Mapping multiple in Maasailand: Ontological openings for knowing and managing nature otherwise

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Mapping with Maasai

It was a nice overcast morning as we set out on foot to ground truth the maps that I was trying to make of the two villages I was conducting research in. I had my hand-held Geographic Positioning System (GPS) unit with me and three interlocutors: my regular field assistant, Landis K; another man of the Landis-age-set, Landis M, who had been helping out with the wildlife transects and had additional knowledge of the local landscape; and Naibor, an extremely knowledgeable Makaa junior elder who had agreed to lead the expedition.[1] While they were all men, our goal was to capture GPS points for place names that had been delineated through "mapping" exercises with separate groups of men and women. While that exercise had proven quite problematic at first, it eventually led to some great hand drawn maps of different places, named and used by Maasai women and men in the area.

I put mapping in quotation marks because Maasai do not draw maps, nor do they have an equivalent word in Maa for map, or mapping. It was not until I asked them to make maps for me that I realized the problematic nature of my request. I had become frustrated with my inability to talk to Maasai about where they took their livestock, or where they saw wildlife, without knowing

1 Maasai society is organized along age-set and clan lines. For men, the age-sets have names beginning with the period when they are *ilmurran* (*olmurrani*, sg., translated into English as warriors), junior, senior, and retired elders. Women are often referred to only by their age-grade/place within the society – young uncircumcised girl (*endito*), new wife (*esiangiki*), mother (*yeiyo*), grandmother (*koko*). While I use pseudonyms, I use the name of the age-set/age-grade to provide guidelines for power and age dynamics.

how they saw and spoke about the landscape. When I realized how heavily Maasai relied on their own place names, I became determined to create 'Maasai maps' of the study area that reflected these names. To do so, I called different groups of individuals (men, women, *ilmurran*) for participatory mapping exercises (on paper or on the ground, whichever they were more comfortable with). I asked them to think about what they were going to do on any series of days and draw a "map" (Swahili: *ramani*) of the areas that came to mind. I realized how flawed my approach was when I noticed that the Swahili word for map, *ramani*, was not being translated into Maa. I then began to notice that the word was actually used by Maasai, even when speaking amongst themselves in Maa, to refer to official state delineated boundaries, the marker of the "map" between two separate state recognized entities (e.g., villages, districts). When I first asked a group of elders to draw a *ramani* I was told, "But we, we Maasai, we do not have maps." Another elder remarked, "I don't have anything to really say, but it's very good if you could explain to us more about the map. There is no map at all in all of Maasailand, but there's a map between Babati and Monduli [districts]."

Once I realized my mistake, I clumsily tried to remedy it by asking them to instead draw a picture, as in a mental map. I soon realized that this too reflected my own ontological bias associated with mental mapping processes, assuming that maps exist as preconceived mental orderings or static pictures in our own heads of our reality, rather than an active performance (Crampton 2009, Turnbull 2000).[2] My notion of mental mapping also assumed the existence of places separated out in space, which is not necessarily the way in which Maasai know/enact their landscapes.[3] I finally settled on rather lengthy explanations that seemed to reflect what I had observed and was different for the different groups. For the elders it went something like this: "when you wake up in the morning you have an idea of where you want the cattle to go that day, and you need to explain it to the *ilmurran*, right? How do you do that? What are the various places you can think about and could you draw

2 Crampton (2009: 846), cites Kitchin and Dodge (2007) in their use of mapping as ontogenetic as in always becoming, rather than with a sense of ontological security. Turnbull (2000) similarly critiques the notion of mental mapping as a universal way of bringing order to the world that all humans practice in a particular way (2000).

3 As Ingold explains, "[m]any geographers and psychologists have argued that we are all surveyors in our everyday lives, and that we use our bodies, as the surveyor uses his instruments, to obtain data from which it assembles a comprehensive representation of the world – the so-called cognitive map" (2007: 88).

them for me (on paper or on the ground)?" Realizing this too was limiting, I asked them to include all the places they thought of as important. I did the same with a separate group of *ilmurran* (but rather places where they would go, places they think about/picture/know), and the same for the women. This seemed to work reasonably well and resulted in unique drawings/maps from each group, reflecting their own areas of expertise and interest.

I was quite pleased with the final results and now wanted to make official looking maps with Geographic Information Systems (GIS) software. I originally thought this would be difficult and would somehow betray Maasai spatial ontologies of place names by forcing them into standard cartographic classifications. But to my surprise, all the mapping exercises resulted in the drawing of discrete shapes that could quite easily be turned into polygons in a GIS map.[4] So that is how I ended up on this refreshingly overcast day walking with three Maasai men to collect GPS points of place names on the ground. And here, once again what seemed like it should be a simple and straight forward exercise, proved far from. We started off with Naibor in the lead, instructing me when to take a GPS mark –which we did at the beginning, middle and end of a particular place; more if the place was particularly large. At one point he told me we had reached the end of a place (*Lera Olkunda*, see Figure 1), for me to 'mark' it with the GPS. I did so and we continued walking.

> Naibor, as we are walking, he looks over at me and with a forward gesture of his arm he says: "And up there ahead is Lera Lendim."
> Mara, stopping where I am standing, and taking out the GPS: "So we are in that place now?"
> Naibor: "No. It's just up there." Keeps walking
> Mara, catching up to him, but then stopping again: "So then we are still in Lera Olkunda?"
> Naibor, confused, he looks at me and back in the direction we came from: "No, we have already left Lera Olllkunda, didn't you mark it?"
> Mara: "I did mark it. But then if we have left Lera Olkunda but we are not yet in Lera Lendim where are we?"
> Naibor: "We are in between!"
> Mara: "So there are in-between places that are not a part of one place or the other?"

4 The challenges of this process and what potentially gets lost in translation are discussed more below.

> Naibor, stops walking to gaze at me with an exasperated look on his face, leaning with an authoritative pose on his walking stick (engudi): "Yes, we are in between. In America, one person's house and land goes all the way up to the boundary of another persons' land? There is no space in between?"

At this I just stopped and laughed. Laughed at my own inability to imagine "spaces in between" and at Naibor's inability to imagine a place without them. Now I can see that while we were standing in the same place and walking the same path through the landscape, we were experiencing the place and the walk quite differently. We were, in Ingold's words, practicing two very different "modalities of travel, namely wayfaring and transport" (2007: 81). According to Ingold, the path of the wayfarer (in this case Naibor),

> wends hither and thither, and may even pause here and there before moving on. It has no beginning or end. While on the trail the wayfarer is always somewhere, yet every 'somewhere' is on the way to somewhere else. The inhabited world is a reticulate meshwork of such trails, which is continually being woven as life goes on along them. Transport, by contrast, is tied to specific locations. Every move serves the purpose of relocating persons and their effects and is oriented to a specific destination. The traveler who departs from one location and arrives at another is, in between, nowhere at all. Taken all together, the lines of transport form a network of point-to-point connections. (Ingold 2007: 81-84).

