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Global Warming in Local Discourses

How Communities around the World
Make Sense of Climate Change





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5. What Does Climate Change Mean to Us, the Maasai?

How Climate-Change Discourse is Translated in Maasailand, Northern Tanzania¹

Sara de Wit

This chapter explores the varying ways in which the Maasai pastoralists in Terrat village in northern Tanzania give meaning to climate-change discourses. This study moves away from the idea that there is a “linear” (from global to local/science to citizen) and “correct” way of interpreting and understanding climate change as a scientific discourse, but turns the question around by asking “what does climate change mean to the Maasai”? Based on fourteen months of multi-sited ethnographic fieldwork, this chapter contextualizes climate-change discourses in the historical, environmental and political dimensions of the Maasai’s “interpretive horizons”. It is argued that local discourses and interpretations are not just barriers in the global pursuit for climate change adaptation, even if they contradict global discourses and policies, but reveal crucial insights about local priorities, values, and agency. In other words, the rejection of this new discourse should not be seen as a form of ignorance, but rather as an act of cultural translation and resistance.

1 This chapter is based on research that I carried out in 2012–13 for my PhD at the University of Cologne, and is a reworked version of Chapter 8 of my dissertation (de Wit 2017). My research was funded by the DFG, part of the SPP1448 priority programme, and supervised by Michael Bollig and Dorothy Hodgson, to whom I am greatly indebted.

Introduction: Climate-change discourse Dawns on Terrat

In northern Tanzania, where the Maasai pastoralists dwell, a nascent discourse about a changing climate is dawning on the rural village of Terrat. This new story resonates with the experience of some herders, who have observed a decline in rainfall levels, which they attribute to a decreased sense of morality in society. Others who have heard about “this thing called climate change” find this new scientific explanation unconvincing, or utterly confusing, since they see climate variability as old news. After all, the semi-arid plains of their homeland have always been prone to climatic extremes and fluctuations. The elderly in particular report that they have not observed unusual changes in the weather or climate recently, and they emphasize that the region has always experienced “bad years”.

Villagers who listen to the radio in Terrat hear about a global problem that is already affecting their locality, which will only become more severe in the future. And they are told that the main culprits of the looming crisis are the rich countries with their polluting industries, but that the Maasai—and all the other poor people in the world—will suffer the most. However, they are also told (mainly by their own government) that they are part of the problem, because they cut down trees for firewood and have too many cattle. They are encouraged to plant trees, and explain that carbon dioxide is dangerous, that God has nothing to do with it, that there is something called an ozone layer protecting the earth that humans are depleting and that science is real (more real than God), among many other things.

While the new prophecy is disseminated through multiple sources, such as non-governmental organizations (NGOs), researchers (like myself), the church and the radio, I observed an overall lack of climate change information, awareness and conversation.² Furthermore, while

2 The main language in Terrat is Maa, the Maasai language, which is spoken by the whole Maasai population, whereas the level of Swahili is generally dependent upon education, connectivity and exposure to external influences. There is one radio station in Terrat, which is the only radio station in Tanzania that broadcasts programmes in both Swahili and Maa. Many villagers own a mobile phone, but few have a smartphone, so internet access is very limited. Despite recent efforts to give women access to radios, they are still predominantly owned and listened to by men.

