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## Article

# Tree Symbolism and Conservation in the South Pare Mountains, Tanzania

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#### Abstract

This paper explores the trees that shape the Pare landscape in Tanzania, and the multiple meanings attached to them by local people. Three main groups of 'symbolic' trees are identified. First, indigenous trees that constitute hundreds of sacred groves dotted across the landscape symbolising communal identity, history, and belonging. Second, fast growing exotic species such as eucalyptus and grevillea, planted in a series of colonial and postcolonial initiatives, symbolising not only progress, modern land management and environmental improvement, but also wealth and landownership. Finally, (largely exotic) fruit trees and (largely indigenous) trees used for fertilisiling farms, signifying good homes and farms. The paper describes how these three types of tree symbolism embody different ways of relating to place and conservation practices, and discusses the insights a pluralistic understanding of such symbolism offers for conservation policy in this region.

Keywords: Trees, symbolism, pluralism, sacred groves, plantations, colonial forestry, land management, land ownership, Pare, Tanzania

## **INTRODUCTION**

From Japan's *Sakaki* trees over *Gyedua* 'trees of reception' in Ghana to the European Christmas tree: there are countless historical and contemporary examples of humans investing trees with symbolic meaning (Crews 2003; Davies 1988; Platvoet 1985). Trees have always been 'good to think', Bloch (1998) argues, because they are both alive, like humans, and immobile, like landscape features. Their longevity, often spanning many human generations, often make them powerful mnemonic devices for recalling and invoking ancestors and past events (Schama 1995) as well as 'potent symbols of vitality' (Rival 1998:23). Indeed trees have long played a central role in life cycle rituals, as

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famously described by anthropologist Victor Turner (1967) in *The Forest of Symbols*. Others have shown how trees are intimately bound to conceptions of rebirth and hope (Tidball 2014). In addition to their visibility, their biological rootedness and permanence also nourish their widespread significance as political symbols: as signs of peace, such as in the ceremonial planting of trees by religious and political leaders, and as signs of power, such as trees marking boundaries or communal sacred groves.

This paper explores how different kinds of tree symbolism co-exist and play out in one locality, the South Pare Mountains of 'northeastern' Tanzania. In doing so, it is inspired by Brian Morris' work on human-animal relations in Malawi and his insistence on the fact that in most contexts humans view and interact with animals, and other life forms, in many different ways at once. His pluralistic stance aims to counter 'a radical and rather gnostic dualism between the worldviews of hunter–gatherers (and tribal people more generally) and that of 'Western' people (Morris 2004:8). As Morris put it in *The Power of Animals*:

'Although there is a tendency these days, especially amongst writers on ecological issues, and even some

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Morris' pluralism as outlined here derives from his earlier critical engagement with Levi-Strauss' and Douglas' holistic understanding of pre-literate symbolic thought as all-encompassing; Morris maintains that all peoples' knowledge and engagement with the natural world includes many plant and animal species that are of no symbolic significance (Morris 1976, 1979). With the recent rise of 'cosmological perspectivism' and the celebration of radically alternative ontologies, in particular 'multinaturalism' in the Amazon (Vivieros de Castro 1998, 2004), Morris' skepticism of 'monolithic labels' has arguably gained renewed relevance. However, Morris' contribution to the field of multi-species ethnography (Kirksey and Helmreich 2010) lies not only in insisting that all human societies interact with animals in multiple and contradictory ways, but also in the empirical precision and clarity of expression with which he identifies different fields of human knowledge and how they relate to each other in embodied everyday contexts.

Taking Morris's pluralistic approach as its cue, this paper identifies and discusses three different categories of tree symbolism in the South Pare Mountains, relating to sacred groves, exotic timber trees, and fruit and fertiliser trees respectively. It suggests that each of these categories, rooted in different elements of Pare social and ecological history, presents a distinct register by which people relate to place, each associated with particular types of conservation and land use practices. There is some affinity and overlap here with Escobar's typology of 'nature regimes' - organic, capitalist, and techno (Escobar 1999) - but in this context 'registers' offers a more useful term to distinguish between different types of symbolic thought. The term 'symbolic thought' itself is used here with greater flexibility and range than in classic anthropological studies of ritual and religious symbolism and common dictionary definitions of a symbol as 'something that stands for something else' - the milk tree (Dyplorrynchus condilocarpon) symbolising female fertility for the Ndemu, for example (Turner 1967). Rather, along the lines of what Tidball (2014) calls 'socioecological symbols', symbolic thought here encompasses all meanings, associations, messages, and emotions particular trees evoke or signify, including those quite closely related to their biological and ecological properties and practical uses. As stated above, one of my aims is precisely to explore how symbolic thought and practices interlink (see also Shipton 1994). Nevertheless, this paper is informed by key insights from anthropological work on symbolism 'proper': the inherent ambiguity of symbols (Cohen 1974, Turner 1975), their political dimensions (Cohen 1974, Firth 1973), and the importance of emotional engagement with symbols (e.g. Lewis 1977). Overall, I hope to show that applying Morris' pluralistic stance to tree symbolism offers insights at a cognitive, political, and practical level.

#### **METHODS**

This paper results from a larger research project into environmental change and memory in the South Pare Mountains (Figure 1).<sup>1</sup> I conducted ethnographic fieldwork in the South Pare Mountains in the summers of 2008 and 2009, during which I explored the uses and meanings of trees primarily through conversations and interviews conducted whilst walking through farms, sacred groves, and communal forests with my two research assistants and friends, Mzee Zawadi and Mzee Mrinde, and with many other people who joined us along the way. Based mainly at Mhero Village in Chome Ward, I also went on extended visits (on foot) to Vudee, Mbaga, and Gonja. I complemented my ethnographic fieldwork with archival research<sup>2</sup> and repeat photography, using photographs taken by missionaries of the Leipzig Lutheran Mission from the 1900s to the 1930s.<sup>3</sup>