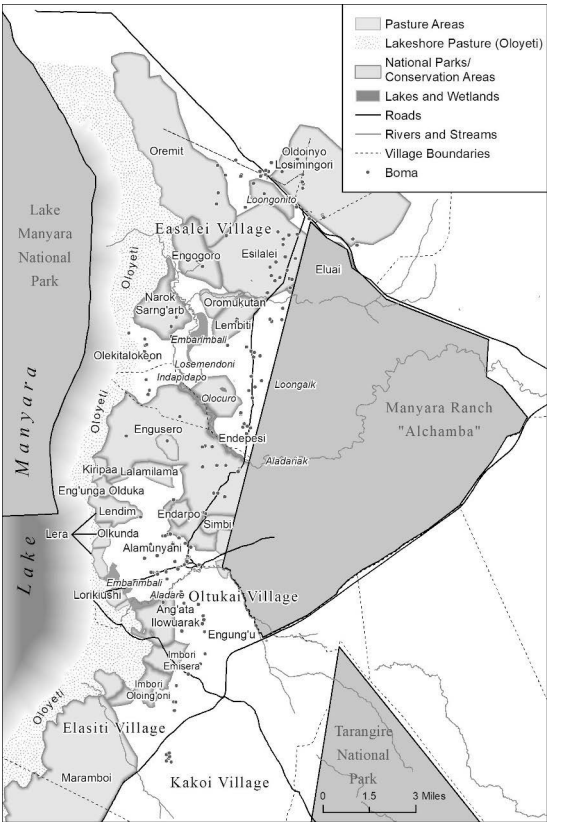
So, while Naibor was the one who insisted that we were "in between" two named places, this was naturally a part of the well-trodden path. For me, I was mapping places as discrete entities, and my path was just connecting these entities or points, which themselves were being created by the connection of points (with the GPS unit). Our way of moving through the landscape, and thus our way of knowing it were fundamentally different.[5]

Introduction

Maps have power. Power to create and reinforce certain spatial relationships at the expense of others. Power to lay claim to resources – by placing and

5 These differences are clear as well in the existence of a village called *Katikati*, Swahili for "in the middle," most likely an outcome of early mapping attempts when Maasai were asked by the surveyor where they were.

Figure 1: Maasai Place Names in Study Area (Source: Goldman 2020; map: Sam Smith)



naming them on an official document. And as official documents, or as digital data stored in a computer, maps have power as objects – ones that travel well in scientific and public circles as legitimate expressions of knowledge, seen as a source of "objective" information (Lovell 2017). As objects, maps not only reflect (and reinforce) particular versions of reality, they simultaneously create them – through the process of mapping certain spatial knowledge and not others, and then managing the space (including resources and people) accordingly. As such, map making has long been recognized as political, and thereby

always a contested process.[6] The short vignette above describes a moment of ontological conflict when I tried to align Maasai place-making practices with those by which I know and live, those of western cartography – first in having Maasai map their landscapes and then to put Maasai place names into a GIS map. I resolved the conflicts, at least in part, by more carefully choosing my words, and then by stretching the methods of the GIS software to accommodate Maasai spatial framings – by leaving visible spaces in between on the map that I created of their place names, or at least trying to (see Figure 1). But I want to suggest, and will argue in this chapter, that this is far from where my work should end. The ontological conflict provided an opening to explore techniques to bring Maasai ways of knowing and being into a format visible to the western trained eye, and thereby useable for local conservation planners, state agencies and employees of non-governmental organizations (NGOs), without jeopardizing what made them Maasai.[7]

But can we (as academics and activists working with indigenous communities) really use standard western cartographic techniques to make maps *with* and *for* indigenous communities that remain true to their ways of knowing and being with and *relating* to landscapes? Or to use Ingold's words, can we reconcile wayfarer (inhabitant) and transport (occupier) modes of being – one that exists, lives, knows and makes the world by traveling through it, with one that plans from above and travels over a landscape, from point to point, often with the goal to occupy, partition, and enclose (2007)? I think that the answer is yes, *but* cautiously and critically; all the while recognizing without fetishizing differences (ontological and epistemological) and working in alliance with the people and communities involved. I stand in agreement here with the call made over ten years ago by Bjørn Sletto (2009: 445), for "ethnographers and cartographers engaged with participatory mapping" to "move beyond cultural relativism and facilitate an emancipatory politics," by exposing and addressing "tensions, negotiations, and contestations," involved in the map-mapping process. This also reflects the warnings previously voiced by Rocheleau (2005: 339) that maps, "may be mobilized in both creative or destructive acts of transformation," and her subsequent call to map carefully and differently from the

6 See introduction to this volume for a thorough overview of the literature on this.

7 See Bryan (2009, 2011) for the politics involved in producing 'indigenous' maps. See Simpson (2017) for the complex ways that mapping can still be used in this way by Indigenous elders.

standard methods often employed, especially when for, with and by communities.

My initial goal in doing this mapping work, was far more than academic, but rather grew out of mounting frustration with mapping projects that were already underway in the area at the time (2002-4). Conservation agencies and Maasai NGOs alike were working with various Maasai communities in the area on "participatory land-use maps (PLUMS)". Despite being called participatory, these projects often involved only a handful of powerful village men, and always began with western informed boundaries for seasons and places. Maasai participants were then just asked to fill in the appropriate spaces (i.e. wet season grazing area) on the map, or to show places on the ground (i.e. ground truth GIS classifications) while sitting comfortably in a Landcruiser.[8] This process and others like it, silence the multiple Maasai ways of being in and knowing landscapes spatially and temporally. One can argue with such projects, participation becomes more a harm then a good (more destructive and less creative), by simultaneously concealing and reinforcing existing power dynamics and continuing colonial practices of land and knowledge extractions (Goldman 2003, Hayward/Simpson/Wood 2004). I began my own mapping projects with the hope that in reconciling western mapping techniques with Maasai place-making practices, I could provide a template for mapping and planning otherwise. My goal was to move beyond standard participation techniques towards decolonizing the methodologies, theories, and practices of mapping.

In this paper, I talk about the process I used and how much remains to be done (with proper collaboration with a cartographer), to not only decolonize or indigenize the map making process, but to *map multiple*. By this I do not mean making multiple maps, but rather producing maps that are "more than one but less than many," through a deep engagement with and bringing together (but not merging) different ways of knowing, being in, and managing the landscape. My argument expands on Dianne Rocheleau's call to map differently through "multimaps, alternative maps, and alternatives to maps" (2005: 344), while drawing from the theoretical contributions of Anne-Marie Mol and John Law on complexity, multiplicity, and ontological politics. In the next section, I briefly explain this framing and how it can work to reconcile what Ingold refers to as different ways of traveling and producing knowledge of the land, without subsuming one into the other, or mistranslating across

8 On the problems of this process in Tanzania, see Hodgson and Schroeder (2002).

ontologies. I then introduce the specific social history of the case study before going into the particular ways of 'mapping multiple' in Maasai landscapes that are also heavily used by wildlife and thereby coveted by conservation agencies and state actors.

