Leach 2012, 80). Its effect is not dependent on them, or their position and historical circumstance. The second is that a correlation of true knowledge with effective action on the external environment sets the conditions for valuation, with the most valuable being knowledge that always works, everywhere, to achieve ends without the institutional conditions for its effectiveness being made apparent.<sup>4</sup>

This paper sets out a different conception of knowledge, also in two senses. That is, following the example and understanding of people on the Rai Coast of Papua New Guinea, I render a description of knowledge that may be unfamiliar. In order to achieve a sense of knowledge on the Rai Coast, I discuss what magic is and what it does for people there. Its necessary connection to particular persons and moments of effect is central to my argument. I return it, in a sense, to a form not constrained by the implications of being 'knowledge' (see Vivieros de Castro 2009, 247–51) as I have just explained it.<sup>5</sup> Following from this, I discuss the 'effectiveness' of Rai Coast people's practices with plants, locating the effect of these practices in other persons and their actions. I thus seek to demonstrate that these practices are effective, that is, not erroneous beliefs but actions with effects in the particular place of their use.

However I also urge caution here. Noting that this form of anthropological analysis invites a further move to distinguish what is 'really' effective about their use (that is, universal and not dependent on position), and what is 'cultural' or 'social' effect,

embellishment or tradition, I reject that distinction, based as it is in the terms of one possible rendering of knowledge (described above as dominant, Euro–American). Instead I follow philosophers and historians of science who show that our judgements of effectiveness in dualistic terms are also located in a particular history, in particular places, just as Rai Coast understandings of effectiveness are. While Rai Coast people privilege positioning things in relation to other things as if they were all persons (Gregory 1982, 93), dominant Euro–American judgements of knowledge privilege effect on an external world of nature and natural forces. Of course, the fact that doing so is *also* to position things with regard to persons (in a modernist episteme of duality and separation) is exactly what cannot be revealed in this conception of knowledge for it to stand *as* knowledge. It is necessarily obscured in the production of ‘effectiveness’ as exactly an effect independent of particular persons. For that to be possible, nature must be precipitated as the very register of effect. I try to show how this precipitation of nature occurs over and again when we talk of ‘knowledge’.

My suggestion is not that we can or should replace one view with another (Rai Coast for Euro–American). Quite the contrary. We need to be very careful that we do not make such a replacement by default, imagining what Rai Coast people do with plants is an inferior version of what we imagine scientific knowledge to be. That we do not, ‘incorporate their ways of life within our own self invention’ (Wagner 1975/1981, 144). And thus, I suggest we recognise what *we* are liable to do when we start calling what *they* do, ‘knowledge’.

### Leaving the Magic Out

In July 2010, Porer Nombo and I were fortunate to launch our co-authored book about indigenous plant knowledge at the nearest university to his village in Papua New Guinea. The book we launched was a product of a long-term collaboration between Porer and myself, begun as a modest private enterprise in 1995. Back then, Porer asked if I would make a book for him recording how he used plants from the forest and old garden sites in processes that were part of what Reite people call ‘*kastom*’.<sup>6</sup> The book has chapters on material culture, garden ritual, medicinal plants, initiation, divination and hunting. The project grew from there over a couple of ‘editions’ that I printed privately and bound myself (and returned to Porer on subsequent visits) into an Australian National University EPress volume, hosted by the Asia Pacific Environment Monograph series. It was peer reviewed and closely edited, and the volume is available for free universal download as PDF, or as a print on demand hard copy charged at cost price.<sup>7</sup> The book provides information on over 100 plant species (most of which have a degree of scientific identification), information about what they are used for (divination, hunting magic, garden ritual, medicine etc.) by Reite people, and a discussion of the contexts for ownership of such knowledge provided respectively by Reite *kastom* and global intellectual property precedents. We jointly examined what it might mean in the climate of the latter (expanding and colonising) precedents to call the information in the book

'knowledge'. The text is presented throughout in both English and the lingua franca of Papua New Guinea, and the book contains more than 150 photographs of plants and some of the things people make from them.

The Papua New Guinean students in the audience that day were rigorous in their questioning of our presentation of the book. We were congratulated; surely the book made a record of important knowledge. It demonstrated indigenous science, the value of custom; it was excellent to see it in published in the lingua franca, and so forth. But was it not true that the uses of plants recorded in the book were dependent on certain ritual procedures to be effective? Were there not secret formulae that specific people had rights over involved in these uses? What gave us the right to include such understandings? Or, if, as many in that audience divined, there was in fact something missing from the book (the magical formulae to activate the medicines, divinatory and gardening procedures that it contained) then was there, in fact, any use in publishing the thing? Who was it for, and who could or would make use of it?