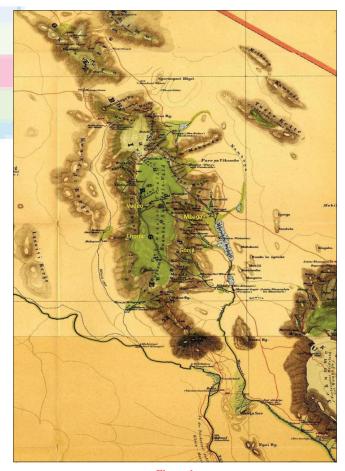


Figure 1 South Pare Mountains in northeastern Tanzania: Chome and other fieldworksites. Map extracted and adapted from Baumann, 1891

# ARGUMENT

#### **The South Pare Mountains**

Part of the Eastern Arc Mountain Range of northeastern Tanzania, the South and North Pare Mountains form two distinct mountain complexes which rise steeply out of the surrounding flat plains. The Eastern Arc Mountain Range is geologically very old and has exceptionally high tree and fauna biodiversity and endemism (Burgess et. al. 2007); indeed in 1998 Conservation International declared it one of the world's 25 'biodiversity hotspots' (Myers 2000). The South Pare Mountains have markedly distinct vegetation zones at different altitudes: dry, savannah style vegetation at the bottom; mixed farming, bush and forest at mid altitudes; and heath and ferns as well as highland moist forest at the highest altitudes, around 2000-2300 meters. These highland forests and heathlands are protected by the Chome Forest Reserve, a 15,000 ha large reserve created in 1910. Rainfall as a whole is less than on the North Pare Mountains, averaging around of 1000mm per year on the wetter Eastern, and 750mm on the drier Western slopes, falling mainly during the 'short' rain season (Vuli - October to January) and the 'long' rain season (Masika - February to May).

The South Pare Mountains are today largely inhabited by the Asu, as they call themselves, or as they are known in the rest of Tanzania, the Pare people. According to oral traditions, their ancestors started settling here from the seventeenth and eighteenth century onwards, with some clans coming from the Usambara mountains to the South, others from Taita in Kenya (oral sources and Kimambo 1969). Different clans settled in different parts of the South Pare Mountains under small chieftaincies, which in many places subsequently subdivided. This history is reflected in present day administrative units: Chome ward (kata), my main research area, consists of three villages (vijiji): Gwanga at the lowest altitude, Marieni in the middle, and at the highest altitude Mhero village, where I stayed. Mhero village is again divided into ten different subvillages (vitongojoi), usually named after the clans who first settled them, such as Mhero, Mpembeni, Bere, and Chaimpishi.

As in many other parts of East Africa, villages were not centralised. Indeed, because the Pare mountains were exempt from Tanzania's villagisation programmes of the 1970s (Coulson 2013), homesteads are still scattered across the mountains' slopes today. Historically people grew maize, beans, and, where rainfall permitted, bananas; they also produced pottery and iron tools from the iron rich soils; and kept large populations of cattle and goats (Håkannson 1995; Håkannson 1998; Kimambo 1969). In the late nineteenth century Maasai and Chagga raids considerably reduced population levels of both humans and cattle. The German explorer Oscar Baumann, who visited the South Pare Mountains in 1890, describes Chome and other places as virtually deserted (Baumann 1891).

Under German colonial rule the South Pare Mountains were part of the Usambara region. Remote and difficult to access, they were only occasionally visited by colonial administrators. Seventh Day Adventists and the Leipzig Lutheran Mission, who opened mission stations in Gonja, Mbaga, Vudee, and Chome in the 1900s, formed the main European presence in the area. Even today, almost all churches in the South Pare Mountains belong to these two denominations – in contrast to the North Pare Mountains, where there are Muslims as well as Christians, there are virtually no Muslims in the South.

Under missionary influences Pare population began to rise rapidly from the early twentieth century onwards (Koponen 1996). When coffee growing took off in the 1940s, the Pare Mountains were transformed into one of the most prosperous and educated parts of Tanzania, as many farmers invested profits of coffee in the education of their children. Today, due to disease and falling prices, coffee cultivation has largely ceased. A few of the more prosperous farmers have switched to producing onions and cabbages for urban markets, but these efforts are much hampered by the rudimentary roads up the Pare slopes, making transport cumbersome and expensive. There is a private boarding school in Chome (remote hill regions are a popular location for boarding schools in Tanzania), and in 2008 the discovery of gold in the highlands resulted in a short-lived gold rush, with several hundred artisanal gold miners setting up camp and digging in the highlands. Bauxite has also been exploited in recent years. But on the whole, there are few economic opportunities and many resident families consist only of grandparents and grandchildren, with most young adults continuing to leave to study and work elsewhere.

There are, however, marked variations within these development experiences. Mhero kitongoji (subvillage), for example, where historically the most dominant clan resided, is the most developed and prosperous part of Mhero village. It has municipal electricity, its farms are terraced and well kept, and there are many large, modern houses. These are mostly financed by the well educated children of Mhero kitongoji residents, several of whom have civil service or university positions in Dar es Salaam or Arusha. In contrast, more remote subvillages, like Bere or Mmeni, have no electricity and simpler houses and farms. Whilst many young people in these less developed *vitongoji* have left, too, they tend to have more precarious lives in cities, often struggling to make a living and unable to send or invest money back in Chome. As will be explored in more detail below, there is also marked variability in access to land between different families.

South Pare's social and environmental history can be discerned in its landscape today, a mosaic of farms and fallow land, small parcels of remaining community grazing land, various community forests, and sacred groves. Hundreds of different tree species form an integral feature of this variegated landscape. They can be divided into three broad categories - sacred groves, exotic timber trees, and fruit and fertiliser trees - each with its own kind of tree symbolism, significance for local ways of relating to place, and conservation practices.

