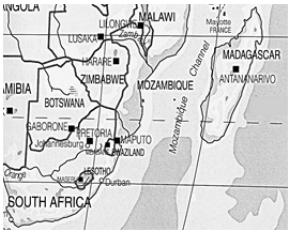
SENSE AND SENSIBILITIES: NEGOTIATING MEANINGS WITHIN AGRICULTURE IN NORTHEASTERN MADAGASCAR[1]



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The agroforestry fields of small-scale farmers in the Mananara region of Northeastern Madagascar are places where materials, meanings, and knowledge overlap. These cultivated landscapes assist individuals to balance the environmental "sense" of scientific epistemologies that emphasize experimentation and development with the more emotive "sensibilities" of tradition, where spirits and ancestors exercise a key role in conceiving worldviews. These two frameworks are epitomized by two Malagasy terms for landscapes—*tany* (land) and *tontolo'ianiana* (environment). Each of these carries its own underlying knowledge, meanings, moralities, consciousness, and practices. The sensibilities of tany create landscapes in particular that interact with mundane spaces, while the senses of environment create landscapes in general that emphasize exceptional spaces. Rather than presenting individuals with an either/or choice, the two frameworks create a spectrum of strategies that adapt over time. Examining agroforestry spaces as places where individuals cultivate both material and ideological resources complicates the ethnographic divide between agriculture and forest environments and illustrates the mutually constitutive spaces of nature and culture. (Agriculture, development, morality, epistemology, Madagascar)

In the agrarian region of Mananara Nord, on the Northeastern coast of Madagascar, agricultural terrains are ideological terrains, where small-scale farmers cultivate both crops and meanings. In working their fields, individuals look towards these landscapes to imagine past histories, to formulate present identities, and to articulate future aspirations. By drawing on the images, narratives, and metaphors of agricultural landscapes, people thus turn towards their cultivated fields to navigate complex moral, cultural, and personal questions. While environmental landscapes are not the only vehicle to reconcile such normative issues, they are important and overarching motifs in helping people imagine their place in the world. What makes a good person? What is a good life? What type of legacies should one leave for children? In facing such questions, people look to their landscapes for reflection and to formulate powerful images, proverbs, narratives, and metaphors (Bloch 1995; Pandian 2009; Shetler 2007). These ideological dimensions of landscape become especially cogent in times of tension and transition. Currently in Madagascar, cultivated landscapes are helping individuals balance the sense

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of scientific epistemologies that emphasize experimentation and development with the more emotive sensibilities of tradition, where spirits and ancestors exercise a key role in conceiving worldviews. Among the Northern Betsimisarika of Mananara Nord, this schematic shift from sensibility to sense frameworks is epitomized through discussions and conceptions of environmental landscapes. For example, there are two widely used Malagasy terms for ideas of landscape: the older term, *tany* (land), and the more recently introduced term, *tontolo'iainana*, used by park administrators and NGOs to mean environment.

As illustrated by the following discussion, this linguistic shift from tany to tontolo'iainana denotes corresponding underlying shifts in frameworks of knowledge, morality, practice, and consciousness. For example, while tany is often interwoven with spirits, ancestors, burial grounds, and agricultural fields, tontolo'iainana is a place of animals and nature, such as parks or protected areas, which often are far removed from everyday activities. Tany landscapes are populated by ancestors and spirits who enforce often ambiguous taboos via circuitous forms of retribution and rewards. Tontolo'iainana landscapes are patrolled by hired guards to enforce laws via fines and other punishments. While farmers who adopt a sensibility view of landscape for agricultural activities may act out of fear of angering an ancestor, a sensible farmer would instead dispassionately consider land choices in response to factors such as market demand and available technologies. As one of the locals summed up this change in land consciousness, "before, we just had land and we relied on the ancestors and taboos to know what to do. Now, we have environment and the rules come from parks."

The deliberate pairing of "sense" and "sensibility" is intended to denote the contrasting frameworks of tany/tontolo'iainana, in the hope to avoid the more value-laden pairing of tradition/modernity. While the emotive views of tany have a long history in the region, they are by no means alienated from current concerns of modernity. Tany relationships have long been integrated into market economies through the cultivation of cash crops and payments to spiritual practitioners. Tany offers the Betsimisarika a lens to view timeless questions such as the afterlife, but also is being constantly adapted to address modern concerns such as paying university fees for their children, dealing with global markets, and considering carbon trading schemes. Thus, to the extent the term "traditional" is used here, it means having a long legacy in the Imorona region, and not as being out of time or non-modern. Additionally, the rubrics of "sense" and "sensibility" are not meant to imply an either/or choice for individuals. Rather, these spheres overlap and present people with a spectrum of strategies that can change and adapt (Tengo and von Heland 2012).