Mapping multiple: More than one but less than many

> [T]he discovery of multiplicity suggests that we are no longer living in the modern world, located within a single *epistème*. Instead, we discover that we are living in different worlds. These are not worlds – that great trope of modernity – that belong on the one hand to the past and on the other to the present. Instead, we discover that we are living in two or more neighboring worlds, worlds that overlap and coexist." (Law/Mol 2002: 8).

By using the term "mapping multiple" I am suggesting producing maps that expose the type of overlapping multiple worlds that Law and Mol refer to above. I am drawing from the title of Mol's 2002 book, *The Body Multiple,* which is about the ways in which medicine deals with the human body and its diseases. In following various actors working with lower limb atherosclerosis in a Dutch hospital (doctors, patients, lab technicians, etc.), Mol found that they were enacting different versions of the disease that nonetheless were made to fit together. *"The body multiple,"* she contends, "is not fragmented. Even if it is multiple, it also hangs together. The question to be asked, then, is how is this achieved" (Mol 2002: 55, original emphasis). Together with Law, she explains further that "we are not dealing with a single body, but neither are there many different and unrelated bodies; for the various modes of ordering, logics, styles, practices, and the realities they perform do not exist in isolation from one another" (Law/Mol 2002: 10). They are related, overlap, sometimes interfere and at other times partially connect. There are of course different ways that power can and often is used to enforce one version of a reality over another, to attempt to produce a singularity, which leads to what Mol calls ontological politics.

So, what does all this have to do with mapping? John Law builds on Mol's work to explore the ramifications for doing social science (and I would say mapping) differently (Law 2007 [2004]). He suggests that we need a range of metaphors to begin thinking in this way – where the world is composed of "fractional objects" – bodies, machines, organizations which are "more than

one and less than many. Somewhere in between" (Law 2007 [2004]: 62). And furthermore, that we need social science methods dedicated to exposing/revealing multiplicity in ways that don't attempt to either smooth it into singularity and 'other' all that does not fit; or to leave it as a relativistic complex incomprehensible mess. This is extremely useful for thinking critically about mapping differently. For it enables a move beyond what Rocheleau refers to as "the duel between maps and counter-maps and on to the use of mutually intelligible maps" (2005: 357). Rocheleau too has argued for "multimapping" to map the various ways of knowing, being with, managing and accessing land and resources in different places. She suggests that "a well-designed GIS can enable multimapping yet retain the ability to represent the various standpoints in a standard, and thus comparable, format" (2005: 357). With GIS, one can produce multiple overlays of various maps into one map – which I suggest can be seen as a map that is more than one but less than many.

The advantages of this approach are many. Perhaps first and foremost is that it neither dismisses indigenous knowledge and ways of being in the landscape as 'other', to be preserved in cultural maps only; nor does it extract indigenous knowledge to be translated into standard cartesian metrics and subsumed into traditional maps. I suggest that it also helps in two other substantial ways. First, this approach exposes the multiplicity inherent in categories that are assumed to be singular – and usually 'othered' or assimilated – such as community, indigenous, or Maasai. For various political reasons, Maasai (as with many indigenous peoples) need to present a unified version of the 'Maasai way', which of course *includes* multiple ways of being in/with, knowing, and accessing land and resources along lines of gender, location, age, class, clan and other access of difference. Secondly, I argue that there is a need to actually make different ways of being and knowing the land "hang together" in a non-hierarchical fashion. To refer back to Ingold's (2007) description of practices of wayfaring and habitation as in opposition to the surveying mode of occupation; mapping multiple could map these as separate layers that form one map. For many indigenous communities, Maasai included, use both modalities (and the resulting sets of boundaries) in their political and daily lives. It would therefore be useful for them to have both sets on a map.

To conclude, by mapping multiple I mean 1) paying close attention to multiple ways of knowing, being with, relating to and using land/environment *within* communities along various overlapping axes of difference (i.e. gender, age, clan); and 2) recognizing the multiple ways of place-making and resulting sets of boundaries used by many indigenous communities today on a daily

basis – including those they did not draw but must contend with (i.e. administrative and conservation boundaries).

Providing some context: Maasai and conservation in East Africa

Maasai are a group of people that occupy the semi-arid rangelands of Tanzania and Kenya adjacent to some of the world's most famous national parks. They historically practiced a predominantly pastoralist semi-nomadic lifestyle. This meant that vast areas of land left 'open' for grazing by livestock, were also used by wildlife. For the most part, Maasai did not hunt,[9] nor did they historically cultivate on a large scale, relying on regular trade with agriculturalist neighbors. As a result, "Maasailand has retained one of the world's largest concentrations of wild animal population[s]" (Parkipuny 1979: 137).[10] Rather than benefiting from this situation, Maasai have been disproportionately impacted by land loss through the creation of national parks in Tanzania and Kenya, starting during the colonial regimes in both countries (Germany and Britain in Tanzania, Britain in Kenya), and continuing today.[11] Many of the areas where Maasai live continue to support relatively large wildlife populations, and are thus subject to some form of conservation status, with subsequent limitations on resource use. Yet Maasai are rarely recognized by conservation professionals as knowledgeable actors regarding the land they live on and the wildlife they often share it with. They are not asked to contribute their way of knowing and being with wildlife to conservation planning, which may very well challenge the boundaries (material and ideological) drawn and relied on by conservation science and practice.[12] They

9 Maasai historically viewed wildlife as "second cattle" (Western 1997) hunting only in times of extreme need, otherwise shunning it as something only the poor (*ildorobo*), without cattle do. Today, many Maasai eat game meat when given the opportunity, but hunting for meat is still culturally unacceptable, though this varies by sections (see Roque de Pinho 2009 for Matapato).

10 For more on this historic co-habitation see Deihl 1985; Collet 1987; Parkipuny/Berger, 1993.

11 Including Amboseli, Tsavo, and Nairobi National Parks and Maasai Mara Game Reserve in Kenya; Serengeti, Manyara, and Tarangire National Parks, Ngorongoro Conservation Area, and Mkomazi Game Reserve in Tanzania.

12 Exceptions may include the research by Homewood and Rodgers (1991) in Tanzania, which was nonetheless not followed by the Ngorongoro Conservation Area authority

are, however, often asked to fill in maps by wildlife researchers in the area – to explain where wildlife are, and to provide the foundation for community-based land use planning (Hodgson/Schroeder 2002).

