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Witchcraft, spiritual worldviews and environmental management: rationality and assemblage

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Abstract

This paper interrogates the interrelationship between witchcraft, spiritual worldviews and environmental management. Drawing on diverse literatures from anthropology, conservation science and geography, this paper explores how witchcraft and spiritual worldviews have been rationalised in order to explain their continued significance, for society as a whole and for the conservation of natural resources and biodiversity specifically. Using an assemblage framework, this paper examines how the agencies of spirits and witches are entangled with other social and material entities, drawing on examples from three communities in Tanzania. It argues that thinking through assemblage allows the agentic capacities of spirits and witchcraft to be recognised, whilst also acknowledging their inseparability from other expressive and material components of assemblages, including social organisation and more-than-human actors. Finally, this paper turns to evidence for the deterritorialisation, or breaking apart, of these assemblages around spiritual worldviews and witchcraft, and considers their future role in local conservation.

Key Words

Witchcraft

Environmental Management

Assemblage

More-than-human

Tanzania

Cultural Landscapes

Introduction

Witchcraft and spiritual worldviews have undergone considerable interrogation from anthropologists, but much less attention has been paid to them by development scholars, including geographers. Whilst there has been geographical work on the history of magic in scientific thought (Hulme, 2008; Livingstone, 1990; Matless, 1991), and contemporary practices of witchcraft in the West (Rountree, 2002), less consideration has been offered to witchcraft, spiritual worldviews and development, with notable exceptions (Murrey, 2015). Yet these worldviews are vital for understanding how communities act in sometimes unexpected ways, in this case, in natural resource management (NRM) and environmental protection.

Whilst the decline in biological diversity associated with environmental change is one of the critical challenges for the 21st Century (Anthwal et al., 2010), the majority of the world's biodiversity exists outside protected areas (Laird, 1999). Evidence suggests that spiritual worldviews, linked to traditional management, can conserve forests and other environments (Brandt et al., 2013; Kibet, 2011; Rutte, 2011). This work, however, has failed to square with parallel research in anthropology interrogating violence associated with witchcraft (Comaroff and Comaroff, 1999; Schram, 2010). Whilst these two literatures have remained somewhat separate, this paper seeks to fold them together

through an analysis of spiritual worldviews, witchcraft and natural sites across three communities in Tanzania, drawing on assemblage frameworks to question notions of rationality and NRM. I argue that rather than understanding witchcraft and spiritual worldviews through forms of rationality, there is a need to consider how such forces act relationally within assemblages, through exploring the forms of agency that non-humans have and their entanglement with the agentic capacities of other non-human organisms and human organisation.

Witchcraft and violent land conflict

10th April 2010: On the second day of field research in Rukwa, a region in Western Tanzania, I witness the aftermath of a witch hunt. Walking into the village with my research assistant, we see a group of people running through the main street, shouting. Later my research assistant explains. Overnight a group of young men have attacked 14 households. In these premedited attacks, buildings are destroyed, possessions, including a car, are set on fire. Older men from the households, most over 60 and relatively wealthy, are beaten, some requiring hospital treatment. They were accused of practising witchcraft to magically harvest crops from others surrounding their land. The group we witnessed that morning were chasing some of the young men, the attackers. My research assistant knows one of the families and we go to inspect the damage.

Later that day the police arrive. They arrest several of the perpetrators of the violence. Over the week we hear different stories from the village. Some are sympathetic to those accused of witchcraft: the attackers were envious of their wealth, using witchcraft accusations to express their jealousy. Conversely, others stated that the older men should not have associated with witchcraft, or performed witchcraft on these younger men and their crops.

The durability of witchcraft and spiritual worldviews

For many in the West, witchcraft, spiritual worldviews or magical practices are archaic phenomena, much like Indigenous knowledges, situated always out of place and time in the modern world, only surviving in small pockets of remote, rural societies (Abrahams, 1994). In reality they are widespread and significant components of daily life and national interest across Africa and elsewhere. This 'elsewhere' also encompasses the West where the fantastic, magical, witchcraft and spiritualism endure to varying degrees (Bartolini et al., 2016; Geschiere, 1998). According to Comaroff and Comaroff (1999: 295), "enchantment, far from slipping away with the resolute march of modernity, seems everywhere on the rise."

Yet the endurance or escalation of these enchantments is not entirely congruous across global space. Whilst witch hunts once were rampant across Europe, the last conviction for witchcraft in the UK in 1944 marked the terminus of official recognition of supernatural forces (Bukurura, 1994). However, the continued pervasiveness of the supernatural and fantastic has not gone unnoticed, including the preference for creationist over evolutionary accounts (Legare et al., 2012); the business of magic across literature, film and tourism (Rountree, 2002); interest in psychic phenomena; witchcraft or neo-paganism as practiced religion (Moore and Sanders, 2001); and the persistence of major religions. Bartolini et al. (2016) suggest that religion, spirituality and magic are the 'stuff' out of which modernity has been built and are entangled with it, despite attempts to divide the secular and sacred. To assume that post-enlightenment rational science explanations should entirely replace these phenomena is evidently false, to a degree.

The durability of witchcraft and spiritual worldviews in Africa shares much with the West, principally to explain the intangible aspects of real phenomena, yet this durability is also distinct. In the 19th and early 20th Centuries, anthropologists and colonial administrators commonly understood witchcraft and spiritual worldviews as evidence of 'primitive' thinking, verifying the delineation of Africans as 'primitive other' (Moore and Sanders, 2001). The scientific community in the early 20th Century likewise

dismissed African witchcraft as pre-modern, associated with the impediments of tropical climates to development, as Fleure writes in 1947 (8):

> "The long periods of moist heat in W. Africa, and of dry heat in other parts, hamper thought and promote dependence on custom, with the accompanying tyranny of witchcraft."

Or where lack of rational accounts for phenomena incubated 'witchcraft beliefs', reported in The Lancet (1933):

> "Belief in witchcraft has its roots in the fundamental terror with which mankind faces the unknown."