#### Sacred Groves: ritual and communal symbolism

Anthropologists have been studying sacred groves ever since James Frazer's 1890 classic *The Golden Bough* (Frazer

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1996). However, sacred groves have received renewed anthropological attention since the rise of concern over tropical deforestation in the 1980s and 1990s, when their conservation potential began to be recognised. By now, the anthropological literature on sacred groves is very developed (for an overview, see Sheridan and Nyamweru 2007). Whilst exploring the symbolic and social role of sacred groves, anthropologists have also critiqued simplistic understandings of sacred groves in conservation policy as 'relic' patches of once much larger forests once protected for religious reasons, but now threatened by the decline of traditional religions and pressure for land. They have shown that the ecological history of sacred groves has been much more dynamic than the standard narratives suggest: far from relics and of 'natural' origin, many sacred groves are distinct products of human entanglements with other life forms (Chouin 2007; Fairhead and Leach 1998; Sheridan and Nyamweru 2007). They were created, they were fostered, and they flourished through multispecies histories that include and occur alongside human social histories.

Sacred groves in the North Pare Mountains have featured prominently in both the anthropological and the conservation literature on sacred groves. Michael Sheridan, one of the leading anthropologists working on sacred groves in Africa, conducted extensive fieldwork here (Sheridan 2000; Sheridan 2001), and the North Pare sacred groves continue to attract researchers (e.g. Ylhaisi 2006; Jones 2013). Their protection also featured in the 1992 Tanzania Forestry Action Plan for the region (Mwihomeke et al. 1998). In contrast, the sacred groves of the South Pare Mountains have received little attention. This is partly due to 'path dependency', in that an area that has already attracted conservation interest and funding tends to continue to do so, in part because it is better known than unstudied neighbouring areas. But this is also because - already of lesser ritual significance than their Northern counterparts before the colonial period - sacred groves in the South Pare Mountains have lost religious meaning much more drastically since the early twentieth century and the beginning of Christian mission. In the North, a significant percentage of the population is Muslim, and it is Muslims who largely continue to use and protect sacred groves (Sheridan 2000). In the South, in contrast, conversion to Christianity was virtually universal. Christianity's condemnation of traditional religion has meant that actual religious use, and therefore reverence, has largely ceased. Thus, whilst Sheridan (2000) describes having to buy and sacrifice a lamb before gaining permission to enter a sacred grove during his fieldwork in the North Pare Mountains in the late 1990s, in the South Pare Mountains I was always allowed to enter freely by whoever I was walking with, without ceremony or resistance. The larger, most important groves today still have official guardians, but their presence or permission was not required for entering groves, and guardians were as unceremonious as anyone else when they personally led us around their sacred grove.

Nevertheless, many dozens if not hundreds of sacred groves persist here, too, constituting important features of the South Pare landscape. As in the North, there are two main types: smaller groves, ranging in size from just a few trees to about an acre or so, traditionally called Mpungi, and larger groves, ranging in size from about one acre to over ten, known as Mshitu (forests). Mpungi are situated on individual family lands and, in the past, were looked after and used by families for prayer, sacrifices, and first circumcision ceremonies for newborn babies. The skulls of ancestors were kept in clay pots not within the Mpungi themselves but in rock crevices or other safe places nearby. In Pare religious thought, in the earliest times people could speak directly to the Creator (Kiumbi), but this fellowship was severed when people disobeyed him by eating eggs that were forbidden (Kimambo and Omari 1972). Since this event, God has been distant and can only be communicated with through ancestors, who are closer to him than living people (Kimambo and Omari 1972: 113). The pots with ancestors' skulls – still found in many rock crevices today - were used to facilitate praying to God through the ancestors, as well as remembering ancestors themselves.

The larger Mshitu groves were clan based and used by the wider local community but also by clan members from throughout the Usambara and Pare Mountains.<sup>4</sup> There were two different types of *Mshitu*, one used for initiation ceremonies, the other for praying (and some for both). In Chome, the two initiation Mshitu were Sangana (in Mpembeni kitongoji of Mhero village), looked after by the Mpembeni clan, and Jocava in Gwanga village, looked after by the Jocava clan. Initiation ceremonies were held every year for boys around 15 years of age.<sup>5</sup> In contrast to the North Pare Mountains, where initiation ceremonies could last several months, initiation ceremonies in the South took only a week (Kimambo and Omani 1972). The actual practices of these ceremonies were and are kept secret (see also Sheridan 2009), but overall, they were concerned with teaching initiates, as one elder put it in Kiswahili, 'mila na desturi za wapare', the Pare customs and traditions. As in other parts of Africa, the knowledge of customs passed on here may not in itself have been as important as the social control and power of elders over youths created through ritual and secrecy (Murphy 1980).

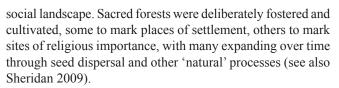
The second type of *Mshitu* were those used not for initiation rites but for a wide range of other, more personal religious rituals, including prayer, sacrifices, atonement and purification. Smaller, less important *Mshitu* of this type were used mainly by local clan members, but there were also several more famous *Mshitu* that were visited by people from all over the Pare mountains and beyond, for particular purposes: some associated with bringing rain, others with fertility, health, or good harvest. In Mhero village, the most important *Mshitu* for the whole community was Mshitu wa Mhero, the *Mshitu* of the dominant and leading clan, the Wahero. It consisted of three different parts: Kitala, where men conducted rainmaking ceremonies; Heimshunkwu, where both men and women, particularly women, prayed; and Heimpoko, where old men only prayed and performed rituals for rain and food.

Scattered across the landscape and – with higher and more distinct trees than most of the surrounding landscape – clearly visible from afar, both *Mpungi* and *Mshitu* were not only of

high religious importance to Pare people but also central to family and clan identity and territorial claims; they were 'places of power' (Colson 1997; Sheridan 2009:74). As different clans came to settle in the South Pare Mountains, the establishment of sacred groves symbolised their arrival and hold over particular mountain slopes, just as families in turn claimed their land by creating *Mpungi*.