many informants indeed complained about the lack of rain, people's day-to-day worries did not center on the global climate crisis; they had more pressing concerns like a fear of losing their land, having access to basic health care, vaccinations for their animals, education and secure access to natural resources like land, water and grasses. Environmental hardships, such as recurring droughts and irregular rainfall, exacerbate this complex set of challenges (De Wit 2019). Based on fourteen months of multi-sited research carried out in Tanzania, this chapter discusses how climate-change discourse is translated, communicated and "received" in Terrat village.³ While much of the anthropological literature has focused on "observing" climate change (how communities perceive climate change directly as a sensory process), and a few studies have explored "receiving" (the uptake of scientific information through secondary sources), scant attention has been paid to interactions between the two (Rudiak-Gould 2013). In line with Rudiak-Gould, in this chapter I argue that understanding how people make sense of climate-change discourse requires taking both observation and reception into account. This is not only because people's environment and climate play an important role in how this new discourse is ascribed meaning; new discourses about a changing climate also shape the ways in which people talk about their environment (De Wit 2019; Rosengren 2018; De Wit 2015; Rudiak-Gould 2011). The first and most obvious reason for the lack of climate-change awareness—as a scientific and anthropogenic discourse—is a lack of access to information and education. However, my research made it clear that this "void" must be understood in light of Maasailand's complex historical, political, environmental, and ontological dimensions that comprise the broader interpretive context through which people make sense of climate-change discourses (De Wit 2017). But there is more to this absence, since there are villagers who have heard about climate change but were not impressed by (or were indifferent to) its apocalyptic undertone. This chapter explores

3 While the concept of "receiving" climate change is commonly used in reception studies (as proposed by Rudiak-Gould 2011), it has a somewhat passive connotation (the term "reader response" as used in hermeneutics overcomes this problem). I prefer to use the notion of translation, which denotes agency—a process in which the producer and reader of a text make an equal contribution.

this complex mixture of absence, translation, observation, and reception (including rejection). It investigates how the climate-change discourse is interpreted in Terrat and entangles old and new horizons, and how it is at times embraced by some, but refuted by others.

In dominant models of risk perception, communication and management, found in fields like natural hazard research and psychometric risk studies, a passive recipient of an independent stimulus is implied, as it is essentially concerned with information transmission and how to educate the recipient with minimum distortion (Rayner 1992: 85). While this insight is not new in media and cultural studies (see, e.g., Hall 1973), in relation to climate change research the preoccupation remains largely concerned with the question how to tailor messages to audiences (Nerlich 2017; Moser 2016, 2010). Both cultural theory and reception studies (in the modern hermeneutical tradition), diverge from such conventional theories of risk perception and the perceiver of information, or “the reader”, is treated as an active and social agent. Furthermore, against a common reductionist trend that exists in the social sciences and policy literature that views religion (and at times culture) as barriers in the larger project of climate change adaptation (e.g. Haraway 2016; Kuruppu and Liverman 2011; Paton and Fairbairn-Dunlop 2010; Taylor 1999), I explore the meaning-making processes as emergent knowledge spaces in their own right (Hastrup 2015) that emerge when climate change is received by the Maasai in Terrat. I argue against the “purification” (Latour 1993) of scientific and religious knowledges but rather focus attention to the ways in which people navigate different registers as they make sense of climate change and the agentive possibilities it affords. The disregard for both cultural but even more so religious perspectives in the literature emerges from a misunderstanding and secular rejection of religious thought, underpinned by “the desire to enforce the boundaries between the religious and the scientific” (Fair 2018: 5; Kempf 2017; Hulme 2014). In this chapter, I argue that the rejection of this travelling discourse should not be perceived as a form of ignorance, but as resistance—an attempt to remain faithful to one’s own set of norms, values, beliefs, principles of causality and “cosmological configuration” (Hermann and Kempf 2018; Fair 2018: 9; Kempf 2017: 34; Rudiak-Gould 2014, 2013). The (partial) refusal and other ways that appear to disrupt the hegemonic framing of climate

science can be seen as a form of agency in its own right (Fair 2018: 9; Hermann and Kempf 2018; Kempf 2017: 34).

In this chapter, I examine what happens when a rural village like Terrat is confronted with a new narrative about a changing world that carries a message of doom and decay. How do villagers, who have never seen industries, receive and translate this story for which they hold no responsibility, and within which God is relegated to the margins? The following account provides insights into a village that is confronted with a new (and still somewhat alien) discourse, which brings new explanatory pathways about a changing world and climate into being. I conclude by advancing the argument that translating this new discourse can only be meaningful for the Maasai if consideration is given to the question what climate change means to them.