These sentiments were echoed throughout colonial and post-colonial governments, which successively assumed that education, science, modernity and development would eradicate such beliefs (Moore and Sanders, 2001). Yet witchcraft and spiritual worldviews appear to be remarkably resilient in postcolonial Africa, despite the march of variegated forms of development. For many Africans, "witchcraft remains an idiom through which life is experienced and acted upon" (Mesaki, 2009: 132). Indeed, evidence suggests that spiritual worldviews are on the rise across Africa (Kohnert,

2003), sometimes with violent consequences (Adinkrah, 2011), yet rather than providing continuity with the past they are dynamically changing in a disjointed parallel with modernity.

Concern for the spiritual and modernity has emerged from anthropological literature, often, although not exclusively, focused on witchcraft (Kohnert, 1996; Niehaus, 2012). Other spiritual worldviews tend to be demarcated from witchcraft as more benign traditional faiths (Adinkrah, 2011; Virtanen, 2002). These encompass a broad church designated variously as beliefs, religions or worldviews, from the environmental values of Native Americans (Johnson and Murton, 2007), Buddhist holistic understandings (Jazeel 2005), and ancestor worship across Africa (Kibet, 2011). The key point from a NRM perspective is that the reason certain environments exist today is because they are sacred sites, protected through their relationship to spiritual entities (Rutte, 2011).

I now explore these two literatures, one of witchcraft, another of spiritual worldviews, commenting on how each has explained these worldviews and practices. I then reflect on how debates about rationality might be tackled through an assemblage framework which, rather than understanding the spiritual and scientific as competing, might instead recognise the agencies of each within a heterogeneous assemblage of diverse agents.

This discussion must be tempered with a note on language. English language interpretations of witchcraft and spiritual worldviews are often inadequate. The term 'belief' is a shallow reflection of what, for many, is a reality, where there is nothing 'immaterial' about witchcraft or spirits, they are part of the mundane world, exist in the form of real people and are evidenced through fortunes and misfortunes of individuals and society (Moore and Sanders, 2001). In English it is difficult to refer to such phenomena without using Western terms which may miscast them. Western understandings of 'spiritual' or 'belief' typically refer to phenomena which are immaterial and 'non-reality', whereas for many Tanzanians and across numerous contexts they are understood, in Western terms, as real and material (Abrahams, 1994; Sanders, 2001). Here I use the term 'worldview' rather than 'belief', but retain witchcraft, witches and spirits as the most adequate English substitutes in common usage, yet I acknowledge these do not fully capture the various meanings of these terms across African and other contexts (Jazeel, 2005; Johnson and Murton, 2007).

Witchcraft and rationality

Across the African continent, evidence has stressed the continued importance of the understanding that people can master occult forces, especially witchcraft (Moore and Sanders, 2001). What distinguishes witchcraft from other spiritual forces is its

association with 'black' magic – witchcraft is mobilised to harm others for selfish purposes (Kohnert, 1996), accounting for disease, misfortune, HIV/AIDS, political success, fertility and economic productivity (Mombeshora, 1994; Smith, 2005). Such understandings are widespread: in Ghana it is estimated that 90% believe in witchcraft (Adinkrah, 2011), and evidence from Kenya (Luongo, 2010), Malawi (Englund, 2007) South Africa (Peltzer, 2003) and Tanzania (Mesaki, 2009) suggests equal prevalence. Worldviews that incorporate witchcraft are present amongst subsistence farmers, business people, politicians, prominent scientists and leaders of religious groups (Kohnert, 1996).

Witchcraft has not eroded with the rise in educational provision and the increasing application of science and modern developmentalism in Africa. On the contrary, it appears to be expanding into some aspects of public life, intensifying in others, and adapting dynamically to societal concerns. Success of the rich and powerful is often accounted for by witchcraft (Comaroff and Comaroff, 1999), drawing on the lifeforce of those less advantaged to strengthen their own lot. Modern witchcrafts are plastered across national media, and panics about witchcraft have triggered violent witch hunts (Englund, 2007; Geshiere, 1998), including in Tanzania (Mesaki, 2009). The persistence of witchcraft is equally evidenced through state recognition. In South Africa, the ANC government established a commission to enquire into witchcraft

violence (Comaroff and Comaroff, 1999), which became a national priority crime (Kohnert, 2003). The Kenyan and Tanzanian governments have employed witch finders (Mesaki, 2009; Smith, 2005), and across contexts there is "a long legal genealogy of state conflicts meshing state power and the supernatural" (Luongo, 2010: 578).

At the global scale, witchcraft accounts for the West siphoning off the productive capacity of the impoverished rest (Comaroff and Comaroff, 1999). Thus witchcraft is offered as an explanation for the travails of capitalist modernity and rapid socio-economic transformation. As such, one might expect questions of witchcraft to be of significance to development, yet, as Kohnert (2003: 1353) argues, "Most Western development experts... do not want to recognise this problem, at least not officially, as one which should be tackled professionally."

It is perhaps the concern of development scholars and professionals of reaffirming the 'otherness' of Africa through engaging with witchcraft which has stemmed debate, and it is perhaps also this concern that has driven some anthropological literature to embed witchcraft within a rational frame. These frameworks share a common purpose in suggesting that witchcraft is rational and therefore intelligible. One of the first studies in the anthropology of witchcraft, Evan-Pritchard's (1937) research on the Azande, suggested that Azande worldviews had an internal logical coherence. This was the

inauguration of attempts to demark witchcraft as internally rational: a coherent

worldview, logical in structure, where magic acts as a substitute for science, but also a

social force moderating hierarchies and norms (Schram, 2010), an understanding which

also aligns with symbolist logics of witchcraft as symbolic of social order (Rountree,

2002).Whilst both claims are functionalist (witchcraft performs a social function) and

culturally relativist (witchcraft is logical 'from within'), they are substantiated through

work demonstrating the social functions witchcraft and witchcraft accusations play

(Kohnert, 1996). Witchcraft can act as a levelling force whereby individuals who

outstrip their status are socially sanctioned (Geschiere, 1998), an idiom through which

to interpret local inequality (Ciekawy, 1999). Such arguments avoid ascribing strict

scientific principles of rationality; objectivity, inductivism, empiricism and so on, but

still prescribe a logic through suggesting a coherent, intelligible purpose if viewed from

'inside' that cultural idiom.

