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Making temporal environments: Work, places and history in the Mengen landscape

Introduction

For the Mengen living in the Wide Bay area of New Britain Island, Papua New Guinea, landscape is an important materialisation of personal and group histories. People see in the landscape traces of each other's productive activities, namely 'work' as the Mengen understand it. Work, as activity that creates and maintains valued social relations, is at the basis of Mengen conceptions of relatedness. Conversely, all activity that produces and maintains valued social relations, is classed as 'work' and hence work is a key source of value for the Mengen. Care and nurture, expressed especially in acts of giving and feeding, are important, if not the most important, forms of work (Tammisto 2018: 11, 54; see also Fajans 1997). Food and gardens are central media through which these relations are acted out, as well as key expressions of value (e.g. Turner 2008: 47, 53; Stasch 2009: 14, 19–20). The socially productive activities of people also leave visible traces on the environment. Thus, in the course of their social life, people make places (see also M. Scott 2007: 167, 213).

The near environment of the Wide Bay Mengen villages is a patchwork of gardens, fallows and secondary forest. What to an outsider looks like undifferentiated forest is, for those living there, an environment made by, and speaking of, human activities. These places constitute the Mengen landscape, which is "the world as it is known to those who dwell therein, who inhabit its places and journey along the paths connecting them", and "a pattern of activities 'collapsed' into an array of features", to borrow Tim Ingold's definition (2000: 193, 198). Abandoned villages are visible to the attentive onlooker in the shape of domestic trees planted by former inhabitants, although the sites had returned to primary forest. Even old and more distant forests are full of signs of past and present activity: paths, old burial sites, places where people have gathered house materials and so forth. These signs of work are 'memories' of people, bringing to mind the persons associated with them. The semiotic aspects of the landscape come together in the Mengen term for landscape, *glanpapa*, translated to me as "how things

draw themselves out clearly when you look at them".[1] Here Philippe Descola's definition of landscape as "transfiguration", the deliberate re-shaping of a site so that it can also function as a sign (2016: 5), is helpful, because it focuses on placemaking and the semiotic qualities of the landscape – which the Mengen themselves emphasise.

All social relations are spatial, they happen in space and co-produce spaces, as Jason Moore notes (2015: 11). Thus, places which constitute spaces and landscapes, are also inherently political. Places are, as Margaret Rodman puts it, "politicized, culturally relative, historically specific, local and multiple constructions" (1992: 641). This means that different forms of value production create different kinds of places and different forms of politics are enacted in different ways in and through the places they create.

In this paper I examine how the Mengen make their landscape, how time and place intersect in it and how places become one of the concrete media through which the Mengen relate to each other (see Munn 1992: 17; Stasch 2009: 19–20). I start by focusing on how the Mengen organise their horticulture in time by following the cycles of particular trees thus dividing the year into several seasons during which different gardening tasks are done. This is a concrete example of the temporality of the Mengen landscape. It shows how ecological temporalities, such as the growth of certain trees and food plants, intersect or converge with human temporal trajectories (see also Stasch 2003: 369, 381). Following that, I show how people not only coordinate their activities by observing a temporal landscape, but through their gardening activities they also create it. Places created in the course of people's lives are important historical markers and indices of people's relations with each other and the land.

As Mengen social relations, histories and values are intimately intertwined with the gardens, forests and land – in short the lived environment – I ask how Mengen forms of politics are enacted through and expressed in the landscape. I examine how engaging with land and placemaking can also be contested acts, and how places in the landscape become contested sites with respect to landholding. Furthermore, intensified natural resource extraction not only connects the Mengen in new ways to a global market economy, it reshapes questions of landholding, and very concretely speaking, it changes the political landscape of the Mengen.

The Mengen tree calendar

The tropical climate of Wide Bay is most notably divided into two main seasons of about equal length, the dry and the rainy. The Mengen call the dry and rainy seasons *kae koureta* ('only sun [*kae*]') and *windfa* respectively. The seasons are most strongly associated with their extreme periods, namely November to January for the sunny season and June to August for the rainy

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1 The term may very well be a neologism. Nonetheless, it illustrates well the visual aspects of the Mengen landscape. (Mengen [M]: *gel*: to see, to look; *pa*: to draw, to write.)
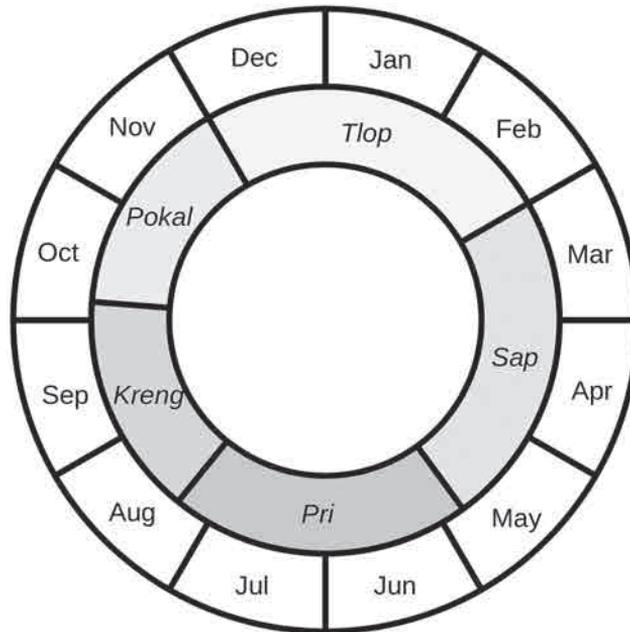
Figure 1. The index tree phase.