Here I am using the words 'establishment' and 'creating' deliberately. In fact, in the present day very little is known locally about the actual origins of South Pare sacred groves; most people simply say that they have always been there, or, if pressed to speculate on their beginnings, that they were asili (Ksw.), indigenous or of 'natural' origin.<sup>6</sup> Some of these may have started as naturally occurring groves. However, like other sacred groves in Africa they are not 'relics' of a once total forest cover. For many centuries the landscapes containing sacred groves have been fundamentally shaped by humans, in particular through cattle keeping and fires. Photographs taken by missionaries at Chome and Mbaga in the early twentieth century show that, with the exception of clearly visible sacred groves, the slopes are largely covered in low shrub or grassland, a landscape that is most likely shaped by frequent fires, regularly set to foster the growth of grasses that cattle could feed on (Figures 2 and 3).

Such landscapes are also described by late nineteenth century travellers to the area (Baumann 1891; Håkannson 1998). But recent archaeological research has shown that even before human settlement, the Pare landscape at these altitudes was a mixed vegetation of shrub land and patches of drier and moist woodlands, with moist woodland groves found only near rivers or streams and in sheltered spots (Gillson et al. 2003; Sheridan 2009; Heckmann 2011). Higher altitudes, too, were never completely covered in high forest (Finch and Marchant 2010). Given this context, sacred groves appear not as 'relics', but as integral features of a dynamic, mixed, and



A wide range of indigenous trees are found in sacred groves. Some groves are heavily dominated by one species -Mshitu wa Jocava, for example, is dominated by Mdu/Mdudu (Maerua triphylla) - whilst others are extremely diverse. Trees commonly found in Chome's sacred groves are Mvumo (Ficus thonnigii), Mgambo (Ficalhoa laurifolia) and Mdu/ Mdudu (Maerua triphylla). I often noticed Mkaa nkhanga (Pterolobium stellatum), a climber with big, bright red flowers, on the outskirts of sacred groves, such as Kitala, signalling sacred groves from afar. Mkaa nkhanga is used as a living fence in North Pare and other parts of Tanzania, so may well have been planted deliberately in sacred groves. The most important plant symbolically, however, is Ithae (Dracaena), found in the centre of sacred groves, at the place where prayers and initiation ceremonies have occurred. Dracaena indicate a place of ritual importance, a place where ancestors are buried and also often mark boundaries between different plots of land. Given their power to organise communities, relations, and other symbolic values; Sheridan (2008) argues that Dracaena are a 'key symbol' (Ortner 1973)<sup>7</sup> in the Pare mountains, as indeed in many other parts of Africa.

Until the mid twentieth century, sacred groves were carefully guarded and managed by the clans and families responsible for them, with a nominated (male) guardian for each sacred grove. Rules of access were strict, as is still remembered vividly by elders today. Cutting of trees and the collection of branches for firewood were strictly forbidden (see also Sheridan 2009, Kimambo and Omani 1972). The most potent form of protection in most cases was fear, as it was widely known that anyone who entered a grove and cut a tree would suffer terrible misfortune or even die. The moral, punitive power of sacred groves extended beyond their own infringement; they

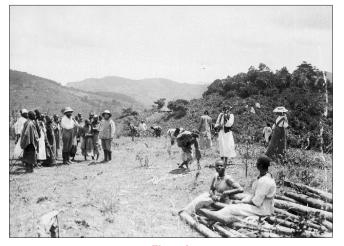
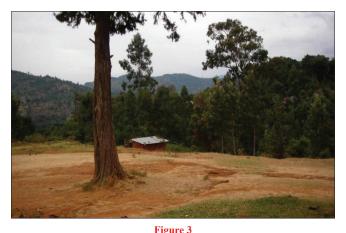


Figure 2 Assembly of chiefs and missionaries, at the spot planned for second school in Chome - 1911-1914. \*Kitala sacred groves is situated on the right, Sangana just visible in the background. (Photograph source: Leipzig Lutheran Mission Archives, 5-612)



Kitala sacred groves from the courtyard of Mhero school - Chome 2008. The trees in the foreground are planted exotics; Kitala sacred grove (background) is still the same size it was in the 1910s (Photograph taken by author, August 2008)

also played a role in detecting and punishing other kinds of crime. The current guardian of the Jocava Mshitu, born in the 1930s, thus told me that, in his youth, if someone stole his goats and he then went into Jocava forest to pray, that thief would die (see also Sheridan 2009: 84). These forms of identifying and punishing perpetrators of crimes remain widespread in Tanzania. Kelsall (2003), for example, describes the 'breaking of a pot' amongst the Meru, in what he calls 'rituals of verification', in quite similar terms.

In the present day religious use of sacred groves has declined drastically in the South Pare Mountains. Initiation ceremonies were repeatedly banned by the German and British colonial governments and condemned by missionaries, and have not been held since the 1950s. Today, sacred groves are also no longer used as official sites for prayer or other ritual practices. The decline in the importance of *Mpungi* groves, in particular, is starkly present in the fact that most people I spoke to, including Mrinde and Zawadi, were quite adamant that the word *Mpungi* had no ritual or sacred connotations at all, it was simply the place near your house where you slaughtered animals.

Such loss of religious meaning and ritual use is widely thought to result in the destruction and degradation of sacred groves. In the South Pare Mountains, too, old people say that sacred groves are not protected as much as they were in the past, that young people don't respect the laws and just go in and take firewood. Some groves do show signs of encroachment by farm land and are now smaller than they were in the past. This is particularly the case for less important family *Mpungi*, some of which have disappeared altogether. *Mshitu* forests, too, are less strictly protected than they were in the past. Thus, on several visits we saw signs of recent firewood collection, and once encountered a well known local church man cutting branches off a tree. In 2009, a Mhero village resident even attempted to farm in the Heimpoko part of Mshitu wa Mhero.

However, this particular act was regarded by all as a serious criminal act, and he was brought before the Chome court and charged. Overall, such incidents are rare, and though occasionally firewood is collected, this does not have a significant impact on the overall extent and biodiversity of sacred groves.

According to local people, most *Mshitu* forests, and in particular the most important ones, such as Sangana, Jocava, and Kitala in Chome, have not reduced in size. Their testimonies are confirmed by historical photographs: none of the sacred groves visible in early twentieth century missionary photographs, such as Kitala in Chome, or Changazu in Mbaga, have been reduced in size (Figure 4).