The first aspect of these questions might be thought of as the interesting one in the context of our discussion of local and global ownership regimes, or indeed this Special Issue, where intellectual-property thinking structures many of the contexts the authors examine. For one thing, there is a clear translation of what Reite people do with plants into an abstract form by means of the book. My essay on ownership in the book highlighted this transformation (from embedded and practised to abstract and recorded), to question whether the problematic move we made was not in making the information about plants available (for appropriation by outsiders; see Hayden this volume), but whether at a more basic level, the presentation of the information *as if* it were 'knowledge', in this Western sense, did not carry a danger of another kind. That is, relegate it to being 'traditional' or 'indigenous' knowledge, and



**Figure 3** Porer Nombo at Divine Word University, Madang, 2010. Photo by Holly Wardlow.



thus make something entangled in complex practices and relationships into something that could be parsed into real and effective uses of plants, and traditional or superstitious 'culture'. The latter is of course a 'knowledge' of less worth than the kinds of knowledge one might gain by analysing each plant for its chemical compound and assessing its potential therapeutic use. I made the obvious point that the mechanism of granting rights for (mental) labour present in intellectual property regimes make that second kind of transformation also a transfer of rights and ownership to those with large chemical laboratories and who can make a patent claim over whatever they discover. A hierarchy of kinds of knowledge is the result, as well as possible wealth, remuneration and so forth.

Of course the questions about ownership and the right to reveal the information were interesting to me, but I hope to show how the fact that the questions came in a rather unexpected form made them particularly interesting in another sense than that of resisting appropriation. The articulation was not about exploitation by outsiders or the threat of bio-prospecting. Rather, the questioners focussed on *where* the plants had come from, if Porer himself was *responsible* for their application in Reite, and if others in the village did not have rights over the use of them because they (the plants) were connected, through kinship, to different ancestors. One of the most insightful questioners that day asked if there was not a division of ritual labour in Reite that meant many of the plants were the business of other kin groups, for example. If they were, then should we have revealed them to others through a widely available publication? To paraphrase: 'You have presented plant knowledge, OK, but you know there is a deeper strata here, and we are concerned that you have revealed that. As it seems you haven't, doesn't that undermine the use of presenting it?'

Of course we had already thought much of this through before publication, and Porer was able to answer most informatively. Yes, the plants used in order to encourage the growth of taro tubers, for example, and the form of those plantings, were the ones that he had learned and inherited during specific life-cycle events. His right to use them had been paid for by transfers of wealth and produce at those moments. The uses recorded in our book were different from things other people might do with the same plants.

Porer was meticulous throughout our collaboration to include only plants that he had direct understanding of and for which he could trace the route (people, kinship connection) through which he knew them. For example, during the collecting work for the first edition of the book in 1995, we stumbled across a plant (used for love magic) in the bush, photographed and discussed it, but then removed it from our records because as we talked Porer realised that it is central in a myth told by people from the neighbouring village of Serieng. While everyone who knows the myth knows the possibilities for its use, the myth named ancestors of other people. Porer was not in a position to use the names of those people. So Porer was in no way fearful of accusations that he was claiming or appropriating something to himself. As you will read below, he is a robust orator in such circumstances. But the care he took demonstrates that there is a potential issue about the relation between persons here.

The use of the names (*paru*) of characters in myths (*patuki*) and tunes (*kaapu*) from those myths are a crucial part of the effect of many of the plants in our book (and see Lawrence 1964, 45). As those students perceived, we had not included them. For indeed what members of that audience called ‘secret names’ or ‘bits of talk’ are not simple formulae, but are expressions of connection to others. When questioned about leaving these names (names sung quietly in the tune/voice [*kaapu*] of the relevant character) from our record Porer responded as follows:

Nombo: I assure you that even though we did not include the *paru*, I *do* know them. Every plant I put in the book I learned about from my fathers and ancestors, so I know them. If I choose to put them in, there is no one who can say anything to me. They don’t know these *paru*!

Leach: But the particular plants which have *paru* associated with them will not work for anyone reading the book without the *paru*?

Nombo: Children and grandchildren seeing them can come and ask me, and I will give them to them. I have already taught many people the lime-powder divination, for example. They can pass this on to their children and grandchildren. They can learn these things and teach others. [The procedures and names for] growing yam and taro are known by many and still in use. I don’t think they will be dropped or forgotten. But lots of kids who see this book can come and ask me (or others) to know more. I say to them, ‘you sit quietly, don’t rush at this, these things have hard work associated with them and I will not force you to learn them.

[Porer here refers to the stringent and long lasting taboos on food and sex that learning *paru* require if they are to ‘stick to’ the person who learns them. Also, in many cases there are pretty horrible illnesses associated with breaking or taking such restrictions lightly.]

Nombo: But if you want them, and are willing to go through the restrictions, you come and sit still and quiet—you will learn them.