Climate-change discourse is here referred to as “a set of various concepts, models and representations that comprises of scientific information about climate and climate change, which undergoes continuous translation by an array of translators such as scientists, journalists, governments, NGOs, activists, anthropologists, local communities etc.” (De Wit et al. 2018: 3). It is important to point out that climate science is not a monolithic but a vast and heterogeneous body of knowledge that consists of an array of varying perspectives, positions, methods, internal translations, etc. (cf. Dürr and Pascht 2017: 3). Furthermore, climate science (or climate scientists for that matter) is not necessarily secular, but this dichotomy might emerge in the translation of a “modern” discourse vs. a “traditional” one. I also do not assume an opposition between science and other “modes of existence” but scrutinize the emergent meaning making processes (Latour 1993). As philosopher of religion Berry has observed, while not being a novel insight per se, “over the past two decades many anthropologists have contributed to a critique of purportedly ‘objective’ scientific ways of producing environmental knowledge, arguing that, like the cosmologically grounded vision of many Indigenous societies, so too are the ecological ideas of Euro-American cultures colored by religious elements” (Berry 2016: 78), or underpinned by different “myths” of nature (Rayner and Heyward 2014; Hulme 2009).



Fig. 5.1 Terrat in Simanjiro District (Manyara Region). Cartography by Monika Feinen, produced in November 2015, CC-BY-ND.

Translating Climate Change in Terrat

In an educational short movie clip called “Climate Conscious Programme”, made by several NGOs and recorded in Terrat with a group of villagers, Maasai pastoralist Leboi⁴ is herding cows in the Simanjiro Plains.⁵ He and his fellow “actors” are lamenting about a changing world:

Actor 1: There are changes in this world and I don’t know why.

Leboi: There has been a prolonged drought, at least three years with little rain. Even those who came here from Kenya had their cattle die because of the drought.

Actor 2: So where will I give my cows water?

Then Emmanuel, a documentary filmmaker, sits with them under a tree and begins to explain in Maa:

4 To ensure confidentiality, the names of informants and organizations may have been changed or left unmentioned.

5 This movie was produced by an international NGO together with Tanzanian based organizations. The movie is scripted, so that is why I refer to these Maasai herders as actors. Translation from Maa was provided by documentary makers.

Emmanuel: Let me tell you something. I learned about this at school. We are not the only ones experiencing these changes. It is like if you pinch yourself on the finger. You will feel the pain all over. It is the same for the world.

Then Emmanuel takes a football that symbolizes the globe. He continues his explanation:

Emmanuel: Let's say this is the world we are living on.

Actor 2: That ball?

In the next shot the ball has turned into a globe.

Emmanuel: There is a place called America, which is here (points it out on the globe). And a place called Europe, here, and another one called China. These places produce a lot of smoke because they have a lot of vehicles, and airplanes, and they have these things called industries [see Fig. 5.2]. They burn a lot of fuels, like diesel, petroleum and oil. After they burn, the smoke comes out, which is called carbon dioxide. That is the bad one. The pollution rises into the sky where it affects our protective blanket. Then the blanket becomes denser and denser. And the whole world becomes hot.

Leboi: So now the world is like someone who is suffering from malaria. It is heated, becomes hot, and gets malaria.

Emmanuel: Right, these climate changes we are getting is because the world is heated. Droughts come and we don't get rains when we expect, like these past ten years. It is caused by humans and humans should fix it.

Actor 1: So it is not God's fault?

Emmanuel: It is not God's fault. This is not caused by God. It is caused by humans themselves. Like those countries I mentioned. So don't cry to God, we are destroying our environment ourselves.

Actor 1: So humans are beating themselves?

Emmanuel: Yes, we are. It is caused by humans and humans should fix it. Yes, humans should have to stop cutting the rainforests we still have. And protect the world's forests for our future generation. Our protected trees will help meet the growing generation.