They continue to be protected: Sangana, Kitala and Jocava, for example, have legal protection encoded in village by-laws (*sheria ndogo*), whilst smaller ones are often protected by the strategic placing of beehives, which act as an effective deterrent to trespassers. And by and large, people do respect sacred groves.

This is in part because some locals do, in fact, secretly continue to use sacred groves for prayer, even if this is neither



Figure 4 The new bell for Chome District - 1913. \*The hill in the background is Mgambo hill, in Gwanga village in Chome. (Photograph source: Leipzig Lutheran Mission Archives, 5-611)

officially condoned nor readily admitted. Some also continue to uphold longstanding conceptions about the dangerous consequences of entering and tampering with sacred groves. The Mhero village executive officer (mtendaji wa kijiji) for example – a man not, on the face of it, particularly interested in traditions, conservation or sacred groves - told me that Kitala was a very dangerous forest, and that you could get serious illnesses if you cut a tree there. These conceptions are to some extent deliberately kept alive by those seeking to protect forests. Thus when I asked my guide Mrinde and Eduardo, a middle aged friend of his from church who was accompanying us that day, whether Chaimpishi, a small cluster of Misiru (Sizygium) trees in the Chaimpishi part of Mhero, was a sacred grove, Eduardo told me it wasn't, but added, laughing, that they told young people it was, and that it had dangerous powers, so they would not dare to enter it.

More significantly, for many human stakeholders the religious importance of sacred groves may be diminished, but they have lost none of their wider historical symbolic significance. Today more than ever they present the single most enduring and tangible connection to the past and to ancestors, and remain important symbols of collective identity. This historical significance extends to the indigenous tree species they contain, many of which are central to Pare identity.

Groves are also appreciated by local people for environmental reasons, in that they are conceived to affect the local microclimate and viewed as necessary to ensure rainfall. Fairhead and Leach (1998) discuss this idea as one that, now largely discredited (see Sheil and Murdiyarso 2009), was widespread in colonial forestry circles and used as a key argument to justify forest reservation.

In the Pare Mountains, however, the idea that trees attract rain predates the colonial period; it is an integral part of an older place-based body of environmental knowledge. For one, it is linked to a long history of rainmaking rituals performed in sacred groves, so central to Pare agricultural and social life (Sheridan 2012). But it is also rooted in a long tradition

of practice and observation based environmental knowledge, which goes beyond the religious and the symbolic (see also Morris 1978). Thus, Pare communities have traditionally not only cared for and fostered sacred *Mshitu* and *Mpungi* groves but also non-sacred community forests. These were used for medicinal purposes, firewood, and building material, and were also believed to play an important role in ensuring rainfall (see also Ylhaisi 2006). In Chome, the largest communal forests were Heimshunkwi and Kaimwesi, but there were also many smaller ones, such as Chaimpishi, mentioned above. All were subject to communal rules of access. Decades of colonial and postcolonial environmental education built on and contributed to these existing forms of environmental knowledge and conservation practices, further ensuring local appreciation and protection of both sacred groves and community forests.

Therefore, the continuation of traditional religious conceptions is not essential for the conservation of sacred groves – with some exceptions sacred groves continue to thrive despite the demise of traditional religious practices; their environmental and especially social and political values may shift and change, but remain relevant. As places of enduring power, they present a communal and historically conscious register of relating to place, concerned as they are with collective identity, wellbeing, and heritage.

# Planted exotics: post-colonial environmentalism and inequality

As noted earlier, throughout the world trees are planted to commemorate a person or an event, and to symbolise hope and peace. But tree planting is also a key symbolic act of modern global environmentalism, symbolising commitment to conservation, environmental improvement, and rural development. Kenya's Green Belt Movement, for example, whose core activity and policy consisted of the planting of over 51 million tree saplings, became one of the best known evnvironmental organisations in the world, with its founder, Wangari Maathai, awarded the Nobel Peace Prize in 2004. But tree planting as an environmental policy has a much longer history in East Africa, dating back to the early colonial period. By combating soil erosion and deforestation, tree planting was, firstly, a conservation measure, central to what many saw as a key mandate of colonialism in Africa, namely the protection of African environments from further destruction by its local inhabitants (Anderson and Grove 1987; Leach and Mearns 1996). At the same time, in the spirit of Chamberlain's 'constructive imperialism' (Worboys 1979), tree planting was supposed to contribute to rural development by providing firewood and timber to rural populations, and to the colonial economy as a whole as a source of revenue and base for industrial development.

For several decades, therefore, it was vigorously promoted by colonial forest and agriculture department officers through the distribution of seedlings, educational campaigns, and government directives. Importantly, the tree species chosen for this were predominantly fast growing exotics from other parts of the world, in particular eucalyptus (*Eucalyptus spp.*), grevillea (*Grevillea robusta*), pine (*Pinus spp.*), and also black wattle (*Acacia mearnsii*), the bark of which was used in the production of tannin. In the 1960s and 1970s, the planting of exotic trees dominated forest policy throughout the tropical world, symbolising efficient industrial forest management (Amanor 2001). Worldwide, they stand for progress, for modern, ration land use, and for environmental protection.

In the South Pare Mountains, initially it was mainly missionaries who planted exotics such as eucalyptus, pine, and cypress (Cupressus spp.) around their mission stations. Some missionaries, such as Martin Kosmala at Mbaga, taught tree planting at schools. In the 1930s the colonial government also enrolled individual chiefs to encourage tree planting. Chief Greyson Herieli in Chome did so by making the planting of trees a form of punishment; whenever someone did not turn up to a meeting or did something wrong, they had to plant a eucalyptus tree along the major public roads going through Chome. But it was in the late 1940s and 1950s that the colonial government began more concerted efforts at tree planting here. These were part of the Mass Literacy Campaign (Kimambo 1991), a rural education programme pioneered in Pare and in Mbulu District. Focussing mainly on adult literacy, and in particular on women, it was a comprehensive programme of 'community betterment', including hygiene, improvement in agricultural methods, soil conservation, and tree planting. One key method was the establishment of tree nurseries at schools, from which seedlings were distributed free of charge to anyone who collected them. School children themselves were enlisted to do a substantial amount of planting on communal land, in particular hill tops (see also Sheridan 2001: 287). In this way almost half a million seedlings were planted in 1951, with further nurseries being established at schools. In 1953 the District Commissioner noted that '[t]here is no doubt that the Wapare have become very 'forest minded' and need no convincing as to the benefits to be obtained through re-afforestation'.8 By 1956 tree planting by individuals had become so established that the Forest Department could introduce a small charge for tree seedlings to cover the costs of the programme.<sup>9</sup>