This article has theoretical concerns both for the anthropology of Madagascar and for environmental anthropology. In examining how Malagasy cultural traditions are produced and circulated, anthropologists have focused mostly on events such as sacrifices (Cole 2001), trances (Gezon 1999; Lambek 2003), or second burials (Bloch 1985, Graeber 1995). Similarly, with environmental anthropology, it is the "exceptional" landscapes of primary forests, protected areas, and sacred groves that receive the most analytical attention for the formation of cultural meanings (Dove, et al. 2011).

The discussion here emphasizes the quotidian and consistent interactions with the mundane, as cultivated fields and managed forests become sites for articulating cultural meanings, memories, identities, and histories. Cultivated landscapes, because they are not pristine but rather reflect repeated interventions, often represent a people's commitments, pride, histories, philosophies, and consciousness. Thus, while the exceptional events of ceremonies and spectacles may introduce new ideas or ideologies, it is through the quotidian practice of agriculture that individuals come to embody new ideas and identities. Planting rice using a new technique represents an avenue to become a "developed" farmer. Honoring ancestors while harvesting rice infuses this essential activity with layers of cultural meaning, memories, and mystery. Overall, highlighting the material and ideological components in these small-scale fields illustrates how cultivated landscapes come to epitomize the mutually constitutive spaces of nature and culture (Fairhead and Leach 1996; Posey 1985).

The following discussion draws from 18 months of ethnographic field research during 2010 and 2011 in the village of Imorona in the Mananara Nord region on the northeastern coast of Madagascar. My research involved working closely with small-scale farmers, and accompanying them in their daily agricultural activities. I also spoke with and observed specialists working as spirit mediums, burial site guardians, and traditional healers. The research included a development agency working on projects with coffee, clove, and vanilla farmers. Including the two and a half years I served as an environment Peace Corps volunteer, I have worked with farmers in this region for over six years and speak the local dialect of Malagasy.

The main fieldwork site, the village of Imorona, is situated along a reef-protected stretch of the Indian Ocean. This area is classified as humid tropical forest, and contains some of the highest incidents of endemism and biodiversity in Madagascar (Dumetz 1999). Away from the sea, one encounters sandy soils, followed by marshy lowland areas suitable for rice cultivation. A few additional kilometers inland, the terrain changes into rolling hillsides of mostly clay soils.

Imorona is 12 kilometers south of Mananara Nord, a large town and the commercial and administrative center for the region. The ethnic group in this region is primarily Betsimisaraka, the second largest ethnic group in Madagascar. Most residents speak the Northern Betsimisarika dialect of Malagasy; very few are fluent in French or English. Access to the Mananara region of Madagascar is challenging. Imorona and Mananara lie along Route National #5, which is in extremely poor repair and can only be tackled in strong pickup trucks or Land Rovers.

Most of Imorona's approximately 2500 residents engage in both subsistence and cash-crop agriculture, organized into complex and well-tended agroforestry fields. The three main cash crops in the area are cloves, vanilla, and coffee. The income from these crops is usually the primary, if not only, monetary means of supporting a family for the year. Cloves and vanilla have been in the region for about 80 years. They are not consumed by Imorona residents, but are cultivated exclusively for trade. Families also farm subsistence crops, including rice, cassava, sweet potatoes, fruit trees, and breadfruit trees. Imorona's beach, being reef protected, is also a site for fishing and shellfish collection.

In general, families in Imorona own their own land, often comprised of four to five scattered agricultural plots of about one-half to one hectare each. Ideally, a family's land portfolio will include a low lying rice paddy and several upland plots suitable for the cultivation of cloves, coffee, and vanilla. Most people rely on their families and social networks for agricultural labor, though there are a few times, especially during clove harvest, rice harvest, and vanilla curing, when wage labor is used on a per-day basis.

LANDSCAPE SENSIBILITIES: EMOTIVE ASPECTS OF AGRICULTURAL SPACE

One morning, I went with a group of five friends from Imorona to visit the fabled abode of the legendary giant, Darifify, who is said to have rambled up and down the east coast of Madagascar, leaving footprints in the shape of inlets, bays, and odd rock formations. People in the Mananara region claim that the giant resided on their shore near the small village of Siranambe, about 10 kilometers south of Imorona. This rocky beachfront, marked with odd stone formations and crashing waves, is considered a particularly taboo area. Those who do not ask an elder for permission before visiting, or who break any of the many taboos while there, will be harmed and washed out to sea. Knowing this, we enlisted the support of an older landowner to act as a guide and intermediary.