season. The intermediary times are characterised by more or less gradual shifts from one extreme to another. The seasons dominate activities in as much planting is not possible during the height of the rainy season, and the rough seas caused by the strong winds of the period make traveling by boat difficult – and dangerous. However, there is no major shift in activities of dwelling corresponding with the contrast of seasons (Panoff 1969: 154).

The two seasons provide the most general division of time, but the Mengen conception of seasons is much more sophisticated. Specific gardening activities are performed according to the so-called tree or village calendar (Tok Pisin [TP]: *kalender bilong ples*), in which the yearly cycle is represented according to the flowering and leaf phases of five index trees (see Figure 1). (The notion of "index tree" is Michel Panoff's (1969: 156), who documented this calendar in use in the 1960s among the Mengen of Jacquinot and Waterfall Bay.) By "index" I refer to a semiotic relation where the signifier and signified are physically connected or occur at the same time (Parmentier 1994: 4). In this case, the flowering of a specific tree occurs at the same time as a specific season and hence the former is an index of the latter. Similarly, in this paper I use the term 'icon' to refer to a sign that has a formal resemblance with the thing signified (Parmentier 1994: 4, 6).

During my fieldwork, the Wide Bay Mengen coordinated their gardening work according to this schedule, having systematised their calendar in the early 2000s so that it could be taught in elementary schools. This was part of a national education reform initiative in which elementary schools began teaching in local languages. In this version, the phases of the index trees were adjusted in terms of Western calendar months, which are more generally used for reckoning time. However, people follow the index tree

phases in their day-to-day gardening work and speak about their work in terms of them – in Wide Bay Mengen this is known as *vekmein* (*vek*: tree, *mein*: phase, 'round'). For example, people often explained to me that a garden being cleared was to be planted with taro of the *sap*, one of the index trees, or that during another tree, *pri*, the yam harvest would begin, and so on.

- *Tlop* (*Euodia elleryana*; also *Melicope elleryana*): The phases of the *tlop* tree index the time roughly between December, when its distinctive red flowers appear, and February. The height of the dry season, occurring in January, is sometimes called *tlop maengngan* (heat of the *tlop*), while the end of this period around February is *tlop kan*, as the seed (*kan*) of the *tlop* is clearly visible. During the flowering of the *tlop* lesser and greater yam is planted and then harvested around September–October. Later in December–January taro is also planted. This constitutes a 'slow' season for the taro, which is ready for harvest around October and lasts until December. Yearly festivals (M: *pnaeis*, TP: *kastom*, also *lukara*) are held during the season of *tlop* as the main food taro is ready for harvest.
- *Sap* (*Alphitonia marcocarpa*): *Sap i*s used as an index for the period lasting from March to April, with *sap lvun* (the leaf of sap) referring more specifically to April. The sap phase is still part of the dry season although characterised by light rains. During *sap* taro is planted, to be ready for harvesting around October–November. Taro planted during *sap i*s often transplanted from yam gardens planted during December–January (*tlop*).
- *Pri* (*Erythrina indica*): the start of the *pri* phase was identified to me differently by people, either starting in May or June, but in most accounts *pri i*s associated with June and July, which could also be referred to as *pri chu chumtan* (*pri* is leafless). The rainy season starts at this time. Both taro and yam can be planted at the beginning of *pri* although it is regarded as a 'minor' season for both. The taro-planting season of *pri* usually merges with *sap*. Yam planted during the *kreng* phase in September starts to ripen and is ready to harvest. During the height of the rainy season there is usually no planting.
- *Kreng* (*Pterocarpus indicus*): *Kreng mukmguang* means that the *kreng* starts to flower and 'leads' other trees, which flower later. This occurs by the turn of August–September, when rains are easing off. The season of *kreng* continues to October when the rainy season is over and the weather is 'good', that is, moving towards the dry season. *Kreng i*s the main season for planting yam. Yam gardens are readied during August and September and seed yam is brought from the *kreng* gardens of the previous year. Yam planted during *kreng* ripens around June–July (see *pri*). The annual ceremonies are usually held in January when taro is harvested, but they can also be held in September–October when yam is harvested and distributed as the gift. Sometimes minor prestations are made with yam at this time, anticipating the actual ceremonies held in December–January, during which taro is given. In this case, the prestations are 'shadows' (M: *koun*, shadow, spirit, image, reflection) of the ceremonies proper to come.