Why was tree planting so popular? Without doubt ongoing government propaganda about its conservation value had a significant impact, and South Pare people increasingly recognised the economic benefits of fast-growing exotics. But there was also another, political dimension to tree planting. In the context of rapid population growth and the first signs of competition for good farm land, the planting of exotics emerged as a key method in claiming land at this time. Traditionally, as in many other parts of East Africa, rights of occupancy were based on usufruct rights to land. There were strong links also between tree and land tenure (Fortmann 1985, Sheridan 2001). Outside of specific government or communal schemes on communal land, the planter of a tree tended to be its owner, and tree ownership often implicitly translated into land tenure. In the absence of formal land titles, the planting of exotics therefore presented an effective way of claiming land.

Tree planting continued steadily after independence. In 1965 Nyerere's socialist government brought in legislation

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to limit the practice of claiming unused land through tree planting (Fortmann 1985: 231), but this had relatively little impact, particularly in the Pare Mountains, which were also exempt from 1970s villagisation programmes. With ongoing tenure ambiguities the Tanzanian Village Land Act of 1999 officially recognised traditional rights of occupancy and use.<sup>10</sup> De facto land privatisation through tree planting continued, and reemerged across Tanzania (see also Snyder 1996, Mwanukuzi 2009). Meanwhile, in the late 1980s an additional impetus for tree planting in the South Pare Mountains came from the Traditional Irrigation Improvement Programme (TIP), funded by SNV, the Netherlands Development Organisation, which operated in the area until 2001. TIP's main focus was on improving traditional irrigation systems, but they also supported terracing and tree planting in the area. In Chome, many prominent plots of planted exotic trees, on both private and communal land, are a result of TIP's efforts.

In sum, the South Pare landscape has undergone significant transformations through decades of exotic tree planting, clearly evident from a comparison of historical photographs with current views (Figures 4 and 5). There are countless eucalyptus trees on state controlled hilltops, and old eucalyptus trees line many roads as well as the border of Chome Forest Reserve. Community forests have been expanded by planting exotics, large swathes of black wattle now cover hill slopes, there are many private eucalyptus and cypress plantations, and grevillea, pine and cypress trees are dotted across fallow family farm land. This transformation of the landscape has brought many benefits for local residents. Exotics offer a supply of good building materials, in particular straight poles. The leaves of grevillea and cypress trees can be used as fertilizers. Above all they are an important source of firewood, which benefits women, the main collectors of firewood. Women in Chome stressed that they valued having large supplies of firewood within easy reach, rather than having to walk long distances to obtain this necessary resource (see also Snyder 1996, Sheridan 2001).



Figure 5 Mgambo Hill today \*One can see a distinct increase in trees, largely but not exclusively due to the planting of exotic timber trees. (Photograph taken by author, May 2009)

In recent years, however, tree planting has significantly slowed down. On Mazingira (Environment) day in June, school children of the area sing songs, perform plays about tree planting, and plant trees. A nursery still exists near Chome Forest Reserve, but on the whole few new exotic timber trees are planted. Among older people the dominant discourses about 'the youth today' stress that they are 'selfish' and 'don't care about the environment'. However, there are other reasons for this slowdown. Firstly, people increasingly identify exotic trees as environmentally damaging, in particular eucalyptus, which uses a lot of water (National Botanical Gardens of South Africa 1959). According to local residents in Mbaga ward, eucalyptus trees on hill tops have significantly reduced water flows in the village. The ward government had already banned the planting of eucalyptus, I was told, and had started various campaigns to cut it back. But eucalyptus is difficult to remove, in part because it regenerates easily on its own, especially after wildfires. As in many other regions and countries, in many parts of the South Pare Mountains it has become a problematic invasive species. Black wattle, too, is an invasive species that regenerates very easily on its own and is generally now fought rather than fostered, especially since it is no longer used for making tannins.

Secondly, quite large areas of public and private family land have now been planted, and there currently is little need, or indeed space, for further planting. Whilst coffee grows well in semi-shade – and there are many exotic timber and fruit trees on the last remaining coffee farms – maize, the major food staple in the area, requires a lot of sunlight. This means people cannot plant many trees on maize crops fields; only those people who have more land than they need to feed their families can afford to plant and maintain trees. In fact, there are today stark inequalities in land ownership and wealth between families in the South Pare Mountains (Porter 1996). The planting of exotics has significantly contributed to these inequalities, with some individuals and families much more astute than others in asserting land rights through the strategic planting of trees. Thus, some families, in particular those of the Wahero clan, own large amounts of land. With so many of the younger generation living in cities, a large proportion of this land is not farmed for food. Whilst some surplus land simply lies fallow (dotted with exotics marking ownership), other parts are filled with high stands of eucalyptus and other exotics. Such plots not only signify progressive, rational land use, they also serve as status symbols, signalling the wealth and extensive land ownership of their - predominantly male owners. Through the sale of timber they also present good sources of income.

Meanwhile other families–poorer ones, belonging to less important clans, perhaps less astute in the past at staking out claims for themselves–have far less land. They cannot afford to plant trees, and often they do not produce enough food to feed themselves. The beautiful green and woody landscape of Chome, rich and plentiful as it looks, in fact belies underlying poverty and persistent problems of malnutrition.<sup>11</sup> This resonates with Murton's (1999) observations in Machakos

District in Kenya documented in Tiffen and Mortimore's famous *More People, Less Erosion* (Tiffen et al. 1994). Murton, too, found persistent inequality and malnutrition in Machakos' rich and fertile looking landscape. As one of his informants told him: 'Once [international observers] see all these trees (in Ndueni) they think that we are quite alright here - but trees are never eaten' (Murton 1999: 43).