Our guide pointed out certain facets of the landscape. One flat area of rock was noted as Darifify's rice field. A carved-out area in the rocks in the shape

of a circle was a mortar to husk his rice before cooking. Near the mortar were three large pointed rocks arranged in a triangle used to balance his rice pot while lighting a fire underneath. Thus, the landscape of the Mananara region offered the giant what he needed to settle down.

In the Betsimisarika consciousness connecting spiritual entities with agriculture, it is logical that for any type of being to be at home there must be a cultivable bit of land. Instead of separating supernatural beings with agricultural landscapes, then, the two entities are fundamentally connected in the consciousness and storytelling of the region. For example, people would often mention to me that once they themselves were ancestors, they planned to continue to watch over their agricultural fields. Indeed, it is agriculture and the rewards reaped by farming that keep the supernatural lingering around the worlds of the living (see also Conklin 1957).

These otherworldly presences are not always benign, however, so individuals continuously monitor their actions and attitudes. Before clearing a forest patch to plant rice, for example, the landowner must consult with a *tangalamena*, the person responsible for caring for the family burial site and presiding over ceremonies and ancestral communications. Often, in order to proceed with land conversion, a family must sacrifice a chicken or a zebu cattle. Local landscapes are replete with taboos, or *fady*, that dictate what type of crops can be planted, what days are suitable for agricultural activities, which places are permitted for farming, and what offerings need to accompany planting and harvests. In addition to the rather high-maintenance ancestors, the Betsimisarika also contend with local spirits, *tsiny*, who may inhabit particular trees, springs, or rocks, and who have their own codes on land practices that must be followed. There is a complex topology of tsiny present on the landscape, ranging from those akin to mischievous wood nymphs, to those more directly connected to divine sources of power. Displeasing the ancestors or any of the tsiny may result in poor harvests, illness, or even death.

In addition to being both the subject and agent of offerings and spiritual relationships, tany spaces also often serve as the sites for ceremonies and gatherings. In performing rituals such as contractual promises to ancestors or thanking ancestors for rice harvest, people gather in their agroforestry fields. Instead of journeying to far-off "pristine" spaces of parks or forests, people celebrate together in the pleasant shade of clove groves and vanilla gardens. These events reinforce ties between ancestors and the living, emphasize the importance of the tangalamenas and other culturally significant figures, and bring communities together out in the landscape. Families also mark more private events on their agroforestry landscapes. Parents may plant a "souvenir" tree to commemorate a birth of a child or for their marriage. Individual trees are often remembered by who planted them, and serve as markers of family

histories. By fostering such emotive connections to their cultivated fields, people are motivated to care for and perpetuate their tany landscapes.

THE PRODUCTION OF KNOWLEDGE SENSIBILITIES

The Mananara landscapes are a complex moral ecology of ancestors and a variety of spirits, all possessing unique powers, motivations, and demands. For each particular circumstance, and for each class of supernatural being, there is a practitioner one should consult. Tangalamenas, who are usually direct male descendants of the family's original tangalamena, are experts at communicating with family ancestors to ascertain auspicious days for ceremonies and to ask permission for certain activities. They are also skilled orators. *Mpimasys*, another specialized group of men and women, have divine gifts and can use certain plants and trees to see where the tsiny live and learn their demands. Other individuals are able to perform *trombas*, when the spirit of a deceased individual can briefly possess someone to convey messages from the ancestors. Others in the community are able to heal people who have fallen ill as a result of a tromba gone wrong.

The knowledge of how to locate, communicate with, and intercede with the supernatural has specialized spheres of activity.[2] Hardly an unorganized realm of knowledge production, the ability to communicate with otherworldly realms is highly prized, exact, and is a prestigious activity. Indeed, with the southern Betsimisarika, "knowing the history of the ancestors is valued over other types of formal historical knowledge" (Cole 2001:101). Who is an adept practitioner and who is not is a common theme of speculation and conversation. Some of the practitioners require payment or gifts for their services, while others work without material compensation.

In general, such practitioners do not come by their knowledge through formal training. Instead, their abilities are often inherited or developed as an effect of a severe illness (such as a fever) or a long-term affliction (such as recurrent seizures). Most say they did not choose to be diviners, but that the tsiny or ancestors picked them for this role. They describe themselves as intermediaries, and the ones with the best reputation are known for their neutrality as translators. One tromba specialist, for example, described his place in the spiritual order by stressing that he was not a "boss" in dealing with the spirits, but merely a "worker."