The real reason for [my interest in writing] the book is that all Reite people have seen that children and grandchildren are going to forget these things. If we don’t put them on paper, they will be lost. So I wanted to stimulate interest by putting them on paper. It is true that I did not ask everyone in Reite before making the book with you. But I don’t think they will say anything critical. They will see this and be happy. From the church and missions we hear the phrase ‘give up practices from this ground’. But I put them on paper to strengthen interest in them and the old people in Reite are happy.

We have always said we are not going to give you [Leach] the secret names, the bits of talk, *paru* in our language. Those Papua New Guinean students asked—does that mean you don’t know the position of the plants [the names]? But I asked them in return ‘don’t *you* have them? Where did you come from?’

It’s true, if white people ask, they don’t seem important.

The message of Porer’s response is clear: if you want these things to work for you, come and talk to me or to others who have received them through the right channels. Come and ask respectfully and I will give them. But they are not simple keys. There is

‘hard work’ involved. That is, years of particular kinds of tailored behaviour and actions relating to *other people*. You can have them, but know what you are getting into!

In the last line of the dialogue above, when a student asked, ‘Don’t these things need magic?’ the response was as follows:

Don’t you know that? Don’t you have those sorts of things yourself? I wonder where you came from? [This is only a thinly veiled insult, suggesting that wherever it was, there was no real power there.]

Porer expressed clearly that for him, ‘knowledge’ of these names is particular relations to specific others, and through them, particular relational effects. As Strathern wrote recently about a comparable context,

[k]nowing the conduct and meaning of . . . performances would, in turn, only be effective when deployed by those with the right to use them. That effectiveness could not be transferred through acquiring someone else’s ‘knowledge’. Ultimately, it was not a matter of knowing but of being, and of being party to a particular relationship (Strathern 2010, 6).

### Locating Effect

Knowing particular garden procedures or divination techniques was part of what becoming the person *Porer is*—a Ripia, Nalasis, man with particular paternal, maternal, and affinal connections—entailed. In my gloss on the answers he gave then and subsequently, Porer told us that he had been given recognition as a person (a person who was in a position to receive and utilise these names and plants) by the acceptance of pigs, shells, and other things by his mother’s brothers and wife’s kin during the course of many ceremonies. That what we were calling ‘knowledge of plants’ was a part of his relation to them, and thus part of his position, his very constitution. The incorporation of those practices in a mythic structuring of relations between kin positioned him as the right person to undertake these specific practices. Now Porer is indeed acknowledged as an expert on *kastom*, healing, and so forth on the Rai Coast. But he is not a special or extraordinary type. All adults have such distinctive aspects of their practices. It is these distinctive practices and their *routes of transmission* that makes one *place*, and one person, different from another (Leach 2009, 181). It is in the recognition accorded through accepting gifts of wealth that the person emerges in the eyes of others as that particular person (see Leach 2003, 151–59).

What Reite *kastom* practices that produce such differentiated persons offer us theoretically, I suggest, is a vivid example of what Roy Wagner terms a ‘differentiating symbolisation’ (1975/1981, 42–59) in which everyone is particular because they are actively and consciously constituted in unique relations to others—their bodies are different (see Vivieros de Castro 2009, 238–41) because they are grown from particular places and particular nurture, contain different relations to others through

unique myths and histories. And 'knowledge' is part of that particularity. It is what allows them to have specific effects and capacities on others' bodies and minds.

Particularity in this mode is not a problem to be overcome with a theory of something transcendent that organises or collectivises individual entities, as is achieved by the Durkheimian notion of society for example (Strathern 1988). There is no need for such a 'collectivising' impetus because differentiation is what makes persons appear *as persons*. Whereas the Durkheimian theory begins with the premise that each person is an individual of dual constitution, a homo duplex with natural bodily attributes and social conditioning, on the Rai Coast, because social theory is not dualistic in the same way, and persons are grown by others through processes of holistic differentiation (body and mind as one), the problem is often the other way around: how does one differentiate persons from one another (Leach 2003, 85–87) rather than explain their collectivities and commonalities? (I return to this below.)

In this context, myth is anything but abstract. The principles of differentiation embodied in myth continually provide a practical distribution, a concrete positioning for persona and their actions in the constitution of a particular world. For example, there are many Reite myths about elder and younger brothers in which the younger differentiates himself through an action not specified by precedent (or the instructions of their animal, or vegetal or spiritual interlocutor) and thus makes a change in the world itself occur: from causing a nutritious nut-tree/spirit-woman to hide her reproductive organs (fruit) under thick and tough shells (by continually fiddling with her), to specific garden forms that result in distinctive taro and yam species, to the emergence of gender and death themselves. In each case, different ways of being a person emerge, and a group or place comes into being as a particular, and located, separate entity with particular practices in relation to situated and animate aspects of their surroundings.