Planted exotics are therefore symbolic in multiple ways. They are symbols of progressive land use and environmental protection; of biological invasion and degradation; and of status, exclusion, and inequality – different facets of the colonial 'nature regime' (Escobar 1999) that brought them to the Pare Mountains. It is not surprising that Pare people are not particularly emotionally attached to planted exotic timber trees, in stark contrast to indigenous trees.<sup>12</sup>

As discussed above, the new nature regime also entailed new ways of relating to place, namely de facto private and state control over land. Planted exotics have played a pivotal symbolic role in staking territorial claims over both private farmland and state forest reserves, far more exclusive and specific claims than ever made by sacred groves. They are also the visible manifestation of a different, utilitarian approach to conservation. Whereas the conservation of sacred groves is steeped in history, the planting of exotics is rooted in modern ideas of rational resource management, planning, and profit. This form of rational conservation has transformed Pare landscapes and brought many advantages to Pare people. But it has also brought many environmental and economic disadvantages, especially for those who have ended up with comparatively little land.

# Making a beautiful home and farm: fruit and fertiliser trees

Fruit trees and trees whose leaves are used as fertiliser do not possess the same obvious symbolic value as sacred groves or planted exotics, and are rarely discussed in these terms. In general, they receive less attention by academics, policy makers, and NGOs working in the region, and yet these neglected trees have contributed significantly to tree cover increases over the course of the twentieth century and play an important role in people's livelihoods. Moreover, they also have symbolic meaning for local people, conveying a sense of a beautiful, good home or farm. This presents another important facet of how people relate to place, in addition to the sense of collective historical identity offered by sacred groves and the land claims made through the planting of exotic timber species.

The majority of fruit trees now growing in the South Pare Mountains are not indigenous, and, with the exception of the banana, people only started planting them in the twentieth century. One of my guide Mrinde's many brothers, 68 year old Shangwe Lukio, told me that when Mrinde and he were small boys their parents 'did not yet know how to plant fruit trees'. But he himself, like others of his generation, planted many fruit trees around his house and along paths. In fact, the planting of fruit trees emerged as an integral part of setting up a new farm and home. Both women and men plant fruit trees: Happy Saidi, an old lady living on Mgambo hill in Gwanga village recounted that she moved up to the hill just after she got married, and the first thing she did was to plant some fruit trees. Men, women, and children also prune and harvest fruit trees; there were no discernible gender divisions of labour.

By now, most village paths are lined with fruit trees (often grown from seeds or fruit kernels discarded by people walking along the paths), and many houses are surrounded by fruit bearing trees. On the Eastern slopes of the Pare Mountains, in Mbaga and Gonja, by far the most important fruit tree is banana, which dominates most fields. In Chome and Vudee, in contrast, very few banana are grown, due to insufficient rain and water.<sup>13</sup> After banana, the most common fruit tree is avocado, but there are also many locquat, orange, lemon, guava, and a few papaya trees. Today the number of fruit trees is comparable to that of fast growing exotic timber species, and they, too, have made a substantial contribution to the significant overall increase in tree cover over the course of the twentieth century. They are also an important component in the local diet: avocados, for example, are eaten as a kitoweo (accompaniment) with many meals. Fruit trees are also viewed as aesthetically pleasing, making homesteads beautiful and, through the shade they provide, pleasantly 'cool' (Sheridan 2001). The importance of fruit trees in the creation of a beautiful home is evident not only in the central role given to the planting of fruit trees in accounts of setting up a new home, it is also apparent in the sense of pleasure and approval informants express when visiting a compound containing many fruit trees, and in the pride with which farmers showed us their fruit trees, invariably showering us with generous presents of fruit.

A large range of trees and plants are used also as *mbolea*, fertiliser. Not only is there a wealth of knowledge about them, they are also highly valued. Today, cow manure (*samadi*) is not readily available because the number of cattle is now so low, and most people cannot afford to buy chemical fertiliser. Instead, the main form of *mbolea* used consists of plant leaves. As informants in Mhero village described to me: soil without fertiliser can be hard, but if you add leaves it begins to change and becomes softer. You can see this, they explained, by looking at soil near forests, where the soil tends to be softer and moister than soil farther away from forests.

The most common and preferred trees used for *mbolea* are those with small leaves, which dry quickest: Msame (*Albizia gummiferia*)<sup>14</sup> is the most popular, but Mvuruku (spp. unknown), Mvumo (*Ficus thonningii*), Mpasa (*Vernonia*) and Ithui (fern) are also used, as are the leaves of some exotics, in particular black wattle and grevillea. Tumbi (spp. unknown) and Ithungute (spp. unknown), two very large leaved indigenous plants, make good *mbolea*, too; their leaves are cut into small pieces, dried, and then made into mulch. Msame trees, highly valued for their tendency to fertilise soils, occur naturally in the Pare Mountains, but they are deliberately protected in farms and also sometimes planted. Apart from providing excellent mulch, and shade to rest in during a long farming day, *Albizia gummiferia* are also nitrogen fixing, thereby making another

important contribution to soil improvement. Indeed, Msame trees tend to be viewed as a sign of a well-managed farm, with good soil and yields (Figure 6). People also express strong emotional attachment to these trees. Many recalled with nostalgia that there used to be more Msame and other *asili* trees in the past; the planted exotics everywhere today were quite worthless in comparison.

Fruit and fertiliser trees present a smaller-scale, more domestic and modest way of relating to place than sacred groves or exotic timber plantations, namely the creation of a good home and farm. They are not associated with any particular traditional or modern body of environmental knowledge, and do not have explicit symbolic value in this domain. Nevertheless, they are of great importance not just to people's livelihoods but also to a sense of wellbeing and home. Pare people, therefore, carefully plant and foster fruit and fertiliser trees quite independently, and without outside instruction, government coercion, or fear of divine punishment. For this reason I present these trees and their positive associations as a third register of conservation practices, more humble and organic (Escobar 1999) than planted exotics and even sacred groves, but, arguably, more effective.