Such logics, however, have a tendency to reaffirm a romantic and ahistorical notion of

'local culture'. They follow tendencies to see witchcraft as inextricably bound to small-

scale social relationships, indexing a particular scale of 'local curiosities' (Englund,

2007). More contemporary understandings expose the dynamic qualities of witchcraft

and its entanglements with modernity and globalisation, transcribing associated

worldviews across spatial scales. Yet manoeuvres beyond the local also seek forms of

rationality. Authors including Geschiere (1997), Kohnert (1996) and Comaroff and Comaroff (1999) have established associations between occult worldviews in Africa, globalisation, and the spread of capitalist socio-economic relations. Witchcraft offers explanations for the contradictions in capitalist modernity, including invisible accumulations of capital and greater social differentiation (Golooba-Mutebi, 2005). Witchcraft is therefore dynamic, it's meaning constantly re-interpreted. Some establish connections between witchcraft and differences in wealth and technology between their society and 'the West' (Schram, 2010), or how traditional diviners adapt their practices to contemporary problems (Swantz, 1979). These explanations move beyond functionalist arguments towards grounding witchcraft in existing material conditions in dialectic interplay with global change.

Others suggest that witchcraft is strategically harnessed. Accusations of witchcraft towards politicians or corporations may represent collective struggles against economic liberalisation (Smith, 2005). Pregnant women claim to be carrying a 'witchcraft baby' to secure a legitimate abortion (Sobo, 1996), and violence against wives is justified through witchcraft accusations (Kohnert, 2003). Recognition of witchcraft in law by African states further substantiates the reality of witchcraft as a modern phenomenon transcending the local (Luongo, 2010). State attempts to negotiate, rather than eliminate witchcraft, ostensibly provides further evidence for the rationality of witchcraft.

These explanations offer a different rationality from functionalist or cultural-relativist arguments, one in which understanding the world through witchcraft is a rational response to modernity. Though the discourse has changed, there remains a deep-seated need to understand these worldviews as an intelligible facet of human response to unseen forces, a rationality that makes witchcraft plausible. What perhaps these arguments miss is how the non-rational might rather be understood as an integral part of knowledge and understanding, and that attempts at positioning the non-rational as rational might miss their place within broader assemblages.

Authors who seek to destabilise the 'otherness' of the non-rational have done so through interrogating their importance in the West, or, as Livingstone (1990) does, to the foundations of scientific rationality. During the 16th and 17th century, "many early advocates... perceived no cognitive dislocation between practising science and practising astrology. And the same is true of natural magic" (Livingstone, 1990: 361). Scientists such as Newton and early Geographers believed in astrology, occult forces, and 'natural magic' (Livingstone, 1990), and witchcraft discourses were employed throughout Europe to explain disease and infection (Giudice and Rappuoli, 2003). The mingling of non-rational and rational has not disappeared. In the contemporary West, technological systems can be imbued with quasi-supernatural agency (Szerszynski,

2006), whilst biotechnologies can be interpreted by the public through theological rather than scientific-rationalist ontologies (Dean-Drummond et al., 2001). Comaroff and Comaroff (1999) and Peltzer (2003) point to the popularity of fantastical explanations including the Loch Ness Monster, black cats, alien invasions and genetic mutation, and others parallel witchcraft fears in Africa and the obsessions with child abuse in the West (Geschiere, 1998), or the presence of scientists and medical professionals amongst modern practising witches (Rountree, 2002). This suggests the continued presence, and intermingling, of the non-rational within the rational.

What this evidence also points to, discussed more later with findings from Tanzania, is that attempting to explain witchcraft through rationality is to perhaps miss elements of agency which witchcraft and spiritual worldviews have 'beyond rationality' (Schram, 2010). Although 'magical thinking' might 'violate basic principles of science' (Peltzer, 2003), this does not mean that its agency is divorced from the material world. Instead, I will interrogate them with tools which explore their relationality within assemblages. This includes a broader spiritual terrain, one which includes spiritual worldviews which relate to environmental protection.

Spiritual worldviews and conservation

Sacred natural sites can be broadly defined as an area of land or water, or an individual or collective of non-humans, which have spiritual significance. Across almost all national contexts there is evidence for scared natural areas, varying in scale from individual trees, forest patches, springs or rock formations, to entire landscapes (Posey, 1999). Animal species may also embody spirits and ancestors (McGregor, 2007). Within Africa, evidence for these sites comes from contexts including Togo (Kokou et al., 2008), Ghana (Falconer, 1999), Kenya (Kibet, 2011), Mozambique and Zimbabwe (Salick et al., 2007), and Tanzania (Mgumia and Oba, 2003). In European cultures forests were also (and, in some cases still are) places of worship. The Oak tree was worshipped in the pre-Christian era by Romans, Druids, Greeks and Britons (Chandrashekara and Sankar, 1998; Ylhaisi, 2006), and many of the first temples in Europe were sacred groves (Laird, 1999). Narratives of relationships between God and climate are present in Jewish and Christian traditions (Hulme, 2008). Hindus, Buddhist and Shintoists often accept nature as manifestations of divinity (Anthwal et al., 2010; Jazeel, 2005).

The most common example of spiritual significance and protection of non-humans is that of sacred groves (Brandt et al., 2013). Such forests are held as common property, usually under the guidance of a lineage or social hierarchy (Kokou et al., 2008). Worldviews in which spirits inhabit a site, connected to cultural norms and taboos, act

to prevent human use, although there may be permitted gradients of human disturbance (Salick et al., 2007). The NRM and conservation community typically understands these multiplicities of sacredness as forms of 'management', and the main outcome which excites researchers in these fields is their potential for conservation of habitats and biodiversity. Sacred natural sites support high species diversity, richness and endemism (Kibet, 2011; Rutte, 2011), in some cases exhibiting higher species diversity than non-sacred comparable forests (Kokou et al., 2008). In another lexicon, these sites provide ecosystem services, including medicinal plants and protection for soils and water (Brockington, 2011; Costanza et al., 2014; Pascual et al., 2014). It is this facet of sacred forests which has captured international attention. Forests and landscapes have been listed as UNESCO world heritage sites for cultural significance (Kibet, 2011), and UNEP publications have recognised their importance (Posey, 1999).