To know the realm of the ancestors and spirits involves navigating local agrarian landscapes. Those with specialized knowledge can see tsinys in rocks, divine which trees should be left uncut, and convey instructions from the ancestors on what types of crops should not be planted. They see the snakes and birds in agroforestry fields as messengers from deceased community members. Agricultural terrains thus are key sites of knowledge production,

and the physical land can be read as a text coded with the attitudes and intentions of the spirits.

THE MORALITIES OF TANY

In addition to being fields of knowledge, the spaces of tany are also key sites for moral reflection and guidance. In a landscape crowded with signs and spirits, where incorrect action can bring harm on oneself and others, wise behavior is to minimize risk. There is always the chance that an individual may ignore a social fady, inviting harm. The tension between balancing self-gain and community well-being is an important motif in Malagasy proverbs, norms, and relationships (Lambek 1992; Sodikoff 2004; Walsh 2002). One proverb, for example, looks to the papaya tree to teach younger Malagasy that it is not in the moral order for the younger to try to rise above the elder. There are many Betsimisarika proverbs addressing morality and ethical codes of behavior, and many of these are metaphors drawn from the landscape.

Furthermore, for all the spirits inhabiting the tany landscape, there is little moral judgment that classifies them as good or evil. Indeed, each class of ancestor or tsiny is in itself neither good nor bad. Rather, these entities are seen as ambiguous, shifting, devious, and subject to emotions—which makes them a bit exasperating. They have good and bad moods, and can change their minds from one day to the next. A good or a bad person can ascend to the realm of the ancestors, as one's behavior while living does not seem to unduly influence one's status from beyond the grave. With such moral ambiguity it is especially critical that one is adept at reading the landscape messages encoded in signs of an emotive ecology of rules and meanings. In such systems with no easily digested moral absolute, many Malagasy express their exhaustion dealing with spirits and ancestors who demand much attention while returning little in the way of rewards.

There are, however, several ways in which the landscape has authority to judge individuals. In one town in the Mananara district, for example, there is a tree near the main path leading out to the rice and agroforestry fields. If someone with ill intent tried to enter the town via the path, the tree would ensnare him or her in its roots. The landscape of the Darifify also is bestowed with moral agency as those who do not observe the correct fady will be swept out to sea. People look towards their agricultural fields to evaluate how well they are performing as moral bodies and take a good harvest to signal that they are behaving as they should in the eyes of the ancestors.

SENSIBILITIES: LINKING PRACTICE AND CONSCIOUSNESS

The Imorona agricultural landscapes contain crops, trees, ancestors, spirits, memories, histories, and signs. One's fields can contain a snake bringing an ill omen, a large stone that is a home to a tsiny guarding a nearby spring, or a clove tree planted by a grandfather to commemorate his marriage. There is no need to make pilgrimages to parks or far-off places to experience a land infused with mystery, as the sensibilities of mystery are engaged every day in weeding a rice field, planting a letchi tree, or harvesting breadfruit for the family dinner.

The multi-layered views people have of their landscape influence their conceptions of which environmental interventions are appropriate and feasible (Bateson 1972). With tany, where agricultural terrains are interspersed with a range of emotional and unforgiving spirits and ancestors, people are encouraged to consult with others before making large changes to land, as the wrong decision about land use may result in illness or community wrath. Clearing a field, therefore, is simultaneously an economic and a moral issue, as families buy offerings of cows or chickens and may pay to consult with local practitioners to intervene with ancestors or tsiny on their behalf. Trees in family fields often carry stories and memories, so people are reluctant to remove or disrupt those trees encoded with meanings.

Recent studies of environmental conservation have indicated that the local rules of fady and community governance that Malagasy agrarian communities subscribe to are actually quite efficient at preserving spaces and species of conservation importance (Jenkins, et al. 2011; Jones, et al. 2008; Lingard, et al. 2003; Tengo and von Heland 2012). These authors conclude that keeping landscapes firmly entrenched in moral, social, and historical realms often encourages the moderate, considered, and respectful use of land resources.

DEVELOPING SENSIBLE LANDSCAPES

In June of 2010, the NGO Association Intercooperation Madagascar (AIM) held a meeting in the town of Mananara Nord to discuss the progress of their regional vanilla project. The meeting drew about 80 people, some 90 percent of them men, from approximately 50 villages in the region. They included small-scale vanilla farmers, regional vanilla buyers, agricultural technicians, and local politicians. The meeting was conducted in Malagasy, with written material available in both Malagasy and French. I was the only non-Malagasy person in attendance.