There are also many myths of transformations between animal and human, transformations that occur due to various mistakes or slights, or, again, due to a youth not following ancestral ways and instructions. One gets a sense in Reite of a world in which everything would have been fine and peaceful if people did not have the tendency to follow their own ideas and desires, to differentiate themselves from others. But being human is to suffer from such conceit. And thus human life as a differentiated existence with gender, kinship, places and so on is the product of differentiation in myth (Mimica 1991, 35–36). The human world is a differentiated world of gender, affinity and death. Of course that means exchange and reproduction. It also means sorrow, disease and anger. It means people have different ways of being because of their different locations in this mythically structured distribution. They have different ways of making things such as gardens grow or bodily transformations in initiation happen. Action then is situated as creative because it is differentiating and thus transformative. Everyday action is already positioned. It is positioned in relation to particular others, to other persons and to outcomes of actions that make or transform particular humans lives. 'Knowledge' here then is what makes one person different from another, and that is a

matter of relational positioning. This realisation allows us to approach the question of knowledge afresh, as it were.

### What Do 'Bits of Talk' Do?

In the *Reite Plants* book, Porer and I relate an incident that tells us much about what plants are and do in Reite. How they fit with their social theory, as it were. The plant in question is one that Reite people use to wash newborn babies. Parents make a bed of it, within which a new born is cradled *at the moment* when they are passed out of a new opening, broken in the back of the marital house (and where they have been secluded since the birth) to the child's mother's brother (MB). He washes the child for the first time, and with his kin, shows the baby how to garden, hunt, climb trees and undertake other vital work.

What is achieved by this procedure? Well, 'birth' is not achieved until the child is recognised by a related person *outside* their immediate family. It is this specific other who shows it gardening, hunting etc. for the first time (and thus can claim to be the origin of these abilities in the child, and claim subsequent wealth in recognition of their achievements). There is no generic gardening, (or rather, all gardening is generic, but one must make a difference from others' gardens to be a located person). There are specific ways of making gardens that distinguish particular places and people, there is a very clear and direct equivalence between this moment and a consumption of the child by the MB and so on. I will resist the impetus to spend the rest of this paper elaborating further. But it should be clear that what the MB 'knows' is here passed onto the child, and that is a matter of making them accept the child and the substitute wealth and meat that accompanies the plate. It is, then, a matter of placing the child in a particular relationship, the form of which determines their subsequent growth and development.

In the *Plants* book I make much of the fact that I wanted to know what this plant, called *asarsing*, does for the child. Why use it? What are its properties? What particular properties make *asarsing* the plant chosen for washing and cradling the child? Well, the answer to these questions came without hesitation from Reite elders in the form of a myth. My contention is that by answering my question about an intrinsic property of a plant through situating its effectiveness as an aspect of a relation to specific named ancestors in the myth, to specific procedures which make a child a human child by relation to particular kin who make it appear as that child, and not as something else, not somebody else's; the 'work' of the plant is to situate the child in relation to particular ancestors.

To be human in Reite is to be in particular relationships to other persons. In fact, the myth is wholly practical.<sup>8</sup> What could be more practical than providing a frame for action in which that action is situated in relation to a series of actions that produce the world in human, Reite, form? To be effective, both things and people must have the correct orientation, take the requisite form. And for the plants in that book, that means 'to be in relation to other people', to draw on the previous

obligations and orientations that the names used in their presence call forth. What we might call ‘magic’, that is, *paru* and mythically specified forms of action are the way that Reite people have of effecting the emergence of particular kinds of human person. Humans are human beings because they are always entrained in, extensions of, differentiated versions of, and obligated to, others. By using *paru*, a gardener or healer or hunter positions an action, or a thing, or a set of practices in relation to other things, other people. To know is to be in particular relation to others in which specific effects are generated and recognised. Now this makes what he ‘knows’ look very different from the characterisation of ‘knowledge’ as a series of individually held representational propositions about ‘nature’ that can be judged true or erroneous with reference to their effective engagement with aspects of that ‘nature’.

### Making Things Called Knowledge

The conception of knowledge as an individual possession, applicable to an external ‘nature’ is obviously characteristic of a particular history and society, one in which a scientific or ‘collectivising symbolisation’ (Wagner 1977, 1981, 42–59) is dominant, and one that has given rise to laws such as intellectual property to administer the connection between knowledge as an object and people as creators or rights holders. Indeed, the kinds of problem that result in broadly Durkheimian theorisations of society (and I mean to include notions of culture here as well) which arise in this milieu begin from the premise of individuation—human persons are individually specified as unique bodies by internal natural properties. Durkheim’s brilliance was in providing a convincing picture of how something (society) is made from individual actions and understandings that transcend and come to reciprocally structure common perception. But certain blind spots or issues arise within what Wagner calls this ‘collectivising mode’ of symbolisation (meaning a social and conceptual world in which entities are assumed as given, and the work of being human is to make connections and generate structures and institutions that bring people or things together into coherent entities that sustain over time). One is the problem of individual versus collective, another of collective coordination. People are seen as naturally different. Experience is individual and unique. They are socialised into particular collectives that share representations about the world, external to them. This is well-rehearsed territory, and I do not elaborate more here (see Wagner 1972, 1975/1981, 1977; Strathern 1988, 1991, 1999; Latour 1993, 2004; Vivieros de Castro 1998, 2009, 2010). We are very much in the realm of the problematics of Euro–American social theory. But I do want to dwell on the fact that ‘knowledge’ is very interestingly placed in this construction (Crook 2007). My point is that our conception of ‘knowledge’ is also an aspect of this view of the world, and that has consequences.