### **CONCLUSION**

Inspired by Brian Morris's work on human-animal relations, this paper has explored three registers of tree symbolism in the South Pare Mountains in Tanzania, relating to sacred groves, exotic timber species, and fruit and fertiliser trees. It has also examined how each is linked to different 'senses of place' (Feld and Basso 1996) and conservation practices. Identifying and mapping these parallel and co-existing registers offers a number of insights relevant for both multi-species ethnography and conservation.

Firstly, at a cognitive level it illustrates Morris' argument that individual humans and societies everywhere are capable of simultaneously holding multiple, sometimes contradictory views on the natural world, and that distinctions between monolithically



Figure 6 Msame (Albizzia gummifera) trees planted on a farm in Chome \*Photograph taken by author, August 2008

conceived Western and non-western ontologies – for example Western 'multiculture' and Amazonian 'multinature' (Vivieros de Castro 2004) – are deeply misleading. For people in the South Pare Mountains, whilst some trees are important symbols of communal heritage or of longstanding ritual significance, others may be valued for firewood or profitable timber trees, just as others may be viewed as an annoying nuisance.

A pluralistic understanding of people's cognitive and practical engagement with the natural world also has important political implications. The identification of stark, binary ontological opposites is very much part of a long tradition of 'othering' in anthropology. But as Fabian (2002) reminds us, the anthropological creation of a timeless 'other' was instrumental to colonialism and continues to legitimise and reinforce global political and economic inequalities. In contrast, a pluralistic (and historical) understanding of multiple, co-existing forms of human and non-human relations allows for the fact that almost all human societies have long been part of regional and global networks, and have long exchanged knowledge, ideas and beliefs as well as goods and seeds (Headland 1997, Gupta and Ferguson 1997). As I hope to have shown here, Pare people not only attach symbolic meaning to trees that are rooted in specific local beliefs and modes of thought, as with sacred groves, but also deploy larger political, economic and knowledge networks that reshape their attitudes towards and interaction with trees in different ways. We discern this most clearly in their encounters with exotic timber trees. Appreciating these multiple strands of place-based environmental knowledge, in the Pare Mountains as elsewhere, offers a foundation for mutually productive engagement between people living here and NGO and government representatives.

A recognition of the co-existence of different registers by which people think and feel about and interact with trees has significant implications for conservation. Understanding how multiple registers map onto the landscape can inform the development of policies that build on existing local forms of knowledge, values, practices, and institutions; in specific and meaningful ways. As this paper has shown, identifying different symbolic registers and categories not only aids in making sense of diverse trees and tree-related practices, it also helps to situate these in their specific social and environmental histories, which remain here as elsewhere both human and distinctively more-than-human.

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# NOTES

- My research was part of the Historical Ecologies of East African Landscapes (HEEAL) project at York University, 2007-2011, funded by a Marie Curie Excellence Grant and led by Professor Paul Lane.
- 2. At the Tanzanian National Archives (TNA) in Dar es Salaam, at the Evangelical Lutheran Church of Tanzania (ELCT) Archives in Moshi, and at the Lutheran Mission Archives in Leipzig.
- These photographs are held in the Leipzig Lutheran Mission Archives, but are also included in the University of Southern California Digital Library's International Mission Photography Archive. http://digitallibrary.usc.edu/cdm/landingpage/ collection/p15799coll123.
- 4. Through migration, members of one clan often dispersed throughout the region, but returned to the orginial Mshitu of their clan for important rituals, including initiation.
- 5. William Seimlugu, an 87 year old resident of Mbaga who was initiated in 1942, remembered how this was organised: every year, a different *Mshitu* 'called out', as William and others put it, by 'shouting loudly', thereby indicating that, according to Pare beliefs, the changing locations of annual initiation rituals were chosen not by priests but by the groves themselves. The guardians of the *Mshitu*, or priests as William called them, then spent a month in the forest and prepared the ceremonies. Then boys of the right age would come from all over the South and North Pare mountains to be initiated in this forest. Boys arrived in pairs, always two good friends together, at the entrance gate to the *Mshitu*. The priest at the gate would ask first one, then the other: 'Is this man ready?' If both replied 'yes', they were allowed to enter, amidst loud drumming.
- 6. The word *asili* originally means 'origin', rather than natural, but it is nowadays used to mean 'natural', and this was the translation always given to me by local informants.
- 7. Ortner identifies two types of key symbols, 'summarising' and 'elaborating'. 'Summarising symbols are primarily objects of attention and cultural respect; they synthesise or 'collapse' complex experience, and relate the respondent to the grounds of the system as a whole. [...] Elaborative symbols, on the other hand, are symbols valued for their contribution to the ordering or 'sorting out' of experience' (Ortner 1973: 1344). It seems to me that Dracaena are key symbols in both senses.
- 8. TNA, 19/6/1, Annual Report of the Pare District 1953.
- TNA, 517/F3, Forest Policy General. Letter by Assistant conservator to Chairman of Pare district Council, 21 March, 1956.
- See http://www.usaidlandtenure.net/sites/default/files/countryprofiles/full-reports/USAID\_Land\_Tenure\_Tanzania\_Profile. pdf. Accessed September 2016.
- 11. According to the doctor at Mhero dispensary, malnutrition is the biggest health problem in the area. I also witnessed a delivery of food aid, which according to my informants was a regular occurance, but unfortunately I was unable to establish which organisation was responsible for it.
- 12. Braverman (2009) describes a very similar distinction in Palestine, where pine trees are associated with the Zionist project, olive groves with Palestine connection to the land.
- 13. Bere subvillage of Mhero, a well irrigated and wetter part of Chome, is an exception to this; there are many banana trees here.

14. Msani or Msane is the name that was actually used, or at least that I always noted in Chome; it is not officially listed as such anywhere else. It was also sometimes called Mririgwi. See Mbuya et. al. (1994:32).

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