Those present sat around a table with name placards and bottled water. The schedule was circulated to all, and activities included coffee breaks and brainstorming sessions of 15-minute increments. Speakers used microphones.

The AIM coordinator presented a PowerPoint show complete with video segments. Throughout the presentation, the AIM team showed slides of quantified graphs and charts depicting the total kilograms of vanilla participant farmers produced, and the total revenue generated from the vanilla market days the AIM had organized. The program's environmental mission was highlighted by advocating the shifting of vanilla production from somewhat chaotic garden models, where vines are interspersed with existing clove, fruit, and native trees, to what is called the "STABEX" model of planting, where vanilla vines are established in neat grids.

These types of environmental development interventions are increasingly prevalent in Madagascar, and follow the "invention" of the environment trend, whereby the term and ethics of environmental conservation and management become adopted and propagated by international, national, and local conservation and development organizations (Agrawal 2005; West, et al. 2006). The notions of environment and species conservation are spread through slogans, radio advertisements, development programs, national development goals, and national environmental festivals.

In these initiatives, "environment" is translated into the Malagasy term *tontolo'iainana*. This can be understood from its two components, *tontolo* (all, everything, or whole), and *iainana* (to live or to breath). Thus, *tontolo'iainana* can be loosely understood as "the whole of what gives one life" or "all the surroundings that one lives in." Having this phrase mean "environment" was a relatively recent development in the Malagasy lexicon. For example, the most widely used Malagasy/English dictionary, first published in 1970, does not include the term. Adult Imorona residents interviewed remarked that they did not grow up hearing the expression, and located its introduction into the local vernacular around the 1990s. As one older resident put it, "before, we had lots of environment near Imorona but we didn't know it was environment, we just thought of it as land."

THE PRODUCTION OF SENSIBLE KNOWLEDGE

The AIM meeting exemplifies what counts as environmental knowledge with many conservation and development programs. First, under environmental epistemologies, knowledge of agriculture is separated from knowledge of forests and parks. This division reflects a long-standing tendency of western scholarship to segregate entities as belonging to either nature or culture, where nature is found in untouched landscapes far from human activities (Cronon 1996; Neuman 1998; West et al. 2006).

For agricultural lands, relevant information for development programs usually includes the number of kilograms of product produced and the amount of revenue generated within formal markets. For parks, collected information

includes the number of hectares under protection and the number of species inhabiting the area. This paradigm engages with landscapes through the techniques and terms of science and management. Missing from this framework is the rich interwoven social ecology of subsistence crops, ancestral relationships, social reciprocity, and historical memories. In highlighting only selected relationships, the categories of "tany" are thus translated into categories of "tontolo'ianiana." In the process, local epistemologies are erased in favor of those knowledge frameworks more readily commensurate with the categories of international institutions and actors (West 2005).

Compared to tany, the tontolo'ianiana framework also alters how knowledge is produced and circulated. Knowledge of the landscape is not derived through subjective dreams or ambiguous cues, but through codified forms of measurement and observation. Knowledge is conveyed through meetings, written materials, videos, and carefully orchestrated practical workshops. The primary place for learning about landscapes thus shifts from outdoors to indoors. The spectacles of environmental knowledge production are not ceremonies with ancestral sacrifices, but are spectacles such as the AIM meeting described above. While in some ways environmental knowledge opens the learning practice to more people in the community, there are also power relationships embedded in the process. In particular, who conducts the meetings, records the notes, and gathers the information via forms and paperwork has the authority to represent the community to the larger development community (Skaria 1996).

Protected areas, which remove people from landscapes, represent a dramatic shift in how knowledge about land is produced. Parks effectively remove land from local spheres of knowledge, except that people know the area as a place where they are no longer allowed to go. The knowledge of protected environments belongs to the park service, or to the handful of tourists or international students who visit the area. While programs try to introduce park knowledge to communities in the form of environmental education, these programs draw only tenuous and abstract connections between people and park landscapes, crafting narratives about protecting species and preventing climate change.

THE MORALITIES OF ENVIRONMENT

The shift from tany to tontolo'ianiana frameworks also removes much of the moral ambiguity and uncertainty of the tany framework. In contrast to moralities of ancestors and tsiny, which have shifting codes and unpredictable retributions, environmental codes of behavior present essentially transparent moral tenants. Farmers should never swidden their fields, with or without the permission of the ancestors. Landscapes are clearly defined as either park or

non-park terrains, each with its own rules. While ancestors watch over the fields of tany, state and park officials watch over the parks.