It is in the transcription from spiritual worldviews to management practices that rationality appears. Spiritual worldviews are treated as cultural artefacts to be utilised for management, as Kibet (2011: 956) suggest, there is a need to support these "traditional management systems within natural and cultural landscapes to take advantage of cultural values of biodiversity and local ecological knowledge". To others these are 'cultural conservation strategies' (Salick et al., 2007), 'capacities' to conserve (Rutte, 2011), 'culturally-controlled systems', or 'spiritual functions' protecting forests

(Brandt et al., 2013; Mgumia and Oba, 2003). This positioning as 'strategies' endows worldviews with deliberate management intention. By fitting spiritual worldviews within the rubric of management they are prescribed rationality, one which is systematic, practical, functional, and exerts control.

Spiritual worship, nature and local ecological knowledge is therefore allied to a deeply-rooted 'local culture' (Rutte, 2011), and social systems (Virtanen, 2002), giving otherwise inexplicable 'culture' degrees of rationality, including the maintenance of societies, and containing ecological knowledge (Posey, 1999). Alongside this functionalist argument about social integrity there is another which equates sacred forest conservation with utilitarian needs, for medicinal plants, fruit trees, building materials, and other environmental services (Anthwal et al., 2010; Ylhaisi, 2006), or to prevent harm by dangerous animals (Campbell, 2009), whilst in more recent times communities may preserve sacred groves to gain revenues from devotees and tourists (Chandrashekara and Sankar, 1998). Sacred conservation is therefore prescribed rationality in two ways: the inseparability of these sites and the social structures which maintain them, and their ecological and economic services to communities. These arguments are not dissimilar to early theorisations of witchcraft, that they are rational when viewed from within the societies from which they germinated, and they are linked to social continuity.

In the conservation literature, however, there has not been a concurrent debate over the nature of rationality underpinning such worldviews. What has emerged is a critical consideration of these worldviews in a rapidly changing world. Some commentators note that their primary purpose is social integrity, not conservation (Brandt et al., 2013; Ylhaisi, 2006), questioning their compatibility with Western conservation ethos. Yet these arguments remain underpinned by an emic rationalisation, that such worldviews are fundamental to social stability. In the face of globalisation and modernity, some see these worldviews successfully resisting change (Brandt et al., 2013), or eroding due to pressure on livelihoods, growing populations, and the expansion of major religions (Chandrashekara and Sankar, 1998). Such arguments do not question the underlying rationality behind interpretations of these worldviews, unlike debates around witchcraft which is theorised as a dynamic response to global modernity.

This last point highlights the separation of these two fields, in part because of their distinct disciplinary foundations. However, there is some shared terrain. Both rationalise the non-rational, through framings which position worldviews as rational responses to, or mediations for, society and the environment. Some research does begin to address concerns over how nature is valued through different worldviews. Gibbs (2010) discusses how Australian Aboriginal's concept of 'country' represents a framework of

interconnectedness which is not simply a reflection of utilitarian values or social formation. Such worldviews are fundamentally different to Western science in that they are underpinned by more entangled notions of nature, society and place, rather than privileging objective, value-free observations and asserting the separateness of people and nature (Braun, 2006; Johnson and Murton, 2007). Recognising these worldviews resists distilling complex and dynamic understandings into a technical and stable ecological knowledge, and their consequent simplistic integration into Western management systems (such as Payments for Ecosystem Services, PES) through community participation (Adams, 2014; Brockington, 2011). Other authors have gone further, asserting the environment as a co-author, encompassing humans, more-than-humans and all other tangible and non-tangible elements which are co-becoming in a relational understanding of place/space (Country et al., 2015). .

Yet there remain echoes of the emic argument. Whilst positioning these worldviews as different from science avoids fully suggesting that they are logical from 'within', there is a risk that they are understood as separate from, and non-compatible with, other worldviews. Such worldviews may not therefore have an internal logic in the post-enlightenment scientific sense, they are not 'environmental management' (Muller, 2014; Weir, 2009), but they are systems of people and environment which have 'worked', suggesting 'other' forms of rationality. This is somewhat underpinned through a focus

on the benign manifestations of these worldviews and their positive aspects for people-nature relationships, without interrogating how, in some contexts, such worldviews may have malevolent and destructive associations. By drawing the spotlight to the environmentally-positive aspects of these worldviews, they are, perhaps unintentionally, aligned with environmental conservation, whereas evidence from other contexts suggests that the protection of nature may not be at the heart of such worldviews (Adams, 2014; Posey, 1999).

Rationality and assemblage

I have illustrated that whilst witchcraft and spiritual worldviews have significance in Africa and elsewhere, their scholarship is somewhat separate. Both fields are however connected through endeavours to position either as rational, but with different purposes. Witchcraft has not been readily taken up by the development establishment, perhaps because to acknowledge the reality of witchcraft is to align oneself too closely with colonial discourses of 'otherness', and along with its malevolent character, this is incompatible with contemporary local knowledge and participatory agendas, which, although supposedly embrace community worldviews, seemingly ignore their 'darker' aspects. It has therefore been the job of largely anthropologists to argue for the significance of witchcraft to modernity, and through positioning it as rational they may

perhaps leverage it into the conciousness of the development community. With spiritual worldviews rationality is deployed more readily precisely because they align with conservation science and NRM. Notably, any association with witchcraft is absent. What is lacking is a framework which accounts for both witchcraft and spiritual worldviews, how they act dynamically together and with other things to generate certain outcomes. Here I argue that assemblage theories and a focus on more-than-human agency may offer such a framework. I recognise that assemblage frameworks represent etic analysis, however I argue they offer a way of exploring questions of what constitute relational agencies and tensions between witchcraft, spiritual worldviews, non-humans and human organisation.

Assemblage, and more broadly relational theory, has proliferated across a range of disciplines, including geography. The term assemblage has no single origin or correct form, however its foundations are largely accredited to philosophers Gilles Deleuze and Felix Guattari (1987), although it can also be associated with the actor-network theories of Bruno Latour and poststructuralist scholarship on socionature and hybridity (Bennett, 2010; Braun, 2006; Gibbs, 2013). Assemblages, unlike totalities which combine to form functioning wholes, instead represent how heterogeneous parts, or "ad hoc groupings of diverse elements" (Bennett, 2010: 23) come together in a contingent fashion. The source of any effect, be it social, material or both, is theorised as a diverse, heterogeneous

assemblage, an ontological field without clear extrication between these assorted

elements, including all manner of humans and nonhumans. Like other relational

theories, assemblage suggests that constituent parts acquire their identity, form and

meaning through their relations to other entities. Assemblages are therefore contingent,

provisional and open, never reducible to parts or a seamless whole. Although it might

be disingenuous to suggest that assemblages exist at different scales, as DeLanda (2006)

partially does, assemblage can be applied to groupings more or less transcending

different spatial scales, perhaps better understood as 'Russian Dolls' (Bennett, 2010)

where smaller assemblages are nestled within larger ones.