- *Pokal* (*Albizzia falcataria*): The *pokal* tree flowers during November when the dry season is well under way. While identified as one of the index trees, many people with whom I spoke tended to leave *pokal* out of their accounts and merged the season with *kreng* and *tlop*. *Pokal* is a time for planting yam and taro and clearing gardens for the yam and taro seasons of *tlop*.

The division of the year into *vekmein* constitutes a sophisticated way of dividing the principal meteorological seasons into distinct phases for the planting and harvesting of the main food plants. My interlocutors did not know how the system had evolved, nor were there any accounts of its emergence, but it is clear that it is based on very careful observation of trees, their relation to the growth of food plants and the yearly cycle. It is just one example of the impressive knowledge the rural Mengen have of their environment. People noted that if the 'tree calendar' is observed carefully – and nothing unusual such as droughts occur – food would be abundant throughout the year. As soon as a garden is planted, clearing new ones for the next season or crop should get underway, as the clearing and fencing of gardens can take considerable time – usually at least a month.

Besides the tree calendar, people use plants more widely to conceptualise time. When I interviewed a man in his 70s on the history of a village, he used the growth of coconut palms to recall how, for many years, the villagers hid in the forest during World War II:

> The war started and we fled into the forest. I think we must have been something like three years in the forest, because when we came back, the coconut palms were ready to carry fruit.

While trees and plants are a way of counting the flow of time and conceptualising seasons, they also serve as metaphors for history for the Mengen (Panoff 1969: 164). Like the growth of a tree, history was seen by the Jacquinot Bay Mengen as progressive, and events, such as branching, as irreversible (Panoff 1969: 164). This conception also applies to the histories of clans which were called vines and vine-branches in the vernacular. This kind of "botanic metaphor [...] that combine[s] notions of growth and succession", as James Fox (1996a: 8) observes, is common among the Austronesian peoples to which the Mengen also belong. The index cycles of the index trees, visible to the skilled observer in the landscape, were used by the Mengen to conceptualise time and organise gardening.

Gardening and place making

Besides this yearly cycle as indexed by trees and connected to the practices and work of the Mengen, there are other temporal features worth considering in the Mengen landscape. Gardening and dwelling practices, such the establishment of settlements and burial sites or the gathering of building materials and food stuff from the forest, as active engagements with the

environment, create places that are visible in the Mengen landscape. People leave their gardens to fallow after one harvest, and the environment near the Wide Bay Mengen villages is thus a patchwork of differently aged fallow-forests. Along with gardens and fallows, there are also abandoned villages, burial sites and other signs of people's productive activities that have created a multi-layered landscape. The Mengen term for landscape *glanpapa*, which a Mengen man translated to me as how things draw themselves out as one looks at them, focuses on the abundance of different signs that constitute the landscape.

Here it is helpful to draw on Philippe Descola's proposal (2016: 5, 11–12) for a stricter definition of landscape, understood as transfiguration, namely the deliberate changing of the appearance of a site. In order to be a 'landscape', transfiguration should satisfy three conditions: the result of the activity must be deliberately sought after, the activity should not be exclusively utilitarian, and at the end of the activity, people should recognise the change in appearance of the site (Descola 2016: 5). Moreover, a landscape formed by transfiguration, whether by modification of the site itself or through its pictorial representation, can function as a sign standing for something else (Descola 2016: 5). The signs of productive activity that make up the Mengen landscape, stand for a variety of social relations. This is especially pronounced in Mengen gardens and in the succession between gardens and fallows.

There are several temporal trajectories in Mengen gardens. The food plants require weeding and pruning at different times and stages of growth. The time-span of a given garden is largely determined by the main food plant and how it matures for harvesting. After harvest, people leave gardens to fallow, and by doing so create an ever-changing landscape of gardens and fallows in different stages of maturation. For example, when a yam garden matures, the taro planted in it are uprooted and transplanted into newly cleared gardens. Like the *vekmein*, which seamlessly merge into each other, there is no absolute distinction between a mature and an abandoned garden, instead, letting the garden become fallow is a gradual process. This effect is made even more pronounced by the way the Mengen never plant a garden with only one crop, and different foods mature at different times and are thus harvested at different periods. Final harvesting takes place as fences start to deteriorate and species associated with bush fallow begin to take over a garden.