The moral frames of environmental paradigms also represent a departure from tany schemes. To be a good environmental citizen, one needs to think less of the past generations and more of the future generations. These descendants-to-be are often framed in abstract terms: "future generations" will want to see lemurs and experience other environmental wonders. Also, compared to tany, the moral community of environmental frameworks expands to include regional, national, and even global spheres. In this way, people's landscapes in Imorona are connected to the national heritage of Madagascar. Madagascar, with its high degree of endemism, must in turn protect its environment for the sake of our collective global heritage. Along with spatial scales, the time frames of morality also expand when speaking of environment. One's present actions may have perceivable negative environmental effects only after many decades have passed. This longer lag time between wrong behavior and retribution differs from the more immediate consequences of moral deviance under tany schemes.

Finally, in many ways the discourse of environment shifts the moral unit of accountability from the community to the individual. Consistent with other western, individualistic discourses, environmental values stress the role for individual agency and innovation (Hanson 2007). In AIM development meetings, for example, trainers often use the proverb "*felona an_droka izay dia manatany*" (if you want the flower that grows on the far away rock, you must go yourself to pick it). This proverb uses environmental imagery to stress the need for individuals to break from the social group to meet their goals and aspirations. People are encouraged to save money, reinvest in their fields, and keep written records of their costs and revenues. Under this framework, individuals are more often held responsible for their own agricultural failures: poor harvests may be the result of poor management, instead of being the consequence of the whim of the ancestors. This ethic of individualism differs from traditional Betsimisarika values that emphasize familial and community harmony (Sodikoff 2004).

SENSIBLE LINKS BETWEEN CONSCIOUSNESS AND PRACTICE

One of the abilities of development is its potential to "colonize the imagination" (Sivaramakrishnan and Agrawal 2003:3). Under the "sense" framework of environment, the agricultural landscape is a more knowable, legible entity overlain with neat grids and rows. Working on her land, a farmer can imagine how her actions connect with larger national and global narratives of protection and heritage. A snake encountered, for example,

would represent a potentially endangered species in need of protection, instead of a messenger bringing news from an ancestor.

These shifts in landscape consciousness have material reverberations for both agricultural landscapes and protected areas. As illustrated above, the results of sensible development practices are in part to create goal-oriented subjects who look at their fields with economic lenses that aim to maximize profit instead of minimizing harm. The development slogan that describes vanilla vines growing intertwined with coffee plants as "money growing over money" is an example of this rhetoric. Through such shifts in vocabulary, people's views of agricultural landscapes shift from an ambiguous, emotional system of signs to one that is commensurate with quantified economic value. Such changes, in turn, may encourage more drastic land-use changes and promote less diverse agricultural systems. As ancestors and tsiny are removed from the landscape equation, people can more easily decide to put all of their land under intensive cultivation without concern for retribution from other-worldly spheres.

The extreme example of the separation of tany and tontolo'iainina in local consciousness is the formation of parks and protected areas. Parks, in moving people off the land, remove spaces from the realm of cultural possibilities. Protected areas sever the everyday hands-on interactions between local people and the landscape, replacing stories of tsiny and ancestors with stories of global heritage and ecotourists. In this way, landscapes are transformed from "living land" actively circulated within moral and cultural spheres into "dead land" removed from structures of consciousness that confer meanings onto the natural world (Dove and Kammen 1997). Instead of protected areas being places to celebrate family and community, people approach park landscapes with a furtive sense of transgression.[3]

As parklands remove populations through restrictive frameworks, these areas are also removed from cultural and social spheres of accountability, and the lack of local engagement leaves tontolo'ianiana vulnerable to appropriation and exploitation by outsiders. In the recent political unrest in Madagascar, for example, the UNESCO Biosphere park located in the Mananara region was used by outsiders for large-scale rosewood extraction. While local residents expressed some dismay at the turn of events, few felt sufficiently motivated to overtly protest the looting. Land, once it is removed to the protected realms of official tontolo'ianiana, is no longer the pragmatic concern of local communities, but becomes the responsibility of the state.

Another potential risk of removing the spaces of tany from consideration as "natural" environment is missing the ecosystem work that tany landscapes perform. The agroforestry fields in Imorona have a high rate of biodiversity, including endemic species. These landscapes prevent erosion and promote

topsoil formation by keeping hillside areas forested. Agroforestry fields also provide important buffer habitat for birds and animals (Martin, et al 2012). The tendency for environmental organizations to view all agricultural activities as antithetical to conservation and healthy ecosystems, however, may result in such groups advocating for land-use policies that unintentionally undermine the very ecological outcomes they seek to encourage.