For me, to even define the study area for this research itself requires multimapping to include the various practices of line/boundary drawing in this area over time – that overlap, interact, sometimes relate and sometimes conflict. These various sets of lines include the national boundary between Tanzania and Kenya (which cuts through Maasai occupied lands), Tanzanian administrative boundaries (village, ward, division, district, region), conservation boundaries (National Parks, Manyara Ranch, and Wildlife Management Areas), and Maasai cultural/territorial boundaries of section (*olosho* sg., *iloshon* pl.), and sub-section (*enkutoto* sg., *inkutot* pl.). The mapping work that I discuss in this paper occurred in two Maasai villages in Tanzania that are situated in between two national parks (Tarangire and Lake Manyara) and adjoined by a relatively new (since 2002) conservation area or "conservancy", the Manyara Ranch. According to Maasai customary cultural/territorial distinctions, the area is part of the *Ilkisongo* Maasai section (*olosho*), and the *Emanyara* sub-section (*enkutoto*). Maasai in the study site use all sets of boundaries on a nearly daily basis to negotiate land use and make management decisions, as well as plan cultural events and livelihood practices. For this reason, it is necessary to take all sets of boundaries seriously, along with other forms of place-making that do not include boundary making practices – such as place names. In the following section, I outline my interpretation of Maasai spatial-temporal enactments through place names, before moving into how these can be mapped as a layer in a mapping multiple approach.

Maasai spatial enactments: Place names

> We experience the contours of the landscape by moving through it, so that it enters … into our 'muscular consciousness.' … In their journeys along paths and tracks, however, people also move from place to place. To reach a place, you need cross no boundary, but you must follow some kind of path. Thus there can be no places without paths, along which people arrive and depart;

or the IUCN, or the early work by David Western (Western 1989; Western/Gichohi 1993), which similarly was not followed by the Kenyan Wildlife Service.

> and no paths without places, that constitute their destinations and points of departure. (Ingold 2000: 204)

In discussing wildlife and livestock movements, or giving directions, Maasai will often suggest the movement pattern with the use of their arms, the roll of their eyes, or the shift of their head. These bodily gestures are accompanied with the names of the various places along the pathway of movement. Places are known through movement and stories of ecological, physical, and social histories that are visible to the trained eye and shift over time. Sometimes these features result in discrete boundaries, such as the closed shapes that participants drew during mapping exercises and as seen on the landscape where the tall grass ends, and trees grow. Sometimes they reflect well known social histories such as former settlements or farms. Terms for cardinal directions are not often used for explaining space.[13] In fact, in the study area there was only one word for north and south (*kopikopi*), meaning the place where the sun neither rises nor sets.[14] Cardinal directions do impact Maasai spatial thinking, in the ways they build their homesteads (gates must face *kopikopi*- either north or south), and during particular ritual events where one must face east or west. Cardinal directions are not however used to talk about and navigate space, place names are.

Place names reflect differences in vegetation composition and structure, water sources, animal presence, social history, soil type, elevation, and more. Place names are used in conversations between Maasai men and women, adults and children. When I asked elders to tell me about their grazing patterns, they were often at a loss for what to say until I informed them that I knew their place names. This inspired an almost universal sigh of relief and

13 For this reason, it is my experience, that Maasai are notoriously bad at giving directions when traveling in a car. When reaching a break in the path, they direct with their arms (often behind your head), saying merely "that way", "this way", but rarely if ever, right or left, east or west.

14 In Kenya *kopikop* very specifically means north, referring to a rift in the north of Kenya near Kerio, the place of origin for Maasai. It is possible that Maasai in Tanzania, being far from these mountains, have lost the significance of the term, for in everyday conversations *kopikopi* can mean either north *or* south. However, there is an understanding of its original meaning, as one elder woman explained (May 29, 2003): "K*opikop* is the place where neither the sun nor the moon come from or go to [i.e. both north and south]. But it is really the place to the right of god, and god is in the east [where the sun comes from]. It is the place of *Yemate*, the rift towards Kerio, where Maasai come from."

then they would begin talking… "Today they went to *Lorkiushi* for water and then to *Eng'unga Olduka* for grass…"[15] Place names help Maasai navigate their use of the land. They are used to direct young men, *ilmurran* (often translated "warriors" in English) where to go to capture seasonal change and resources for livestock and to talk about rainfall patterns, and animal movements (livestock and wildlife). They are used by women to talk about where to collect grass, medicinals, and water, where to avoid wildlife, and where to graze small stock.

Places are named at various overlapping scales, some places nested inside other places. A small water inundated area may exist inside a larger grassland, and the use of names within names, reflects these nested relationships. For example, there is a large grazing area called *Lera*, plural for *Oleria* – Maa for Yellow Fever Tree (*Acacia xanthophloea*), that is further divided into different areas, all with names. On the south side there is *Lera Shingo*, and *Lera Olkunda*, which both refer to the names of Maasai *inkang'itie* (Maa for homesteads, pl., singular *enkang'*) that used to be located here. Today, the area is not dominated by *ilera* trees nor are there any *inkang'itie* located in this area. Conversations about the names reveal that the area used to be dense with *ilera* trees but they have thinned out due to the combined effects of flooding of the saline lake during El Niño, a particular disease that affects this tree, and cutting of the tree by villagers (for building thorn fences for their *enkang* and cattle enclosures). *Inkang'itie* (homesteads) that used to be located in this area relocated up to the higher ground as access to fresh water became a problem and people began farming, since the soils in *Lera* are not good for farming and the water table had begun to dry up. Two additional names divide *Lera* by vegetation density. *Lera Lentim* – in the bush/forest – is the area, which at least in the near past, was heavily forested with *Lera* trees. Today, a walk through the area reveals that while it is no longer a forest, the dense stands of yellow fever trees are returning, creating a dense thicket. *Lalamilama* to the northeast is the area where the trees are not dense but are separated out at a distance apart. And this is in fact what the area looks like – a much less dense wooded area then *Lentim* (see Map 1 and Figure 1). *Enkungu Olduka* to the north is the uplifted area with *Oldukai* trees, that is a place within *Lera* where the palm trees mix with the Acacia trees.[16] Here the name reflects both

15 Interview, Makaa Elder, Oltukai November 2003.

16 *Enkungu* also means knee in Maa. Mol (1996: 214) defines *enkungu* only as knee and the masculine version, *Olkungu*, as rounded small hills, "rounded like knees." Kisongo

a change in vegetation composition as well as a change in elevation. A place where water passes through is denoted as *Naikurkur* – the sound that the water makes as it roars its way past the tall grass towards the lake. Places exist inside of other places and places exist as parts of larger places, all named and co-existing.