Wagner argues that to think there is something called ‘knowledge’ in this mode is to think there is something humans collectively create and construct separate from the actual reality of the world. Unlike in the Rai Coast material presented above, knowledge is not part of ‘being’, it is a series of representations of a reality

on which being depends, but is separated from. Knowledge is variable because there are different human collectivities. All this in turn rests on an assumption that there is something to be constructed from or against—a given world of nature. The very use of the term ‘knowledge’ therefore implies, in this formulation, a radical distinction between what is constructed as knowledge (human artifice) and what it is constructed against (a given world). Knowledge can be false, and falsified with reference to this external given reality, with which it has no necessary connection. Porer however talks of knowledge as remembering, as acting, as thinking on an experience or moment of transmission between persons. It is clear what he describes is acting in and on relations, not a representation or a thing at all.

Now in the same tradition that I am characterising by reference to the Durkheimian legacy here (as shorthand), myth and magic are understood as either erroneous belief based on faulty representation, or as superstition with certain social function. Malinowski saw magic as the way that the template for behaviour in myth was made present in the everyday world: it institutionalised mythic thought through everyday practices in reference to its norms (1922, 326–28). Evans-Pritchard saw society as common morality institutionalised through witchcraft beliefs. One could see the beliefs and practices as exhibiting a rationality based on morality. While Evans-Pritchard successfully shifted the terms for judging rationality from cause and effect to society’s norms, he perpetuated the notion that the natives were calling one thing (morality and societal norms) by the name of another (witchcraft). Put simply, people are thought to be aware of a force above and beyond themselves that guides and structures their actions. For the Durkheimian analyst, that force is real, but is of course ‘society’, a super-organic, collectively created entity, and not whatever gods or spirits are actually the subject of belief or devotion. People’s magical practices, their myths, their religions and beliefs are not true representation of what is out there, nor do they have their effects on the ‘real world’ of nature.

Myth and magic can at one and the same time be considered ‘socially real’ but untrue in these Euro–American constructions of belief, magic and knowledge. To see this as a consequence of linked conceptualisations of humans, nature, culture and belief allows us (as analysts) to move on to understanding how part of the worldview that gives us myth and magic versus history and science also needs to assume the concept of nature as the given ‘other’ to society and human artifice. Knowledge slots into the place of being about nature, a representational project—with accuracy and truth determined by the fit between representation and effect on the external world of nature. Judgements about the value of knowledge are dependent on its effect on nature, on a world given, other to the representation itself. There is a consequent relegation of practices which are not ‘knowledge’ in this sense to the realm of culture: the ‘encrustation or constraint on’ the reality of practical action and effect that Gudeman describes so effectively (1986, 129). Or as Vivieros de Castro puts it succinctly, ‘their cultural “view” cannot change the way things are one iota’ (2009, 240).

Now, as intellectual property has been referred to as relevant to this discussion of knowledge, I venture here to suggest that the view of myth appropriate to a collectivising symbolisation is something akin to a version of law. That is, a template that sets out the rules and norms of behaviour in a society and demonstrates the consequences of breaking them. It has a 'real' social function, but not one the natives realise. Myth encodes and perpetuates elements of culture such as institutions, rituals and so forth. This is an old mistake, discernable in Malinowski who thought of Trobriand myth as form of law—a blueprint for how society has to be run, a record and reference for convention (Lévi-Strauss 1966, 74).

But myths as I described them in Reite provide the context, as it were, in which context (convention) is undone over and again. That is, because myth is specific to places, persons, histories and relations, and sets the conditions under which those differences appear, it cannot be the universalising blueprint or template in which a universal moral and social context is encoded.

The subject that the law deals with is the abstract subject as a universal entity—the same as the subject of Durkheimian sociological analysis. (Indeed, assuming such a subject is what makes it possible to do comparative sociology in the first place.) Law is equivalent to myth in the understandings generated by a conventionalising symbolisation because it is the way that certain actions are already placed—not for specific people, but for everyone—it is the universalising function which makes all people 'the same' before distinguishing them through a method of classification of their actions. Law partakes of, and contributes to, the worldview in which knowledge is representational—representational of universal truths in the world, external to perceivers (and therefore independently verifiable). The actions of each person can be understood against this universal and external reality, not as specific to their mode of differentiation.