Assemblage theory is useful in this context for how it incorporates more-than-human

agency, and how heterogeneous material and social entities interact to produce

contingent effects. Because assemblages are characterised by relations of exteriority

(DeLanda, 2006), entities do not have prescribed capacities, nor are they bound to

particular assemblages. The capacities of any assemblage are merely a set of

possibilities, and capacities to act are distributed across contributing entities. An

assemblage itself has agentic capacity, power to make a difference to, and call response

from, other things (Bennett, 2010). This agency is constituted of, although represents

more than, the agencies of all human and more-than-human elements.

In assemblages agency is distributed. This has led some to claim that assemblages are ontologically flat (DeLanda, 2006), whereas others suggest that, whilst more horizontal than hierarchical totalities, assemblages experience differentiation between the efficacy of agents (Bennet, 2010). Whilst actants are not entirely equal, assemblage theories recognise the agentic capacity of all nonhuman entities, and how these may be evident through events that express the agency of an assemblage. It is this understanding of the actant – Latour's term for 'source of action' (Bennett, 2010) which is conducive to a more revealing encounter with the role of spiritual worldviews and witchcraft. Here, I turn to evidence from research in Tanzania to illustrate how assemblage theories might be utilised in this way.

Spirits and witches, reality and assemblage

I conducted qualitative and ethnographic research in three communities over three years in Tanzania (2008-2010), for a period totalling 5 months. The sites were an urban ward of Dar es Salaam: Kawe, the second a coastal town: Bagamoyo, the third a rural and relatively remote Western region: 3 villages in Rukwa. This research was part of a project on education and environmental conservation and evidence was collected from interviews, group and informal discussions from 394 individuals, including local

leadership and key actors (12 individuals), local residents (259 individuals), workshops

with young people (123 individuals), and participant observation (Table 1).

Age	Kawe		Bagamoyo		Rukwa	
	Male	Female	Male	Female	Male	Female
13 – 17	15	22	25	10	20	17
18 – 19	2	3	3	2	4	0
20 – 29	7	11	12	7	26	13
30 – 39	9	6	9	7	37	8
40 – 49	5	7	8	4	23	9
50 – 59	6	3	3	0	13	8
60+	8	4	1	1	3	1
Total	52	56	61	31	126	56

Table 1: Interviewees by age and gender excluding local leadership & key actors.

In these discussions people were asked about the role of spirits, ancestors and witchcraft

in the locality, focusing on the consequences for conservation. Discussions took place in

individuals and leader's houses, public places, and workshops held at various locations,

including schools. Some settings were more conducive to discussing sometimes taboo

subjects, although some openly discussed these in public. Interviews were conducted in

Swahili in Kawe and Bagamoyo, and in Swahili and Sukuma language in Rukwa, with translation from a local research assistant. This script therefore relies on translations, and does not aim to provide the depth of insight gained through an anthropological study conducted over several years with a single group. Instead it offers qualitative analysis and comparisons across three contexts.

In Tanzania, spiritual worldviews can be described in Swahili as '*imani za jadi*', or 'traditional faith'. Across all three study areas these offered forms of protection to features of the environment. The extracts below draw from the three areas:

> "There are some protected forests here, and a big tree, where the area around it is a sacred place. There are hollows in the ground where you kneel down and pray to the spirits which are there."
>
> *Male, age 20-30, Rukwa*

> "There is a small forest... with a source of water, a sacred area for traditional prayers. You are not allowed to cut trees there, and this helps caring for the water in the catchment."
>
> *Female, age 50-60, Bagamoyo*

"There is a big baobab tree near the beach. It has demons in it, and people cannot go there and take a branch from that tree... in the past some young men were told not to go there but they did, and some of them disappeared."

Male, age 50-60, Kawe

In Rukwa and Bagamoyo these statements refer to forests where chiefs are buried and become ancestral spirits inhabiting the forest. The demons in Kawe and the spirits of the pools in Rukwa are not ancestors but are akin to 'nature spirits'. These spirits may act differently, conferring different reactions. Ancestor spirit dwelling places are respected, the spirits not 'feared' themselves, whilst in Kawe demons would directly harm people. Despite these differences, in each area protection was conferred to sacred places, including trees, small forests, water sources and hill tops. The correspondence across all three areas is not dissimilar to the literature on sacred natural places (Brandt et al., 2013; Salik et al., 2007). In each context there is evidence of traditional forms of environmental governance. The expressions used (admittedly, translated) however betrays perhaps a different worldview other than that of the rational environmental manager:

"There *are* hollows in the ground where you kneel down and pray to spirits *which are there*"

"There is a big baobab tree near the beach. It *has* demons in it"

The reality of the presence of demons, ancestors or spirits is not questioned in these statements, and this ethos was evident across all respondents who discussed a spiritual worldview. This is not to suggest that the 'reality' of spirits was not without question in these communities, but for these particular respondents and others, their discussions suggested that such entities did exist.

Witchcraft has also played a role in environmental management in some of these communities, although notably examples were lacking from Kawe. In Swahili, witchcraft is referred to through a number of terms, including '*uchawi*' – 'witchcraft', or '*kufanya uchawi*' – 'to do or to make *uchawi*'. Examples included:

"Here... you may find a forest where witches and wizards meet frequently. So a person can go there if they have problems… People fear to cut the trees there as they might encounter some problems... the area I am talking about is... near the school, where you can see big trees where the witches meet."
Male, age 17-19, Bagamoyo

"There is a place near here called Kalabaca Forest, it is a place of witches.

People go to the forest to pray... When you leave the sacrifice there you go back

and find that the remains are not there, even the bones! In that forest no human

activity is allowed... a boy once went there to graze cattle and he was lost for

two days."

Male, age 30-40, Bagamoyo

"These people were witches in the village, that is what some people think...