NEGOTIATING LANDSCAPE SENSE AND SENSIBILITIES

In Madagascar, change does not often proceed in all-or-nothing frameworks of quantum additions and erasures, but is a considered process where communities select new ideas and materials within existing worldviews (Cole 2001; Lambek 2003; Randrianja and Ellis 2009). In Madagascar, "change does not happen unconsciously—behind the backs of its subjects—but as the product of self-conscious agents, addressing the contingencies of the present with reference to the past" (Lambek 2003:245). In such processes, people are adept at blending new entities within existing frameworks. Through these self-conscious processes, new materials and ideologies emerge.

Changes conferred on the landscape are no exception. In the Mananara region, historical efforts to convert the landscape into monoculture or exclusively cash-crop agriculture were not successful, even when backed by the powerful measures of French colonial regimes (Sodikoff 2004). Oral histories and archival accounts note that at various times during the twentieth century, the Mananara region was imaged to be an ideal landscape for large-scale plantations for sugar cane, black pepper, cacao, coffee, and cloves. Despite these outsider visions for landscape change, local landowners resisted any totalizing views of agriculture and remained committed to diverse cultivation strategies integrating cash and subsistence crops.

Similarly, as farmers in the Mananara region face the intersections of sense and sensibility frameworks of land use, they generally do not adopt an all-or-nothing stance in favor of one or the other of these agrarian schemata. The region values the cultivation of diverse material and social strategies. With options of how to visualize landscapes, farmers often adopt a strategy of negotiation, where new ideas are considered, debated, and adapted in small-scale increments. Similarly, leaving sensibility frameworks for sense frameworks is by no means a binding, permanent, or unidirectional choice.

Navigating between the different ideologies of sense and sensibility often results in a landscape crowded with overlapping materials and meanings. In a large inauguration celebration for an AIM clove oil project, for example, many constituencies were represented. State officials, adorned in leis of plastic flowers, presided over speeches and ribbon cuttings. Protestant ministers gave an opening prayer, while the elder tangalamenas, at a place of honor

on stage, contributed with traditional speeches. A zebu was killed to appease the ancestors, and his head was displayed next to the sound system. Farmer organizations working with AIM took part in a formal ceremony where they received stamped certificates for their participation in the clove-oil project. Many of the recipients were quite moved by this honor, as most lacked formal degrees or other evidence of their learning and skills. AIM technicians displayed blackboards next to the clove-oil machine outlining the environmental rules of the project, including guidelines for clove tree reforestation.

Far from being a paralyzing force, these layered, overlapping meanings of tany and tontolo'ianiana present local populations with many points of entry for interacting with landscapes. As Tsing (2005) notes, these areas of friction can be productive opportunities for diverse groups to craft their own narratives and worldviews. Such times of increased symbolic loading also give individuals ample material to experiment with multiple articulations, as they can draw upon various discourses depending on their visions and goals for themselves and their landscapes (Li 2000; Tsing 2005).

CONCLUSIONS

As illustrated above, in the Mananara region environmental landscapes are often described as either tany or tontolo'ianiana rubrics. These two frameworks bring their own underlying connotations of knowledge, meanings, morals, consciousness, and practice (see Table). In both schemata, local residents dedicate much time and effort towards developing successful strategies to navigate these ideological and material terrains.

From an epistemological perspective, the knowledge of tontolo'ianiana emphasizing sense over sensibility offers the illusion of certainty. In confronting complex tropical ecologies and erratic markets, environmental programs offer simple prescriptions that correlate with predictable results, claiming that planting vanilla vines will produce x amount of kilograms of beans, and removing people from landscapes will result in the preservation of y number of species. This model stands in contrast to the epistemologies of tany, which are opaque, shifting, and difficult to decipher. Indigenous and scientific approaches deal differently with the issue of uncertainty as "both approaches make some effort to cope with uncertainty, but while modern development tries to eliminate it, [indigenous systems do] not" (Dove 2006:51).