The importance of horticulture is evident in the forest terminology of the Wide Bay Mengen. The general term for forest, *gurlon*, covers both primary and secondary forest of different kinds. *Gurlon* however, is divided into four terms referring to forests of distinct types and ages:

1. *papli*: this encompasses mature gardens, gardens left fallow and secondary forest that begins to grow in abandoned gardens. *Papli i*s recognised as a former gardening area. No new gardens can be cleared at this stage.
2. *mlap*: secondary forest growing in abandoned gardens. *Mlap i*s distinguished from *papli* by the size and type of trees. Certain tree species

start to grow in size and thus overwhelm species typical to immediate secondary growth or *papli*. In contrast to *papli*, *mlap* starts to resemble 'real forest' and trees grow into substantial specimens. *Mlap i*s still recognised as former garden where traces of human work, such as tree stumps and axe marks, are visible. *Papli* becomes *mlap* in about seven to twenty years, depending on various factors that influence the growth of trees. At this stage new gardens can be cleared. There is no rule about how many years are needed before *mlap* can be cleared for gardens, it depends on the size of the trees, which in turn varies from area to area. To my knowledge, fallows younger than five years should not be cleared.
3. *lom*: primary forest. *Lom i*s not regarded as former garden, but some of my interlocutors noted that if left unused for a "very long time", *mlap* will turn into *lom*. The *lom i*s distinguished from *papli* and *mlap* through the type and size of the trees: these are of different species and considerably bigger than in a secondary forest. Traces of work, such as gathered plants, but also trails (*gue*), abandoned villages (*knau*) distinguished by domestic plants or earth oven stones, and burial sites (*o*), are visible in the forest.
4. *lom son*: the definitions for this category are somewhat vague, but it refers to forest growing on mountain ranges, where vegetation is poorer due to less fertile land and not much fauna. In some definitions *lom son i*s distinguished from other types of forest as characterised by a lack of (visible?) human action. One person noted that if people were to start using this kind of forest, it would change into *lom*. Another considered the main distinction to be the different flora. The distance from the everyday environment of people is also a factor. Some people noted that *lom son* are the "blue ranges" visible far away (as opposed to the more proximate forest characterized by different shades of green).[2] The counterpart of *lom son* – in the opposite direction, namely toward the sea – is *mail son*, the far away ocean – characterised similarly by another shade of blue.

As is evident in this forest terminology, the Mengen emphasise 'work' and its visibility in the environment. The two terms for secondary forest refer to gardening areas and are directly linked to horticulture, as these types of environments would not exist without human action. The terms *ngur* (garden), *papli* and *mlap* are partly overlapping and on a continuum. A garden where harvesting has started may be called *papli*, while a secondary forest ready to be cleared again (*mlap*) can be also referred to as somebody's *papli*. People thus emphasise that fallows are always *somebody's* fallows. In contrast, secondary forest that had been logged, but not cultivated, is not *papli* or *mlap*, but called *tlanglis* (M: *tlang*: to fell, *lis*: to decompose), forest cleared for no apparent reason (TP: *katim bus nating*). While *lom* is not an anthropogenic forest type, it incorporates a wide range of visible human action. However, in terms of horticulture *lom* is 'empty' and whoever clears a garden in it retained further rights to cultivate the area.

Botanists' classification and description of the forests near Toimtop village overlap with Mengen classification. Pius Piskaut and Phille Daur

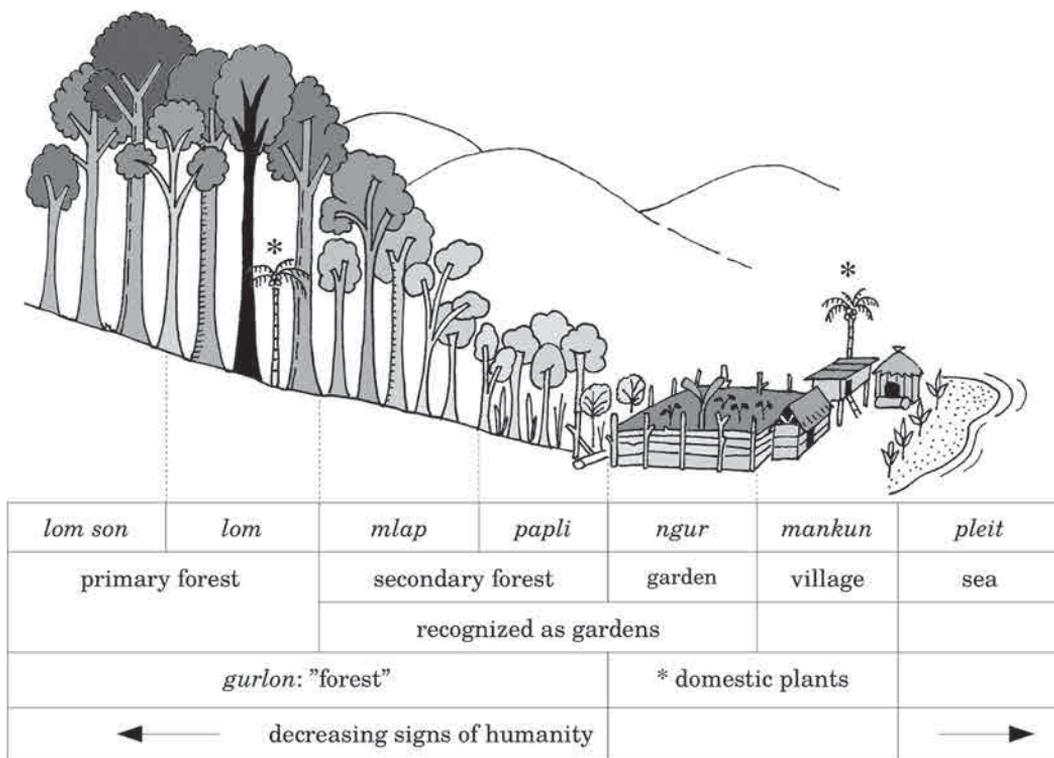2 Note that in Mengen 'green' and 'blue' are referred to with the same word.