They believe these people practising witchcraft have stolen their crops... You

might go to harvest your crop, but find that twenty to thirty per cent of it has

been harvested magically already"

Male, age 30-40, Rukwa

Unlike previous research on spiritual worldviews in at least two of these communities

the presence of witches in forests also conferred protection. However, there are

differences between witchcraft and spiritual worldviews in terms of the nature of

protection. Congruent with previous work on witchcraft, those who undertake it do so

for 'selfish' purposes (Abrahams, 1994; Moore and Sanders, 2001), therefore protection

is due to fear of witches, or conversely of witchcraft accusations. In the final quote,

related to the witch hunt described earlier, witchcraft is used to maliciously harvest

other's crops, a form of environmental interference for sure, albeit management of a deleterious kind.

In Rukwa and Bagamoyo, two quite different contexts, spiritual worldviews and witchcraft can confer environmental protection, for different reasons, but with similar outcomes: acting to prevent individuals from cutting trees. For witchcraft there are similar references to its reality:

> "twenty to thirty per cent of it *has* been harvested magically already"
>
> "it *is* a place of witches... he *was* lost for two days"

These statements raise similar questions to those posed above on rationality. They demonstrate either that such expressions are irrational because it is impossible to prove that spirits or witches materially exist, or, that they are rational in an emic sense as they offer protection to natural resources, or, in the case of the magical harvesting of crops, they provide explanations for environmental variability (Hulme, 2008).

Approached with assemblage thinking one might instead interrogate these worldviews, or things, through their agency. In these quotes, agency is prescribed to the event and to contributing agents, in Western terms described as 'spirits' or 'witches', which have

prevented the cutting of forests because of their presence. One might therefore describe

these things as agents with certain capacities. Their material capacities are evident from

their material effects: individuals do not cut trees in a particular place, or crops are

depleted. In line with Bennett's (2010) conceptualisation of 'vitality', referring to the

capacity of things to impede human designs and act as agents, these spirits and witches

produce effects and make a difference to human intensions, and might be

conceptualised as nonhumans with agentic capacities. However, in Bennett's (2010)

writing and that of others (Gibbs, 2013; Johnson and Murton, 2007) nonhuman agents

are decisively material. Bennett specifically warns against spiritualising material

agency, as 'souls' which animate matter or have purposiveness to their divinity.

DeLanda (2006), on the other hand, suggests that components of an assemblage can be

either material and/or expressive. This might suggest that spiritual entities are complex

expressive components, built around how DeLanda (2006) conceptualises the 'problem-

solving procedures' of traditional societies, overlaid by ritual and symbolism. Here,

DeLanda too strays into rationality, because if spiritual entities are granted only

expressive status, they become 'problem solving procedures'.

For Anderson et al. (2012), abstractions such as 'society' are real entities with

expressive powers, and for Legg (2011) assemblages can govern, incite and move –

affecting the material and social. Although the precise status of spiritual entities or

witches is unclear in these conceptualisations, if they are conceptualised as assemblages themselves they are real through recognisable material agency. Indeed, DeLanda (2006: 34), despite his rational approach to ritual, insists on the reality of assemblages, as "emergent wholes are real because they are causal agents capable of acting back on the materials out of which they are formed." In the case of spiritual beings and witchcraft, this agency is made visible through the protection they confer on forests, their ability to act on humans.

The social in assemblage

The critical aspect of this conceptualisation is that spirits and witchcraft are themselves assemblages, and part of broader assemblages which act in an environment. Indeed, in some of these three communities their worldviews were not singularly centred on spiritual or witch-y things, but also entangled with other social and material assemblages. One particularly vivid example comes from a village in Rukwa, close to the shores of Lake Rukwa, an important source of fish:

> "There were areas preserved for sacred issues... Women were not allowed to go to the lake... there is a link between the presence of women and the presence of fish... Now women are going to the lake and antagonising the fish."

Male, age 30-40, Rukwa

"Nowadays there is a tendency for women going to the lake. It causes there to be

less fish there. So many women are going there, it is less clean and now there

are less fish."

Male, age 50-60, Rukwa

A relationship is established between gender and spiritual forces. The control of

women's spatial movements are entangled with social and material reproduction

(harvesting of fish), and potentially with patriarchal leadership. Indeed, in the three

study villages in Rukwa, leadership was entirely male. Associations between women

and pollution of nature, particularly during menstruation, have been established in

Africa and across other cultures (Namihira, 1987; Jewkes and Wood, 1999). Women are

commonly stigmatised during menstruation (Ortner, 2006), and some have established

links between female restrictions and male control over natural resources (Lindenbaum,

1972). Whilst no respondents suggested that restrictions were linked to menstruation,

several discussed maintaining the 'cleanness' of water at the lake and other water

sources. The quotes above also appear to express concern over depletion of fish stocks,

and changes to social ordering whereby women are ignoring social controls, although

women working with fishermen at the lake was common and accepted by many men

(Figure 1). This in turn implies concern for deterioration of the efficacy of spirits, as 'women *were* not allowed' and '*now* women are going'.

Figure 1: A woman (kneeling, front) working with men at a fishing hut on Lake Rukwa

Similar concerns were expressed in Rukwa about young people:

> "For modern ideas students listen much more to their teachers. If they are taught about spirits at home then they won't listen to their parents."
>
> *Male, age 20-30, Rukwa*

Young people would have learnt about spiritual worldviews from parents. However, the quote expresses the displacement of where the knowledge that young people value comes from, from the 'traditional' of the home to the 'modern' of the school. The respondent implies that young people are ignoring these worldviews, challenging traditional age hierarchies. In the witch hunt at the opening of this paper, this intergenerational conflict is manifest in violent ways. Those accused of witchcraft were senior men, some of whom had held roles in leadership or traditional worship. The perpetrators of the violence were young men who accused the older men of practising witchcraft in order to magically harvest crops. In Tanzania, senior men are associated with pre-independence leadership of chiefs, and the control of rituals and sacred sites (Abrahams, 1994; Mesaki, 2009). For some younger people, associations between traditional leadership, spiritual worldviews and witchcraft may be becoming blurred:

> "A person who believe in this [spiritual worldviews] is often connected with witchcraft so we cannot really be interested in these things"
>
> *Male, age 20-30, Bagamoyo*

Young people may become suspicious that alignment with spiritual worldviews may overlap with witchcraft, as both may be conducted in secret. Across Tanzania and in other contexts, Christianisation has also influenced how younger generations interpret local manifestations of witchcraft and spiritual worldviews (Kokou et al., 2008; Mesaki, 2009; Schram, 2010). Young men in Rukwa may also be expressing their frustration at increasingly scarce family plots being subdivided for inheritance, such that they often have less land than previous generations, and their frustration at the 'unexplained' success of others.