Figure 2: Maasai cattle in Lera (Photo: Mara Jill Goldman)

A place may have several names – one referring to the type of water present, the other to the type of soil, and yet a third to the species of grass. All refer to the same place, the name used depends on the context and scale of concern, as well as the person using the name. In other words, place names are relational – reflecting relations to these places by different people (and sometimes animals) at different times, on particular paths, for particular reasons.[17] Names are either clear or complex, but the unraveling of them is

Maasai in my study area used both the masculine and the feminine version to refer to slightly elevated areas, the former being a larger area then the latter.

17 For instance, the lake shore of Lake Manyara in Oltukai and Esilalei villages is referred to as *E-Makat* (the saltwater lake) if you are talking about the lake, or the whole general area, surrounding the lake. It is referred to as *Emborianda* (the hard crusted soil) if you are trying to distinguish that part of the lake shore that is in fact *emborianda* as op-

always informative of the contemporary or historical ecological structure of the area and/or social history. For names often stay the same, as the ecology of an area changes, and thus the name itself *is* historical data, in a non-literary society. Names can also change, however, with a different generation of men taking over the leadership and decision-making capacity in an area, and reflecting the changes in ecology. When the ecology changes so much that the name is no longer appropriate, or a new phenomenon demands attention, a change can also take place. But the old name is not lost, merely referred to as the old name. We are all familiar with such occurrences in our own lives, as roads are named after former presidents or deceased heroes, and we need to refer to both the new and the old name to find our way.

Maasai name all landscape variations – small and large, including changes in elevation and soil structure. And here, language subtleties are important, with the feminine preface *en-* donating small, such as the small uplifted area of *Enkunga* (also Maa for knee), versus the masculine preface *ol-*, such as the large uplifted area *Olkunga*.[18] Place names combine the general and specific to reflect differences in vegetation composition and elevation (*Lera* low laying grasslands with yellow fever acacia trees versus *Enkunga Olduka* for small uplifted area with date palm trees); vegetation structure (*Lera Lentim* - the densely wooded acacia grassland, versus *Lera Lalamilama* - the sparsely wooded acacia grassland), water sources (as natural depressions, man-made wells, small creeks); animal presence (where the wildebeest stay, the field of the lion, the hiding place of the lion), and historical social ecology (the names of former resident locations).

Similar types of places can have the same general names, with qualifiers added when needed. For instance, there are many places throughout Oltukai referred to as *alamunyani,* which refers both to a soil type – mixed sand and clay with a high saline content that is seasonally flooded – and the type of

posed to still grassy; and it is referred to as *Oloyeti* (the dominant grass species) if you are talking about grazing. Yet a fourth name – *Naong* (the sounds of the wildebeest) reflects the relationship of wildebeest to this area and is used when discussing wildlife use of the area. All the names however, could be used inter-changeably to refer to the entire area.

18 Masculine and feminine versions of the same word can also refer to known versus unknown entities. *Entim*, for instance refers to forested, bushed areas which are often large in size. Here the feminine prefix refers to the unknown qualities of this 'wild' place. The masculine version of the word, *oltim*, refers to a specific large branch (a known piece of the bush) that is used to close a Maasai homestead at night.

vegetation it supports: annual grasses, what Maasai referred to as *nyepesi* in Swahili,[19] meaning "light, quick grasses", and dicots/forbs/scrub that Maasai call *embenik* in Maa. One can speak of *Alamunyani o Lera*, suggesting the one near *Lera*. Both villages consist of areas referred to as *Engesero* (low-laying seasonally water inundated short grass plains which are great for grazing) and *En-kunga*, or *Ol-kungu* – small or large (respectively) raised areas which are good for farming. These names and many others can be found throughout Maasailand to note similar types of vegetation, soil types and elevation; they often co-exist with other names that refer to specific local social histories. And again, the subtleties matter. An area called *Endepesi* is bound to have *Acacia tortilis*, but also be smaller in size then an area called *Oldepesi*. The names are not only used locally but can help visiting Maasai navigate their way to sites for grazing, fuelwood, shelter, and so on.

Mapping multiple I: Speaking differently with names[20]

> What we call the landscape is generally considered to be something "out there," But, while some aspects of the landscape are clearly external to both our bodies and our minds, what each of us actually experiences is selected, shaped, and colored by what we know.
> (Barrie Greenbie, *Spaces: Dimensions of the Human Landscape*, cited in Basso 1996: 71)

In the above section, I presented Maasai place names as if they were universally 'Maasai', but this is not exactly true. Nor is it false. There are names that are used throughout Maasailand that mean the same thing, but there are also differences by section (*olosho*) and sub-section (*enkututo*) as well as by villages – based on different localized ecologies, social histories, and regional dialects. For instance, the term *alamunyani* seems particular to the area in Tanzania where I worked, near to Lake Manyara, with no usage found in other parts of Maasailand.[21] Yet this distinction of an area as *alamunyani* matters regionally for recognizing a very specific soil-mineral-water make up that

19 This is a generalized term for annual grasses. Individual grass species have names in Maa.

20 I am drawing on the title of Chapter 3, *Speaking with names* in Keith Basso's *Wisdom Sits in Places* (1996).

21 I asked various people about this all over Kenyan and Tanzanian Maasailand.

limits grass growth. While visiting conservation practitioners would often refer to these areas as overgrazed, Maasai would shake their head and say, no, it's just *alamunyani*. So regional differences matter. But there are other areas of difference. Maasai are internally differentiated along lines of location (*olosho*/*enkutoto*) clan, age, class, and gender. These differences matter. They create and mold different sets of knowledge and experiences. But this does not mean that they are not all also Maasai.

I tried to capture this internal multiplicity in the mapping exercises with Maasai, by working with different social groups – elder men, younger men, and women. This enabled more space for certain individuals to speak without the constraints of respect associated with age and masculinity that often inhibit speaking in front of others with certain sets of relations (Goldman 2020). It also produced very different maps. Whereas the elders began their drawing far from the village, at the place where the main water source comes from upstream, the *ilmurran* began with the dirt road that passes through the center of the village. And the women mapped locations of water in far greater detail than either of the groups of men. They also mapped stories about wildlife encounters such as places where the lions hide, or the elephants go, that are often thought of as the knowledge purview of men.

Yet in the end I made one map of place names for the area. How did I do this and in doing it did I erase the multiplicity of Maasai ways of knowing and experiencing the landscape? First, I took all the various drawings and created a list of place names to be mapped. I then went out into the landscape with three Maasai men – an elder and two senior *ilmurran* – to locate the place names on the ground with a GPS unit so that they could be put into a GIS map. In hindsight, I was wrong to not include any women in this process, though I did make sure that their places were on the list.[22] I then sat with one man, a senior *ilmurran* at the time who was also my most trusted interlocutor, at a computer screen in a GIS lab at first in Tarangire National Park and then at the International Livestock Research Institute (ILRI) in Nairobi, to match up the

22 I fell into the trap that many do and that I myself critique (Goldman and Jagadeesh forthcoming) which is to take the easy way out by not taking the extra effort to find woman who could participate given their often-busier schedules, many being constrained by their husbands, many not feeling they are knowledgeable, and others not able to participate with certain men because of social norms of respect. It would have been doable, and I did begin shortly after to include women in the wildlife transect work when possible.