lom son	lom	mlap	papli	ngur	mankun	pleit
primary forest		secondary forest		garden	village	sea
		recognized as gardens				
gurlon: "forest"				* domestic plants		
◄— decreasing signs of humanity						—►

Figure 2. Schematic representation of Mengen forest terminology.

(2007: 21) distinguish between early secondary forest with tree heights of up to 10 m, and advanced secondary forest with the canopy layer at 20–25 m and trees occasionally as high as 30 m. In primary forest the canopy layer is generally at 20–30 m with trees occasionally as high as 40 m (Piskaut and Daur 2007: 20). Botanists divide the primary forest into three types: upper and lower lowland hill forests (at elevations of up to 220 m asl) and *Dillenia* (230–400 m asl) and Mixed *Castanopsis* forests (400 m asl and upwards) that grow on ridge tops with shallow and nutrient-poor brown forest soils (Piskaut and Daur 2007: 20).

Taking the village as a starting point, the fallow succession and the different types of forests can be schematically represented in relation to time and the gradual diminishing of signs of human presence (see Figure 2). The village and the surrounding gardens are the most evidently human areas. As the gardens start to become fallow, signs of human activity decrease. In the primary forest (to which the fallows return if left uncleared), signs of human presence decrease: the forest itself is not anthropogenic in the same way as secondary forest, but domestic trees, oven stones from abandoned village sites and so on provide evidence of past usage. Finally, the far-away forest, the *lom son*, is characterized by the absence of human signs. In this sense the gradient of human presence is also temporal. The *papli* is young bush which, over time, grows into more robust secondary forest and finally

back into *lom*, primary forest, a temporal gradient that is connected to signs of human presence and the social relationships they index (Thomas Strong 2008; personal communication).

The villages and gardens index contemporary and present social relations, whereas older fallows and abandoned villages highlight past relations. These semiotic aspects of the different types of forest are also iconic, in as much the diversity in age of forests is iconic of the diversity of social relations of different ages. Similarly, Mengen gardens are indices of their users and important food plants are indices of the women who tend them, while the diversity of plants in a single garden is an icon of the diversity of social relations through which the women have acquired the different plants (for more details, see Tammisto 2018: 41–43). Thus the Mengen landscape, and its elements, can function not only as iconic signs, as Descola (2016: 5) notes, but also as indices. The signs of people's socially productive activities, or work, in the landscape materialise personal histories (also Maschio 1994: 180; Kirsch 2006: 189). These places evoke memories of the people who, through their activities, created them, and are thus not just about recollecting past activities; remembering other people often has a strong emotional component. As a Mengen woman in her 50s told me:

> A grandfather of mine, once we were clearing a garden on an abandoned village, he sat down and cried. It's bush now! But people still know this area. [...] And he said he recalled his mothers and uncles from the past, because when I felled that tree, a *rin*[3], it smelled. [...] He asked me: "Do you smell that? They planted it in front of the men's house." And he said to me, "you go and plant that garden". And once I had done it, I [...] gave him a piece of shell money, a pig and a heap of food. And another one I gave to an old grandmother of mine. I compensated the two like that. I made the two cry, made them worry and think back, because in the past they lived there, then the government came and we came down [to the coast] and now we go back to work our gardens there.

The quote brings up several important issues. First, while the visual aspects of places are central in the epistemology of the Mengen, other senses are also important. While Descola's (2016) definition of landscape focusing on placemaking and signification is helpful, landscape is not only experienced through sight. Here the smell of the tree functions as a sign as well. In this story, the smell of the *rin*, a domestic plant and an index of people's activities, triggers a memory of the abandoned village, the men's house and the people who lived there. A young man told me how he had gone to look for an abandoned village that his grandmother had told him about. Knowing its approximate location, he finally found the village because of the scent of the domestic plants. This points to another important way in which the places in themselves are not the whole story, so to speak; their full social significance unfolds only when people know the area and its history. This knowledge is passed on both by visiting the places and through narration – in these

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3 The *rin* (*Euodia anisodora*) is a fragrant plant often planted in villages, because it has ritualistic uses and because of its aesthetic and decorative properties. In time the shrub grows into a tree.

two cases by the elders telling younger relatives about abandoned hamlets, where they were located and who lived there. This intertwining of places and history is common for Austronesian societies (see Fox 1997b): for the Rauto of New Britain, the recitation of place names and the stories connected to them are a social history (Maschio 1994: 182), and this is also the case for the Mengen.