Now what Wagner and Vivieros de Castro suggest is that much of what passes as 'magic', and thereby goes unexamined by serious scholars, could be understood in an alternative anthropological approach that sees the practice of, rather than the belief in magic as crucial (and see Tambiah 1981). That practice is one whereby actions, events, people and things are situated, of ensuring that through this positioning they are correctly recognised.

In Reite, *paru* are not culture, or belief or superstition. Myth is not an encoded version of universal norms. *Paru* are modes of having effects on others by positioning actions and person in relation to others. So instead of viewing myth as a blueprint for action we might do well to understand law itself as a kind of myth in a collectivising ontology. It is a way of situating actions in a given and universally applicable set of norms, an appropriate situation in this construction. That is, people's creations are already positioned in relation to other persons and things through the practices around and assumptions supporting the law. My suggestion is not that we think of Rai Coast myth as primitive law, but of intellectual property as an equivalent to the structuring condition of myth in Reite. It provides the (in this case fixed) context in which actions can be understood.<sup>9</sup>



I suggest that this conceptual move was indicated by the responses to our book launch: towards analysis of the relations in which persons and objects come to have their effects. My suggestion is that the work that calling vastly disparate things 'knowledge' does is to situate them in a kind of mythic structure partially embodied in intellectual property law, to determine their substance and thus to position people and things in a moral and social universe.

One clear effect of calling things knowledge is to make them appear types of the same thing: different versions of doing (or trying to do) similar things. That is, each culture is a way of knowing the world. There are many cultures, one nature (Vivieros de Castro 1998). The attraction of this conventional Euro–American view of otherness is that it makes for a kind of commensurability—a baseline equivalence to cultures as ways of organising the same thing—knowledge about the natural world. But very soon, we run up against the fact that this apparent equivalence is fertile ground for judgements of effectiveness and value based in exactly the assumption that effect is effect on 'nature': a concept precipitated by the necessity to see human artifice as against and acting on something that it is not. Inevitably, some knowledge is valued more highly than others. Some is superstition, narrative, 'cultural', etc. Some is real and effective, resultant in modern technologies and patents. Recognition or not of others' practices as 'knowledge' comes to be an issue of veracity not just within a (cultural) system, but between and beyond them.

The problem goes deep. It is reliant on assuming that what other people have is culture, and that their knowledge of the world is codified in culture. Doing so relies on an assumption about the reality of a universal external world of nature as a common baseline against which culture emerges, and knowledge as the ability to act upon something objective and external. The quality of that engagement then is discernable against the practical quality it has in transforming, controlling or dominating nature.

What effects does it have to say that knowledge is contextual, that it is cultural, in this world made sense of by intellectual property law? Making Porer's practice into 'cultural knowledge' means we can see its value as heritage or tradition, but not really as effective, verifiable knowledge. Indeed, let us remind ourselves that our idea of knowledge emerged alongside the idea of nature (Shapin and Schaffer 1989). That for us knowledge is representation of nature because the notion of knowledge we operate makes little sense without 'nature' on which we can see its effects. In other words, we have translated the world and divided its peoples exactly along the expression/utility divide that is enshrined in intellectual property law between decorative arts and useful arts. And that is my evidence for making the experimental suggestion that intellectual property laws might be usefully seen as an elaboration of a structuring myth we live by.

## **Conclusion**

Intellectual discussion in universities rarely gives credence to magic. I suggest that this is a function of the frame provided by the mythic structure of intellectual

property law. Judging social practices' value on their production of differentiated and abstracted knowledge: on knowledge's fetish-like ability to carry value from relations in and of itself, outside the particularity of its production and effect. In dominant, Western descriptions of epistemology, effect on the natural world is definitive. The 'social' is the realm of another kind of effect, and one in which an anthropologist can conventionally show the 'meaning' or logic of 'magic'. But that explanation itself precipitates 'nature' as the background to the 'social', and thus undermines the possibility of seeing 'magic' as 'true' knowledge. In this paper I attempted a different kind of explanation: one that does not rely on a 'social' explanation of 'magic', but instead suggests that what we call 'magic' are mechanisms whereby a gardener (or healer or hunter) positions an action, or a thing in relation to other things. Knowing how to do this is crucial for effectiveness.