GPS points with the drawings and a remotely sense image of the area. Since many of the place names refer to soil or vegetation characteristics, they were clearly visible on the false color composite remotely sensed image. Together we traced the contours of reflection, for instance of black cotton soil areas (*Engusero*), the salt encrusted lake sure (*Emakat* and *Emborianda*), raised and forested areas. Finally, I presented draft versions of the maps in village wide meetings and to small groups of individuals to get feedback and make any necessary changes.

In this particular case, the different sketch maps made by the different groups were *different but compatible* and could be brought together into one map that presented a combination of inputs for place names. If I had been mapping resource use and access, there may have been more difference and potential conflict, but even then, as Rocheleau (2005) illustrates, it is possible to create one map with different knowledge, access rights and responsibilities listed in symbols. The final map was more than one but less than many: a Maasai relational landscape for this region, that included various Maasai input. With place names, there is not often disagreement about the placement of names, but there can be different foci on what is important to be mapped, or what name should be used, and the stories that are told to explain a name. A better map would include these levels of complexity. Unfortunately, as mentioned above, most maps made with Maasai in the area by visiting scientists and local NGOs alike, start and end with the exclusive input of male leaders, excluding the knowledge of women. As a result, important water sources, clean and accessible for human consumption, are often missing from local planning maps, with clearly important implications for regional planning. But the divisions of knowledge are not always as clear as many would expect – in our mapping exercises, women often mapped in great detail particular hiding places of wildlife that the men did not. They also mapped their farm spaces. These differences matter when mapping for wildlife conservation planning. Recognizing knowledge differences across and within groups is important and demands that mapping practices are always multiple. This is not the same as being inclusive. Mapping multiple means mapping in groups so people can tell different stories with their maps; maps which may or may not fit together smoothly. GIS can be used to fit different layers on top of each other, to leave spaces in between, to show overlap and scale, and even to tell different stories. Narratives are missing from the maps that I created, as they distill place names into shapes on a GIS map. But this can be done differently, to include narratives in the map (see Pearce, this volume; Pearce 2008). In this

section, I argued how the places and the narratives need to always be seen as multiple, while still being 'Maasai.' I now turn to why putting the place names on the map, where they cross and connect with other sets of lines, matter.

Mapping multiple II: Across epistemological and ontological realms

> From time to time in the course of history … imperial powers have sought to occupy the inhabited world, throwing a network of connections across what appears, in their eyes to be not a tissue of trails but a blank surface. These connections are lines of occupation. … Unlike the paths formed through the practices of wayfaring, such lines are surveyed and built in advance of the traffic that comes to pass up and down them. …Drawn cross-country, they are inclined to ride roughshod over the lines of habitation that are woven into it. (Ingold 2007: 81)

As mentioned above, Maasai "do not have maps" in the sense of having boundaries. Yet boundaries were introduced across Maasai inhabited lands by colonial administrators, conservation agencies, and later representatives of the independent Tanzanian state. In the process, some of the long-distance social and spatial relations and categories that Maasai customary land use relied on were manipulated, stretched, but also disrupted and severed. Boundary drawing practices by the independent Tanzanian state built on pre-existing Maasai cultural-political boundaries (i.e., *inkutot*) to enact official administrative categories of governance (i.e. wards, districts) that did not always match Maasai customary management processes (Goldman 2020).

Maasai have adopted some of these new boundaries, with customary leaders strategically utilizing Tanzanian decentralized governance categories (i.e. district, village) to multiply their numbers and strengthen their own legitimacy (Goldman, in prep.). Village boundaries are also used to manage grazing access by Maasai from outside villages, sometimes following and sometimes contradicting Maasai boundaries of *enkutoto*/*olosho* and clan. Maasai elected leaders have also started participating in the boundary-making processes, by seeking official government titles for village lands and dividing villages to create new ones so as to better regulate resources and access state and NGO support. Legally recognized boundaries, they are told, will protect their land from theft for conservation and other land uses. The land titling process demands land use planning maps, which requires zoning village land for wet

and dry season grazing areas, reserve grazing areas, farming, housing, etc. Sometimes this is done in a way that recognizes cross-village land use practices, for instance by placing grazing pastures adjacent to each other across village boundaries.[23] Most often, though, Maasai place making practices are ignored and new place making practices enacted through the map making process.

What if these land use maps were *also* populated with Maasai place names (beyond those already turned into official village and sub-village names)? What if they *also* reflected Maasai seasonal distinctions, which breaks resource (pasture and water) availably into five seasons rather than just two? Doing so entails the second key aspect of *mapping multiple*, by placing Maasai spatial and temporal categories *together* with (alongside of, on top of, across) those of western cartography and scientifically recognized seasons. This is not the same as translating indigenous knowledge *into* western categories. It is rather placing the different categories as different *layers* in a map, not to produce a singular complete map, but rather a map that is *more than one but less than many*. These different layers could include multiple categories of spatial organization such as: Maasai place names, Maasai cultural-territorial boundaries, land use categories, village boundaries and conservation units.

Maasai navigate their place names alongside of, together with, and sometimes in spite of state and conservation-based boundaries. This matters. When Maasai cross village boundaries to graze they do so with implicit or explicit permission, and in accordance with their own territorial demarcations of *enkutoto* and *olosho*. When they cross the boundary of a conservation area to graze their cattle illegally inside, it is not because they do not know or care that the administrative boundary is there. Nor is it because the boundary does not matter. The movement occurs *across* the boundary. Sometimes on purpose and with intent to claim the land and show a disregard for the rules in place. Sometimes at night to be discrete and hide the transgression, sometimes with cash in hand to bribe authorities, and sometimes as a group to

23 This is the case with the work of the organization, Ujamaa Community Resource Trust (UCRT), which is working to help Maasai and other indigenous communities in Tanzania secure legal tenure rights through Certificates of Customary Rights of Occupancy (CCROs). While they recognize that Maasai grazing practices cross village lands, they are compelled to map at the village level to ensure rights to communities within the legal framework of the Tanzanian state (pers. communication with the Director; see also http://www.ujamaa-crt.org/, last accessed July 17, 2020).

show solidarity in claiming this right, while also hiding individual blame. In other words, the boundaries matter and are crossed, challenged, or used, and called on for various resource management and political purposes. Rather than obscuring or ignoring imposed boundaries, mapping multiple would place them all on the map where they can be seen in relation to the place names and social boundaries that Maasai also use, which could help explain how introduced boundaries are put to use, challenged or manipulated, as well as how they may be misplaced ecologically and socially.