Thomas Maschio (1994: 181) notes that among the Rauto the trees people plant could be called memorials, as indeed is the case among the Mengen. Signs of people's productive activities, such as trees, are called *rnagil* (M: *gil*, to know) and were points of active remembering – to paraphrase Debbora Battaglia (1990: 10). When I was preparing to leave Wide Bay, a friend of mine suggested that I plant a fruit tree, people could remember me by it. In the extract above, the woman says that she "compensated" her elders for making them cry and "worry". (The Tok Pisin idiom *wari* means here sorrowful, nostalgic longing [see also Maschio 1994]). "Compensation" does not imply that the woman had done wrong. On the contrary, her grandfather had approved her family's clearing the garden on the site of the abandoned village (which was, moreover, located on land that claimed by their clan). Rather, it was an acknowledgment of their sorrow and the work of past people.

Finally, the quote shows how in pursuit of control and "legibility" (J. Scott 1998), the colonial government encouraged and ordered people to leave their dispersed inland hamlets and move to the coast and main trail routes. As a Mengen man told me:

> The government wanted people only along the roads [main trails]. They didn't like to go around the bush looking for people. [...] People had to be along the roads at the time they were to be given work or checked that they live in an orderly fashion. [The patrol officer] would only walk along a road. Climbing mountains and such was too much hard work.

This process took place gradually, and people continued to move between their inland settlements and coastal villages, coming down to the coast for church and the government-appointed communal work day on Monday before returning inland. In some cases, people who had already permanently settled to the coast, returned to their inland hamlets to perform their children's initiations on their own clan land. I was told that the last inland villages were abandoned in the 1970s. The history of colonialism and state formation is also inscribed in the landscape as roads established by the colonial government, abandoned settlements in the forest as well as copra plantations that the mission and colonial governments established in Wide Bay and New Britain (Tammisto 2018: 129–134). As Maxine Dennis notes (1981: 219), plantations in New Guinea were not only economic projects, but also ways of occupation and pacification that supplemented the work of the colonial government. Like concentrating people into villages, they were a spatialised form of governance.

The Wide Bay Mengen were not dispossessed of their lands – they still communally own them under Papua New Guinea law (Lakau 1997) – nor

did colonial policies break people's links with the land and landscape. People remember past settlements that materialise histories of land use and relations to the land, discussed more in depth below. Similarly, at the time of my fieldwork, some people in the southern Wide Bay Mengen areas had resettled old inland villages as new roads had been established in the course of logging operations starting in the 1990s (see Tammisto 2018: 84–89). Along with re-establishing links to the land, this resettlement was most probably also a way of enforcing claims to land in disputes over ownership that had arisen in consequence of the logging. As these examples show, people's relationship with the socially meaningful landscape and its scattered places of significance, is not static. On the contrary, it is one of active engagement. In the above example, an abandoned village was cleared for a garden and the appearance of the place was transformed. Still later, after the harvest, the garden was left to fallow and turn into forest again. With the ceremonial gift prestation, those who had cleared the garden publicly acknowledged relatives' emotional and historical ties to the place. This also meant upholding the memory of the site as a past village.

The productive activities of people root them in the land and leave a testimony of their lives in the landscape. This is an inevitable result of Mengen social life, but like all social life, it has also its tensions. Rootedness is not only about emotional and historical connection for the Mengen, it is also about claims of various kinds. Because of this, people occasionally hope that others would make their presence visible on the land they themselves coveted. As Simon Harrison (2004: 147) has noted for the Avatip of the Sepik area, sometimes the landscape remembers too much. In a society where knowledge of the past is a value whose circulation should be controlled and carefully restricted, people do not want the landscape to remember more than they do (Harrison 2004: 147). Because of this, people sometimes also deliberately seek to erase the traces of others. In the following section, I turn more closely to these questions of placed histories and land-holding as well as their relation to Mengen politics.

Placed histories and relating to the land

Along with the histories of individual persons, inscribed in the Mengen landscape are important categories such as the autochthonous clan and the land-using group. Landownership among the Wide Bay Mengen is vested in exogamic matrilineal clans, which are associated with their places of origin (also Panoff 1970: 177). This cosmological link between the people and the land, however, does not translate into a clear-cut local community. Both members of the land-owning clan and those who actually inhabit the land become emplaced by the work performed in villages and gardens. Few people live on their own clan land, and thus land-use is conceptualised as a reciprocal relation between clans, much like intermarriages or ceremonial gifts. This is a common dynamic in the Austronesian matrilineal societies of Melanesia (e.g. Panoff 1970: 177, 194; M. Scott 2007: 223; Eves 2011: 353; Martin 2013: 31, 37). The autonomy of the landowning clan and socially

productive relations between clans are also two central values. Pursuing these produces both a productive contradiction in Mengen society that accounts for the dynamism of Mengen landowning practices and Mengen political life generally. The two categories, land-owners and users, have their spatial equivalents, namely origin-places and abandoned villages.