I have tried to show that it might be possible to return Reite practices with plants to a form that is not constrained by the term 'knowledge' as it is generally understood in Euro-American dominant discourse. I undertook this endeavour because it seems that placing 'magical' practices in relation to 'knowledge' does two things to them. It invites contextualisation to show how they could be seen as 'socially' effective, but in that, not as true knowledge. Making the comparison on our terms, it leaves their knowledge as inferior to representations of the world that can be utilised to make changes to natural things or processes unmediated by other human beings. This not only relegates it to superstition, it renders it apparently available for others to use (once corrected) under the false account of 'knowledge' (as a universal and universally effective mode of action on the external world). I have tried to show that for us to approach Porer's practices with plants, we need a recognition of equivalence which is not based on the underlying premise of knowledge as that which can be applied anywhere by anyone, as that in turn relies on a separation of social and natural which obviates the possibility of seeing the effect of his actions. Thinking through the students' questions at Divine Word University has made 'legible the particularity of the supposedly "natural" or "scientific" categories through which formal institutions organise "their" knowledge—knowledge that has been defined as the aims of those institutions' (Sassen 2012, 96).

Porer's speech at DWU was not a claim to authorship. (Indeed, we can see here how the critique of authorship that has been so powerful and useful elsewhere would miss its mark in the context we are discussing.) His is a much more interesting claim than of his sole creation or authorship of the material in the plants book, and one which involves us rethinking the category of knowledge itself. Plants need a particular relational position to have their effect. To be effective, both things and people must have the correct orientation, take the requisite form. What happens when we call this knowledge is a different matter.

I have suggested that we see what happens when we view knowledge 'as if' it were a relation. That is, try to think about knowledge as a practice that sets other relations in motion. How do we activate an idea of knowledge as a social relation that does not just reiterate that knowledge is contextual and cultural? Thinking through the

questions we were asked at the launch of *Reite Plants* has suggested the need to analyse what 'knowledge' is in different places, and why plants might be effective in some, but not others. I have attempted here to avoid an explanation of effect based on a notion of society or the social, and in its place establish a frame in which all knowledge is located, specific and reliant on particular processes of making human worlds appear.

I hope I have shown how for Porer, leaving the magic out was not a con, or a mistake, but a clear recognition on his part of the existing and potential relational effects of *paru* and indeed the book. For him the book itself was an anticipation of effect: an endeavour that links the garden with the world far beyond Reite, with the academic publishing industry and with a Reite youth disinterested in their forebears' practices. The book does not contain magical instructions to render gardening effective, but in itself it might lead young people to approach Porer. In a sense, the book has worked its magic already: Porer has been recognised as an expert in indigenous biodiversity and invited to give classes and talks both in Papua New Guinea and abroad. The form of plant knowledge is having effects. Leaving the magic out might have turned out to be a way of keeping it in after all.

## Notes

- [1] Long-term collaboration with Porer Nombo and others in Reite made this paper possible, and their generosity is gratefully acknowledged here. Martin Holbraad commented helpfully on an early draft. I thank Marilyn Strathern, Eduardo Vivieros de Castro, Kath Weston, and the anonymous reviewers for *Anthropological Forum* for the stimulation, inspiration and suggestions they generously provided. I also record my gratitude to Alexis and Anita von Poser, Jerry Semos, and Linda Crowl for hosting the launch at Divine Word University in 2010, and Holly Wardlow for the image from that event. Richard Davis gave me the idea of structuring this paper around questions asked by Papua New Guinea students that day. I am very grateful to him, to the Institute of Advanced Studies at the University of Western Australia for funding the workshop 'Recognising and Translating Knowledge', to the Department of Anthropology and Sociology at the University of Western Australia for a visiting position, and to the Royal Society of Edinburgh for additional support from their Scholarly Exchange Programme.
- [2] 'wa' – garden, 'ting' – shoot. 'Ting' in the Nekkini language designates a complex of things linked by a characteristic of vital motility, of things-that-are-movement in local understanding. The shoot of a growing plant is '...-ting', as is a water spring gushing up from the ground. It is also used to describe the fontanel of a newborn, the sharp edge of a knife, the human eye as it extends into the world and explores it, and the light pouring from the sun as it rises above the horizon. The *wating* then, is the vital growing shoot of the whole garden.
- [3] As defined in Reite, that is.
- [4] As described in detail by Latour (1993), including under the analytic of 'immutable mobile' (1987).
- [5] Detached from persons and effective without reference to them, effective on nature or the physical world.
- [6] I was at the time resident in Reite village for 21 months of doctoral fieldwork. My presence was enthusiastically accepted by people in Reite on the grounds of my interest in *kastom* and my ability to record it for people there. *Kastom* is a term in the lingua franca of Papua New Guinea

denoting ways of doing things that are seen as drawing on ancestral practices (See Leach 2003, 9-12).

[7] [http://epress.anu.edu.au/reite\\_plants\\_citation.html](http://epress.anu.edu.au/reite_plants_citation.html).

[8] I am indebted to James Weiner for emphasising this point.