I use an example to highlight how overlapping boundaries can help explain resource conflicts. According to Maasai customary norms, movement to access pasture and water resources usually occur freely within *olosho* and *enkutoto* boundaries. In times of acute need, such as droughts, customs of reciprocity declare that no hungry herder can be denied pasture. During the drought in 2009, Maasai moved in large numbers throughout Tanzania and from Kenya into Tanzania. Many Maasai from the study area moved to access pastures in villages in Simanjiro district. To do so, they negotiated across *enkutoto* lines and village boundaries. With some villages receiving large influxes of herders from across Tanzania, they began to turn people away based on rainfall patterns in a different *inkutot* (pl for *enkutoto*) and along village lines. For instance, as *Emanyara* received rainfall, many Simanjiro village leaders sent herders from *Emanyara* home. As the drought dragged on, villages throughout Tanzanian Maasailand came up with their own rules for allowing visitors in – either along set boundaries in particular places, or by attaching themselves to existing *inkang'itie* (homesteads). Place names, Maasai customary boundaries and village political boundaries all worked together and overlapped in managing resource access.

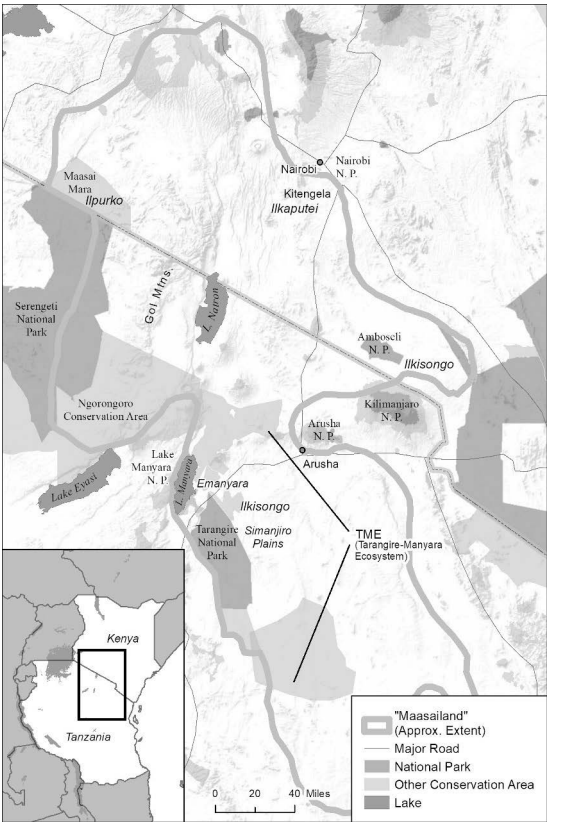
In the study villages, there was an additional boundary that became very important – the conservation boundary of Manyara Ranch. The abundance of grass available in the conservation area became known across Maasailand, along with various misconceptions related to Maasai access to it (as a community-based conservation area that included Maasai on the steering committee, see Goldman 2011). As such, Maasai from all over Tanzania and Kenya came to the villages surrounding Manyara Ranch with hopes of accessing grazing within the ranch. What many did not know was that access to Manyara Ranch was limited to surrounding villagers and regulated through official requests. In the end, village residents and visitors alike entered the conservation area together, illegally, to access the abundant pastures inside. Conservation authorities saw these as politically motivated violations of the law. They de-

manded local Maasai keep "outsider" Maasai out of the Ranch, and threatened failure to do so with livestock confiscation and fines. What these state and NGO workers failed to see, and what was not visible on *any* map, was that for local Maasai these were not outsiders, but insiders to certain Maasai recognized boundaries – those of *Olosho* (some were *Kisongo* Maasai and thus with explicit rights to the area for Maasai), and others were just from within the larger boundary of Maasailand (see Figure 3). Neither of these boundaries are easy to draw, though anthropologists have tried to outline them over the years, as have I (see Figure 4). They remain fuzzy, but important. Mapping multiple would mean putting these boundaries, however fuzzy, on the maps so they become visible when planning at village levels, for recognizing social norms or reciprocity, and for negotiating larger scale land use systems for grazing and wildlife conservation.

Ingold suggests that different modalities of travel are not necessarily commensurable. He states that "place-names that index specific landmarks are told in sequence to form stories or 'verbal maps' describing lines of travel for people to follow" (Ingold 2007: 89). He suggests as such that place names are relational, attached to movement and storytelling and that drawing them onto official cartesian maps solidifies the fluid continuous movement trails of habitation or narrative lines of place names with rigid lines of occupation and enclosure. While this may very well be true, many have argued that it is possible to map otherwise, in ways that maintain continuity, movement and even narratives (Pearce this volume). When I first mapped Maasai place names, I presented them as a verbal tour, and used an arrow on the map for the reader to follow the verbal description that I put into words in the text (Figure 4; see also Goldman 2020). Even taking away the line (Figure 1), the spaces in between named places remain visible and there is an attempt to blur the lines of the boundaries. Earlier versions also contained a detailed index with the meanings of the names included. Since Maasai place names do not exist in isolation from the lines of occupation and enclosure drawn on maps, I argue that it is better to find ways to put them on the maps as well – not by changing their ontological ordering, nor to map them inside of other existing boundaries – but to map them as best as we can as part of the landscape along with other boundaries. In this way, we can map multiple in a way that produces maps that are mutually intelligible to Maasai, conservation and development NGOs, and state agencies, without epistemological or ontological hierarchy.

When I mapped Maasai place names for the study area, I mapped all places named by participants even when they crossed village boundary lines.