Generational 'structural conflicts' are well recognised in Tanzanian and other African contexts (Bukura, 1994; Geshiere, 1998; Moore and Sanders, 2001), and to label them as such is to offer a straightforward explanation of witchcraft accusations. Yet it is unclear whether these societal elements of the assemblage can be fully disentangled from the spiritual. In the assemblage around witchcraft in Rukwa there are multiple agencies: the agency of witchcraft, the magical harvesting of crops; social power hierarchies and their contestation, evidenced through violent expression; but also of more-than-human actors, of crops, climate, soils and micro-organisms, which contribute to a suboptimal harvest for some. Similarly, in the case of 'women antagonising the

fish', the agency of patriarchal societal ordering is evident, but also the agency of

spirits, fish, climate, and broader ecosystems.

Within these assemblages, conglomerating around spirits, witches, forests, crops, fish,

young and old, men and women, community and power, ownership and use claims, and

spatial exclusion, the spiritual-social-spatial nexus of agencies are impossible to fully

disentangle, they are at once assembled through the agency of things and through

community discourses. In the quote concerning fishing, it is impossible to disentangle

whether the respondent is fully convinced of the powers of spirits. Women are breaking

traditional rules, suggesting that spiritual powers are failing and acknowledging that it is

social controls, rather than spiritual forces, which restrict access. Alternatively, the

respondent states that 'women are antagonising the fish' – the link between the presence

of women and fish is retained. There is no single, causal agent. In the fish case and

those of sacred forests and witchcraft-related crop disputes, it is not possible to

deconstruct the whole to its constituent parts, to disentangle the spiritual, social or

material. These assemblages have agency, but it does not follow a simplistic sequence –

in some cases agency is expressed through preventing forest cutting, in others crops are

harvested but humans punished for their acts. As Legg (2011) suggests, it is impossible

to reduce these assemblages to 'ideal types' – spiritual worldviews and forest

conservation, witchcraft and violence – they are instead heterogeneous multiplicities of

actants and agencies which manifest provisionally (Anderson and McFarlane, 2011).

The agentic capacity of the 'event' (Bennett, 2010) has significance. In some events

these assemblages have violent outcomes, whereby human agency overwhelms

whatever agency witchcraft and spiritual assemblages have. Conversely, in other events

the agency of spirits and witchcraft takes precedence, preserving forests across

considerable timeframes. In each instance causality is emergent within the specific

moment.

Deterritorialisation

There is also in the quotes above an expression of temporal changes to these

assemblages. Where young people are not adhering to local worldviews, where they are

violently challenging authority, and when women are going to the lake, assemblages

which may previously have had more predictable outcomes are now changing and re-

forming. Table 2 illustrates the percentage of respondents who were prepared to discuss,

or had knowledge of, spiritual worldviews and witchcraft which related to

environmental protection.

Location	Spiritual Worldviews	Witchcraft
Kawe	8%	3%
Bagamoyo	36%	18%
Rukwa	81%	7%

Table 2: Percentage respondents who discussed knowledge of worldviews relating to environmental protection.

Clearly these figures are crude, as non-responses to direct questions about spiritual worldviews and witchcraft relating to environmental protection might reflect taboos and lack of knowledge, which could reflect the over-representation of younger people. Nevertheless, there is a notable trend of increased willingness to discuss, or greater knowledge of, spiritual worldviews relating to environmental protection from the most urban study area, Kawe, to the most rural, Rukwa. It is possible to speculate that the connection between such worldviews and environmental protection are less persuasive in urban contexts where the population is more ethnically diverse, and where protection of the 'natural environment' may seem more distant. The figures for witchcraft do not follow this same trend. Bagamoyo has the highest percentage of respondents who discussed witchcraft. Bagamoyo is a town known for its connection to witchcraft, as noted by Sanders (2001), and well recognised by respondents, who claimed that

prominent politicians and business people would travel there to engage in witchcraft. The low figure for Rukwa is perhaps surprising given the violent incident observed during the field research, but may reflect the depth of taboo around the subject.

Ethnic and cultural diversity was significant across all three areas, but associations between ethnicity and spiritual worldviews were most apparent in Rukwa. Here, the majority tribe, the Fipa, took issue with Sukuma immigrants and their respect for local worldviews:

> "There is a tree over there which used to be a place of worship for the Fipa... but now people are less interested... Here we have intruders like the Sukuma who might not know local customs."
> *Male, age 50-60, Rukwa.*

> "We used to protect the water sources, and used to pray in various places but now this does not happen because of these Sukuma people."
> *Female, age 20-30, Rukwa.*

This exemplifies the cultural specificity of spiritual worldviews, and similar sentiments were expressed by other respondents in Rukwa. Spirits associated with Fipa ancestors,

and the places they dwell, are exclusive to that tribe. Sukuma could not partake in Fipa rituals and did not have to observe these sacred places. This issue was entangled with difficulties around land use, which, Fipa people repeatedly noted, were compounded by the incoming of Sukuma who typically had large families and kept more cattle. In Kawe, although few people chose to comment on spiritual worldviews associated with environmental protection, several who did maintained that their worldviews were specific to their 'home' area, often not Kawe. Kawe, and much of Dar es Salaam, has a high proportion of migrants. This respondent commented:

> "In Mtwara there is one dominant tribe. We have customs of our own so it is easier to work together. But here [Kawe] it is very mixed up, so it is very difficult to do this."
>
> *Female, age 50-60, Kawe.*

The ethnic and cultural specificity of spiritual worldviews casts considerable doubt over their potential to confer ongoing protection of geographically specific natural sites. The relationship between ethnic mixing and the decline of spiritual worldviews is not unknown (Swanstz, 1979), however in this case it provides a poignant example of how, across the contemporary African metropolis and rural villages similar processes may be operating. In assemblage terminology, factors contributing to the decline of spiritual

worldviews are components of deterritorialisation, a process of deconstruction of an assemblage which may concurrently contribute to the territorialisation, or stabilisation, of a new one. In these three locations, it appears that processes of deterritorialisation of spiritual worldviews dominate. Assemblages have a finite temporal existence (Bennett, 2010; DeLanda, 2006; Gibbs, 2013). The evidence for young people and women challenging local social norms, of gradations of willingness to discuss, or knowledge of spiritual worldviews relating to environmental protection across geographic space, and of disruptions to these worldviews due to ethnic mixing associated with greater mobility, and perhaps increased access to education, all point to destabilisation of these assemblages.