[9] A necessary element in a collectivising symbolisation, where each person and each action are different to start with, and need to be understood and judged against common norms—a fixed context that makes sense of each individual action. In other words, it is no wonder that Western anthropologists such as Malinowski projected ‘law’ onto ‘myth’: they were compelled by their assumptions about individuals and society into finding equivalent institutions to those that constitute Western civilization. This also informed the debates about rationality and proto-science in magic.

## References

- Crook, T. 2007. *Anthropological knowledge, secrecy and Bolivip, Papua New Guinea – Exchanging skin*. Oxford: Oxford University Press.
- Evans-Pritchard, E. 1937. *Witchcraft, oracles and magic among the Azande*. Oxford: Clarendon Press.
- Gregory, C. 1982. *Gifts and commodities*. London: Academic Press.
- Gudeman, S. 1986. *Economics as culture. Metaphors and models of livelihood*. London: Routledge and Kegan Paul.
- Holbraad, M. 2012. *Truth in motion. The recursive anthropology of Cuban divination*. Chicago: Chicago University Press.
- Latour, B. 1987. *Science in action: How to follow scientists and engineers through society*. Cambridge, MA: Harvard University Press.
- Latour, B. 1993. *We have never been modern*. Cambridge, MA: Harvard University Press.
- Latour, B. 2004. *Reassembling the social. An introduction to actor network theory*. Oxford: Oxford University Press.
- Lawrence, P. 1964. *Road belong cargo*. Melbourne: Oxford University Press.
- Leach, J. 2003. *Creative land. Place and procreation on the Rai Coast of Papua New Guinea*. Oxford: Berghahn.
- Leach, J. 2009. Knowledge as kinship. Mutable essence and the significance of transmission on the Rai Coast of Papua New Guinea. In *Beyond kinship: The genealogical model reconsidered*, edited by S. Bamford and J. Leach, 175–192, Oxford: Berghahn.
- Leach, J. 2012. ‘Step inside, knowledge freely available’: the politics of (making) knowledge objects. In *The politics of knowledge*, edited F. D. Rubio and P. Beart, 191–207, London: Routledge.
- Lévi-Strauss, C. 1966. *The savage mind [La Pensée Sauvage]*. London: Weidenfeld and Nicolson.
- Malinowski, B. 1922. *Argonauts of the Western Pacific*. London: Routledge and Kegan Paul.
- Mimica, J. 1991. The incest passions: An outline of the logic of Iqwaye social organisation. *Oceania* 62 (1+2): 34–57, 81–113.
- Nombo, P., and J. Leach 2010. *Reite plants. An ethnobotanical study in Tok Pisin and English*. Canberra: ANU EPress. [http://epress.anu.edu.au/reite\\_plants\\_citation.html](http://epress.anu.edu.au/reite_plants_citation.html).
- Rubio, F.D., and P. Beart, eds. 2012. *The politics of knowledge*. London: Routledge.
- Sassen, S. 2012. Informal knowledge and its enablements. The role of the new technologies. *The politics of knowledge*, edited by F.D. Rubio and P. Beart, 96–117. London: Routledge.
- Shapin, S., and S. Schaffer. 1989. *Leviathan and the air pump. Hobbes, Boyle and the experimental life*. Princeton, NJ: Princeton University Press.
- Strathern, M. 1988. *The gender of the gift. Problems with women and problems with society in Melanesia*. Berkeley: University of California Press.
- Strathern, M. 1991. *Partial connections*, Savage. MD: Rowman and Littlefield Publishers.

- Strathern, M. 1999. *Property, substance, and effect. Anthropological essays on persons and things*. London: Athlone Press.
- Strathern, M. 2010. What's in an argument? Preliminary reflections on knowledge exchanges'. Harry Hawthorn Lecture, UBC Vancouver.
- Tambiah, S.J. 1981. *A performative approach to ritual*. London: British Academy.
- Vivieros de Castro, E. 1998. Cosmological diexis and Amerindian perspectivism. *Journal of the Royal Anthropological Institute* 4 (3): 469–88.
- Vivieros de Castro, E. 2009. The gift and the given. Three nano-essays on kinship. In *Beyond kinship: The genealogical model reconsidered*, edited by S. Bamford and J. Leach, 237–268. Oxford: Berghahn.
- Vivieros de Castro, E. 2010. Intensive filiation and demonic alliance. In *Deleuzian intersections. Science, technology, anthropology*, edited by C. B. Jensen and K. Rödje, 219–53. Oxford: Berghahn.
- Wagner, R. 1972. Incest and identity: A critique and theory on the subject of exogamy and incest prohibition. *Man (N.S.)* 7 (4): 601–13.
- Wagner, R. 1975/1981. *The invention of culture*. Chicago: University of Chicago Press.
- Wagner, R. 1977. Scientific and indigenous Papuan conceptions of the innate: A semiotic critique of the ecological perspective. In *Subsistence and survival*, edited by T. Bayliss-Smith and R. Feacham, 385–410. London: Academic Press.