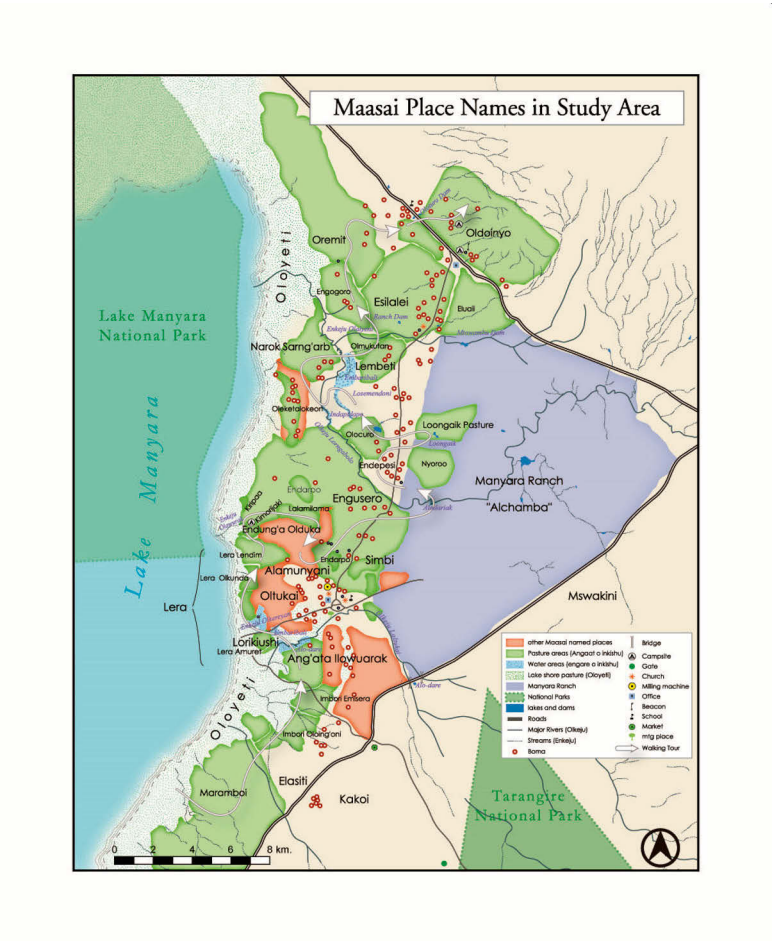
Figure 3: Research Areas (Source: Goldman 2020; map: Sam Smith)



The two specific focus villages were previously one village and there was not yet an official boundary between the two, coupled with an on-going boundary negotiation.[24] For this reason, and to avoid conflict and distraction from the

24 This was common in areas, like this one, where original villages were split into two or three. The new boundaries were drawn on maps at both the district level and the national level with very little communication on the ground. These were different from the new official boundaries being drawn by villages themselves for village land titles, or Certificates of Customary Rights of Occupancy (CCROs), because they were demar-

Figure 4: Walking Tour Place Names (Source: Goldman 2020; map: Joel Przbylowski)



goal of the map, I did not include a boundary between the two villages, though other administrative boundaries were included. I did not include Maasai *enkutoto* or *olosho* boundaries for scale reasons – all mapped places were inside

cated at the district level not locally). At the point of writing, village boundaries have been determined with the help of UCRT for both villages.

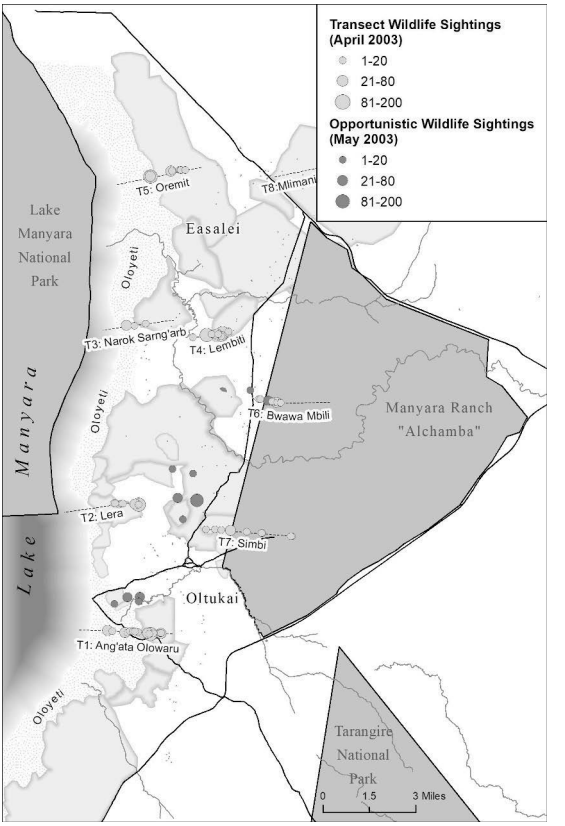
the *Emanyara enkutoto*. Yet in producing the larger map for my book (Goldman 2020), I put in only the *olosho* and *enkutoto* distinctions that were vital to my story. I did include the larger Maasailand boundary, national boundaries (Tanzania and Kenya), regional administrative boundaries and conservation boundaries (Figure 2). There are no limits to what a mapping multiple perspective can do, the challenge is to make sure the map is not too complex to read. For instance, I managed to map ecological wildlife data, Maasai wildlife knowledge (listed as opportunistic on the map), administrative and conservation boundaries, and Maasai place names into one map (see Figure 5). The map is however missing distinctions of areas important for grazing by Maasai during different seasons.

Conclusion

Despite the fact that Maasai occupy much of the land now targeted for wildlife conservation in East Africa, Maasai place making practices are rarely acknowledged or taken seriously by conservation agencies and land use planners – even when 'participatory' land use planning is pursued. Why not use Maasai place names to talk about wildlife presence on Maasai lands? Why not use Maasai socio-spatial management frames for land use planning? Doing so would require taking multiple Maasai time-space relationality with the land seriously (by internal differences of gender, age, etc.), alongside conservation and state boundaries.

On the contrary, international and even local NGOs, state agencies, and conservation organizations continue with their own map making practices, with Maasai asked to fill in the gaps while following standard cartographic and scientific breakdowns for time and space. Part of this is due to the hegemony of western mapping technologies (Lovell 2017), and assumptions of epistemological hierarchy. Maasai ways of knowing and being in the world are simultaneously not taken seriously and thought to not easily match up to western cadastral traditions and seasonal land use maps. This is particularly true for wildlife management, which has historically been dominated by western ontologies and epistemologies. Yet, I have argued here that in order to move beyond the rhetoric of participatory processes – as related to mapping, conservation, and land use planning – we need to change the language, context, and ways in which we bring different participants to the table. We cannot give up on mapping, but rather need to bend the map to do

Figure 5: Wildlife sightings by transect and by Maasai, April-May 2003 (Source: Goldman 2020; map: Sam Smith)



more than it is often expected to do in specific legal/scientific settings. We need to map multiple.

Mapping multiple can mean different things, and I have just begun to explore the possibilities here. It can mean mapping Maasai place names together with village boundaries, conservation boundaries, and Maasai cultural-political *enkutot* and *olosho* boundaries. It could mean mapping across scales – including the over-arching Maasailand boundary along with ecological boundaries such as the Tarangire-Manyara boundary, despite the

ambiguity of both. It means recognizing that while there are great hopes in theory and practice about decolonizing conservation, the academy, and cartography – today many indigenous peoples, including Maasai – regularly use multiple sets of boundaries in their daily lives, and in their political fights for rights to their land (Simpson 2017). Mapping the different sets of place-making and boundary drawing together does not legitimize one over the other but recognizes their use in practice. Cartographic skill can be used to emphasize and de-emphasize, but all the competing, sometimes co-used boundaries are in view to be discussed, understood and respected as existing.

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