DeLanda (2006) associates the temporal duration of assemblages with transmission of semantic knowledge across generations, and indeed there is evidence of this here. There is also the temptation to assume that durable orderings are being replaced either by a more chaotic and indeterminate situation, or by globalising forces which increasingly percolate across distant spaces. However, as Anderson et al. (2012) stress, assemblages should not be characterised as completed entities, and instead they draw attention to the ontic indeterminacy of what might previously have been understood as totalising practices. Witchcraft activity is not in decline across Africa. Evidence from Tanzania demonstrates that incidence of witchcraft has increased, including in urban areas, in

some cases associated with heightened ethnic conflict (Abrahams, 1994; Sanders, 2001). Whilst I note here incidences of resistance to community norms, it cannot be assumed that these are patently modern in character. Such conflicts are likely to have been replayed for generations. Spiritual sites are not fixed. Some in Rukwa are the burial places of chiefs, thus creating 'new' sacred forests. It might be more appropriate to remark that aspects of these assemblages may have previously been more durable, and that assemblages around spiritual worldviews, witchcraft and the protection of nonhumans have entered a period of uncertainty where the subsequent direction of the re-territorialisation processes are unclear (Legg, 2009; McFarlane and Anderson, 2011).

Conclusions

Deterritorialisation of assemblages around spiritual worldviews, witchcraft and environment present a series of contradictory terms for the development industry and environmental conservation. Where spiritual worldviews have been heralded as local solutions to conservation (Brandt et al., 2013; Salik et al., 2007), their close association, for some in Tanzania, with witchcraft and therefore with malignant intent and violence, gives them a morally ambiguous character. Where community-based NRM and local knowledge have been celebrated amongst the development and conservation establishment, the continuation of such practices when they are embedded in

assemblages that include the continuity of patriarchal social norms seemingly contradicts other developmentalist goals, including 'modern' desirable societal changes of women's empowerment and young people's rights. Witchcraft, also associated with environmental protection and manipulation, is part of an assemblage including violence, destabilisation of community norms and the deterritorialisation of other social assemblages. The heterogeneity of these assemblages across space, alongside their ethnic specificity, presents further challenges to the conservation orthodoxy. Assemblage thinking encourages attentiveness to the heterogeneous more-than-human agencies at work, and in doing so reveals some of these contradictions though demonstrating how spiritual worldviews and witchcraft are assembled with other social and material processes within and across particular geographies. Their various and ambiguous agentic forces cannot easily be disentangled.

Questions remain about the non-rational for which assemblage theories do not necessarily provide greater clarity. Rather than rationalising witchcraft and spiritual worldviews as responses to modernity, as social ordering, or as environmental management, a focus on their agentic capacity might allow for a deeper engagement with their 'real' place within assemblages, or indeed as assemblages themselves with objective existence evidenced by their agency (DeLanda, 2006). Whilst this argument does not seek to entirely bypass rationality, it instead asks questions about what things

have agentic capacity. For Bennett (2010), agency is decidedly in the material, yet the vitality of this agentic force is often invisible and fleeting. For others, DeLanda (2006), Anderson et al., (2012) and Legg (2011), agentic capacity and reality is also distributed to social entities which have material components, but are equally expressive or intangible. This does not answer the question of precisely what kind of agents spirits and witches are. Gibbs (2010; 2013) in her discussion of Aboriginal conceptions of the agency of water suggests that Aboriginal spirituality might be entangled with recognition of the vital forces of more-than-human materiality, somewhat concurrent with assemblage thinking. Similarly, Country et al.'s (2015) understanding of co-becoming expresses a more-than-human relationality akin to assemblage. In these Tanzanian communities, the material agency of nonhumans, the capacities of forests to 'get people lost', the dangers that nonhumans pose, may be intertwined with spiritual worldviews and witchcraft, and compose a part of their agency. Whether there is a need to establish what spirits and witchcraft are is itself a question of rationality, a need to explain the non-rational and immaterial.

The assemblages that might emerge from deterritorialisation of spiritual worldviews, witchcraft and environment are unclear. It might be tempting to deduce that re-territorialisation of an assemblage related to conservation of non-humans in Tanzania is most likely forming around rational-legal organisations, including PES, carbon credits,

or protected areas. Whilst aspects of spiritual worldviews and witchcraft are becoming disassembled from other socio-natural assemblages, there is evidence that elements endure despite changes to other parts of the assemblage, as particular forests have survived along with their associated spirits and witches. Ontological pluralism is a critical part of the heterogeneity of an assemblage, evident, if hidden, in Western science (Johnson and Murton, 2007; Livingstone, 1990), though more overt in worldviews such as Buddhism (Jazeel, 2005). Rather than privileging 'other' worldviews, which typically romanticises Indigeniety (Howitt and Suchet-Pearson, 2006), thinking with assemblages offers the possibility of diverse worldviews being assembled together. This requires conceptualising rational-legal species conservation, spiritual worldviews and witchcraft, as having possibilities of co-assemblage. Although assemblages around spiritual worldviews in Tanzania are entangled with social relations that may be oppressive, this does not mean that they necessarily will remain wedded in the future. Just as the moral ambiguity of witchcraft has been evident for some time (Comaroff and Comaroff, 1999), spiritual worldviews, Indigenous knowledges, and environmental conservation also contain moral ambiguities, which should confound attempts to position any as 'better' for conservation. Assemblage processes affect mutual transformations (Bennett, 2010), they affect the co-motion, or moving together of things which does not require the erasure of difference (Muller, 2014). There may be

possibilities for spiritual worldviews to transform scientific-rationalist values of nature as part of the territorialisation of new assemblages, and vice-versa.

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