According to Mengen clan histories, the apical ancestress of each clan autonomously emerged in a specific area, often from a plant or a topographical feature. The clan names refer either to the environmental element from which the ancestress was said to have emerged or the circumstances of her emergence. The landscape is scattered with such origin places (M: *plangpun*, *plang*: to emerge, *pun*: root). The clans claim land areas both on the basis of this mythical precedence and first settlement into a vacant territory, as is common in Austronesian societies (Fox 1996b: 9; M. Scott 2007: 7). Among the Arosi of the Solomon Islands, who have very similar notions of lineage emergence and relations, the pre-social emergence of the ancestress forms the basis of landownership. Yet, because of clan exogamy, no lineage can live alone on its land. Therefore, real social existence is only achieved when lineages intermarry and dwell together on the land (M. Scott 2007: 223; also Eves 2011: 359). This is also the case in Mengen clan histories: the apical ancestress meets a man from a different clan (both are often named), they start having children and start to inhabit the land. So in order for real social life to be achieved, the clan has to 'bring' others to their land (M. Scott 2007: 223). For the Arosi there are two ways of relating to the land, what he terms utopic and topogonic (M. Scott 2007: 201–202).

The "non-placed" or utopic refers to the separate emergence of the various lineage ancestress in areas which are devoid of others and "non-placed". The topogonic relation is based on place making and dwelling (M. Scott 2007: 201–202); one Mengen elder referred to uninhabited land before the emergence of the ancestress as "land nothing" (TP: *graun nating*). Through place making activities, both the original lineage and people from other lineages are rooted in the land (M. Scott 2007: 225). The Mengen have distinct spatial categories for the two ways of connecting people to the land. The place of origin only refers to the clan that had emerged from it, whereas villages, gardens and abandoned settlements create links between the land and all its long-standing inhabitants and their progeny. As a Mengen man noted, "[o]nce you have cleared gardens, made kastom and buried your dead, your blood is in the land". These two spatial categories are an important part of Mengen conceptions of history (Panoff 1969: 163).

Each clan has its own history which recounts its emergence, movement and intermarriages. Those I was told followed a similar pattern: they begin by describing how the apical ancestress emerges from the *plangpun* in an area devoid of other people. She resides alone on the land until she meets a man from a clan of the opposing moiety who has ventured into the area while hunting or because he had seen smoke from the woman's fire and was inquisitive. The two inquire about each other's marriage status in a roundabout way and, realising that both are single, they pair up. After this, the clan histories list the children of the apical ancestress and whom they marry, in other words they become genealogies listing the members

of the matriline. The histories also recount where the apical pair and later generations moved, the villages they founded, the locations of their gardens and so on. (See Michael Scott [2007: 74, 190] on very similar lineage histories of the Arosi of Solomon Islands.) In other words, the clan histories are also listings of places, or topogenies, which are a common Austronesian "means for the ordering and transmission of social knowledge" (Fox 1997a: 8). When attached to specific locations in an inhabited landscape, topogenies are "a projected externalization of memories that can be lived in as well as thought about" (Fox 1997a: 8). In the Mengen case, the topogenies are closely intertwined with genealogies (see also Fox 1997a: 13).

The relationship between the autonomy of the landowning clan and the socially productive inter-relations between the clans is a 'productive contradiction', because as values they are in constant tension. On the other hand, they also presuppose each other. In order for the exogamous clan to reproduce, its members have to marry people from other clans and share its land with them. So in order to pursue one value, one must pursue the other, but emphasising one too much can have "negative value" potentials (Munn 1992: 12) in respect to the other. For example, as Michael Scott notes (2007: 245–46) in the case of the Arosi, if the landowning lineage emphasizes too much its ownership of the land, it risks making other lineage members feel unwelcome. By 'productive contradiction', I do not mean that the relation is one of conflict, but rather a central dynamic within the Mengen society that accounts for much of the dynamism in communal life. Like with other similar value antinomies in Melanesia (for example Robbins 2006: 192–93, 195–96), socially successful action has to strike a balance between the two opposing and complementary values. Among the Mengen this is especially pronounced in matters relating to land use.

Questions of land use and ownership rose to the fore with large-scale logging which began in Wide Bay in the early 1990s like in many other rural areas of Papua New Guinea (Tammisto 2018: 84–89; also Bell 2015). Malaysian logging companies saw PNG as a frontier of unused resources, while both the government of PNG and many rural communities hoped that logging would bring in income, infrastructure and services (Filer 1998; Tammisto 2018: 87). As under PNG law local communities own their lands, they had to be consulted before the logging operations could start (see for example Lattas 2011 on wrong-doings by loggers). So too among the Wide Bay Mengen. When logging was first proposed to the Mengen, many communities started discussing if and how it should be allowed. As noted, landownership is vested in the matrilineal clans, which owned distinct areas, but user rights to land are more widely spread and hence actual Mengen communities are always multi-clan polities, to borrow Scott's expression (2007: 33, 247). The logging proposal sometimes created disputes over who should decide on logging and how benefits should be shared among landowners and land users for instance.