Table
Summary of the Characteristics of "Sense" and "Sensibility" Landscape Frameworks

	Sense	Sensibility
Knowledge production	Maximize certainty; predictable causation	Minimize uncertainty; ambiguous relationships
Focus of practice/knowledge	Intervention	Interpretation
Moral scales	Future oriented	Past oriented
Locus of accountability	Individuals	Communities
Landscape consciousness	Landscapes in general: universalizing templates	Landscapes in particular: actions contingent on place
Privileged type of spaces and activities	Exceptional	Mundane
Primary place for "meaningful" landscapes	Protected Areas, removed from human activities	Cultivated spaces, integrated with human activities

From a moral standpoint, sensible models shift the locus of responsibility from the community to the individual, while reorienting individuals towards looking to future generations for their moral compass, instead of focusing on their ancestors. By erasing the "weightiness" of a shared ancestral past, sense frameworks free individuals from the moral uncertainty of ancestral relationships (Lambek 2003). Individuals are instead encouraged to make decisions that focus on the rewards of the present and the future. Such a moral shift may, in turn, encourage more drastic changes in land use, as farmers would not have to worry about making costly sacrifices to ancestors and tsiny before clearing land for new agricultural ventures.

One result of shifting from tany to tontolo'ianana frameworks is a changed conception of land from landscapes in particular to landscapes in general. The mixed agricultural spaces of tany, for example, hold personal signs and meanings that relate to one's history, identity, and situation. This knowledge is not easily extrapolated from one person to another, or from one field to another. People must therefore consider each parcel of land as a unique site of rules, signs, and potentials.

Environmental landscapes, in contrast, take local areas and render them more abstract. Individual fields are connected to larger regional, national, and even global systems (Sivaramakrishnan and Vaccaro 2006). Environmental landscapes become places to combat climate change, save lemurs, and preserve global heritages. Sensible frameworks produce sensible knowledge as universal templates. The strategies advocated through this framework are easily scaled-up without regard to family histories, resident tsinys, or ancestral politics. Through such shifts in consciousness, local agricultural landscapes slowly become more interchangeable, emerging as blank slates for environmental interventions.

As illustrated above, under the sensibilities of tany, landscapes are complicated and emotive spaces where nature is not separated from culture, where agricultural fields are interwoven with taboo forest patches, burial grounds, and supernatural signs. Through activities such as weeding a rice field, planting a clove tree, or harvesting vanilla beans, farmers are able to imagine their places within larger moral, spiritual, and cultural systems. Individuals thus infuse their quotidian activities in the mundane spaces of tany landscapes with emotive layers of meanings, memories, and values.

The sense framework of tontolo'ianiana in many ways shifts this consciousness of landscapes. Most dramatically, environmental protected areas attempt to separate the cultured spaces of agrarian landscapes from the natural spaces of parks, a template that de-emphasizes the cultural meanings created through the interactions between people and their land. Instead, the emotive feelings of wonder, awe, and beauty are thought to be best experienced by traveling to distant parks, which are set aside as delineated spaces. Agricultural and tany spaces, on the other hand, are emptied of the sensibilities of emotion and reframed as places to optimize yields and maximize profits. Thus, both sense and sensibility frameworks can cultivate the emotive aspects of nature, though they differ on where and how these connections are created and perpetuated.

It is interesting to speculate with Mananara farmers about how they imagine their environments will evolve over the coming decade. Many people believe that the tsiny are slowly disappearing from local landscapes. They explain that as village populations increase, the tsiny tend to retreat, disliking the noise and mess that result from too many people. People are also increasingly questioning the power of the tsiny, in part encouraged by the discourses of development. As one Imorona resident summarized, “There are now hardly any tsiny left in Imorona. They are losing their power.” Despite the apparent emptying of the landscape of the world of local spirits, most traditional practitioners are not worried that these entities will disappear entirely. As one long-time tromba practitioner notes, “as long as people are living in villages, there will always be tsiny.”

Whether or not people in the Mananara region embrace the emotive world of the tsiny or the rationalized views of development, they will likely continue to hold to one aspect of their experience, the prominence of agricultural spaces, in imagining and articulating their worldview. People turn towards papaya trees to remember moral lessons, point to rocks to illustrate tenants of philosophy, and look forward to rice harvests as times to celebrate community. Through their caring for fields and managed forests, people become connected to larger normative systems, as cultivated spaces emerge as “ecosystems with

people in them" (Geertz 1972). The resulting landscapes are ideologically complex, environmentally robust, and also often strikingly beautiful.

NOTES

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2. This division of knowledge parallels Lambek's (2003) discussion of the Sakalava tromba, where there is an array of practitioners and specialists that form an interwoven ecology of knowledge.

3. In recent years there has been some attention given to community-based natural resource management (CBNRM) programs, which aim to integrate local communities into the planning and management of parks and forests.

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