Likewise, not all of the Mengen supported logging, but some feared that large-scale logging would hamper swidden horticulture and destroy important parts of the landscape, while others saw logging and the use of forests as a means of establishing productive relations with outsiders.

Likewise, even among those who agreed on allowing logging, the distribution of compensations and decision-making power created tensions. People debated whether compensations should be held by the clan on whose land actual logging took place or whether the money should be distributed between all community members. This reflects the 'productive contradiction' between the values of clan autonomy and inter-clan relations. For example, some members of the clan on whose land logging took place, decided to distribute the logging royalties among all the clans involved in the landowner company, but wanted auxiliary payments from the loggers for clan members only. The idea was to emphasise their status as landowners.

Meanwhile men who were active in logging, initially sought to present the operations as community projects involving all clans in the given communities. Interestingly, the landowner companies that represented the local population and acted as contractual partners with foreign loggers, were named after abandoned villages. In doing this, the men sought to emphasise the communal aspects of logging, as abandoned villages in the landscape are signs of inter-clan relations and of long-standing histories of shared land-use by the different clans. In disputes over the ownership of land, clan histories and particularly topogeny, or recitations of places, is used also as evidence of landownership. Basing their claims on place of origin and on villages founded by their ancestors, the disputing clans seek to point out their long-standing relations with the land. Thus the above mentioned re-settlement of abandoned settlements was a way to reinforce claims to the land. These are examples of how the Mengen use the semiotic aspects of the landscape as signs of claims to the land. The forest and the places in it became with logging a new object of contest over who owns it, who decides its use and what is done with it, as well as a media through which these contests were acted out.

Conclusions

Time, history and social relations are thoroughly emplaced in the gardens and forests of Wide Bay. The places, both mythical and those made through human action constitute the Wide Bay Mengen landscape, in which human and ecological temporalities intertwine and converge. To refer back to Jason Moore (2015: 11), all social relation are spatial inasmuch they develop in through space and actively co-produce it in the process. Moreover, this means that 'humans' and 'the environment' or 'society' and 'nature', are not distinct entities, but form what Moore calls a double-internality (2015: 13, 25, 36), a dialectical relation in which human activity unfolds in and through nature and vice versa. However, different forms of activity and different forms of value production make different environments (Rodman 1992: 641; Moore 2015: 44–45).

In the Mengen case, forests and the land are not only, or even foremost, conceptualised as resources. Rather, the landscape is thoroughly social and it tells of past and present activity. It is both a product of human activity, as forests around the villages are anthropogenic fallows regarded as gardens, and

the mythical origin of Mengen clans. As a testimony of human activity, the landscape is also thoroughly political: the origin places, abandoned villages and gardens speak of histories and legitimate land use and ownership in the present. A garden is not only a trace of important livelihood practices, it tells the Mengen about relationships between a landowning clan and its affines, as well as about relations between them. And like all pursuits of value have their tensions, so it is with the Mengen. What I have argued is that these are enacted through the landscape. The clearing of gardens or planting of trees is not only about making a living, in certain contexts, both can be highly political acts establishing links to land and making claims to it.

Composed of signs of human activity, the Mengen landscape is semiotically dense. To escape both a narrow definition of landscape as a pictorial representation, and a broad conception of it as an experienced environment (e.g. Ingold 2000: 198), Descola defines landscape as the deliberate change of appearance, or transfiguration, of a site (2016: 4–5). The proposal for a cross-culturally sensitive, but analytically precise definition (Descola 2016: 3) is useful here, because it focuses on placemaking and its possible semiotic functions. The Mengen are particularly sensitive to placemaking and emphasise the semiotic aspect of the landscape in their own definition of landscape as how things draw themselves out to the onlooker. The places that form the Mengen landscape are often results of transfiguration and typically results of dwelling practices. As I noted above, while the Mengen emphasise visual aspects, places are experienced more holistically. Other sensory experiences, such as the smell of a domestic tree, can and do function as indexical signs of people and social relations. Adding to Descola's definition, I note that transfiguration can be experienced with many senses. This means we should be sensitive to how people experience their lived environment.

The Mengen landscape is and has been formed through the relations between the Mengen and various actors, such as colonial governments, missions and foreign companies. Logging roads, copra and cocoa plantings and such are signs of these, often highly unequal, relationships (e.g. Bell 2015). Large-scale oil palm projects currently underway over the east coast of New Britain loom also at the fringes of the Mengen landscape. These projects promise income, employment and services (Tammisto 2018). However, they threaten radical changes in the landscape and the livelihood practices that form it. Despite these, the Wide Bay Mengen have managed to retain control over their lands and the landscape, to keep them infused with their history and to ensure Mengen pursuits of value remain meaningful.

Acknowledgement

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