Fig. 5.2 Image from an educational video in which a documentary filmmaker explains to several Maasai from Terrat about CO₂ and industries as the causes of climate change (ResourceAfrica UK). “The World Has Malaria—ClimateConscious”, 7:30, posted online by Max Thabiso Edkins, *YouTube*, 15 August 2012, https://www.youtube.com/watch?v=_Ay1snatTl8&t=2s

While this scripted video was created partly for educational purposes, considering its limited grassroots outreach possibilities, it may also have been intended to target donors and other policy-makers.⁶ The clip offers vivid insights into the process of translating climate change—including the mediating forms, materiality of communication tools and practices—at the very end of the “translation chain”. It reveals a glimpse of the climate narrative in the making; here, a story (supposedly) told by the Maasai to the Maasai, yet a clear NGO rhetoric can be discerned, in which a new allegiance is forged between Terrat and the globe. The actors are placed in the role of ignorant and helpless victims who need to be enlightened by NGOs, who operate as true “pedagogues of progress” (Englund 2011). At the same time, the villagers’ “observations” are used to confirm that climate change is real and actually happening. As historical geographer Bravo (2009) has pointed out, Indigenous people around the world are used as “proxies” of climate change, warning us of a looming catastrophe that one day will befall all of us (cf. Farbotko and Lazrus 2012; Farbotko

6 The educational movie was shown at the COP 17 in Durban, where it won a prize. Produced by ResourceAfrica UK, in collaboration with Ujamaa Community Resource Team (UCRT) and Tanzania Natural Resources Forum (TNRf).

2010). The video implies that the Maasai, while wandering around, are complaining to each other about a hotter world, questioning what is going on in the world, and therefore seek recourse to the NGO for clarification. Of course, the reverse is actually happening: the NGO aims to enlighten the villagers, and makes them question “what all this is”, prior to, and as a necessary step towards, their own intervention. The NGO is engaged in a process of “problematization”: it defines the nature of the problem and then “makes itself indispensable” to solving it (cf. Rottenburg 2005, 2002; Roe 1999; Roe 1991; Ferguson 1990; Callon 1984).⁷

This fragment can be read as the (staged) culmination point of a positive-feedback cycle in which different epistemologies are brought together and (unconsciously) strengthen each other’s gaze (see De Wit et al. 2018). It also reveals how the global is localized (e.g., the analogy with malaria, and how remote industries have a direct impact in Maasailand), and how the local is made global (plant trees to protect the globe). And while the polluting countries are named as the major culprit, the Maasai are also reminded of their own role as environmental destroyers. While I will touch here on the notion of cultural decline as trajectory narrative (see Rudiak-Gould 2013), inherent to the Maasai society’s self-critique, I will not elaborate on questions of externally imposed blame and responsibility (i.e. blaming the victims), since I have written about this issue in another context in which it was more prominent (De Wit 2015).⁸ Here, I focus on the

7 I have addressed this field of post-colonial power relations elsewhere, which pays more attention to the politics and practice of development and emerging frictions and shifting positionalities as actors move across different constituencies. In this development space, climate change becomes a political resource to maneuver oppressive politics, to leverage change and create opportunities in the absence of a benevolent state (De Wit 2019, 2018). These insights build on a larger body of literature of “brokers and translators” and critiques of development practice (Mosse and Lewis 2006; Mosse 2005; Bierschenk et al. 2002; Bierschenk et al. 2000; Rottenburg 2005, 2002; Roe 1999:5; Ferguson 1990)

8 See also the work of anthropologists Rudiak-Gould (2013) and Eguavoen (2013) on trajectories of blame and the translation of climate change. Their studies also demonstrate how climate-change discourses and local observations become part of the cultural narrative of “in-group blame”. However, they come to diverging conclusions. Eguavoen sees self-blame as something that “ignorant” societies need to be liberated from through education, while Rudiak-Gould argues that we need to approach it as a form of local agency. The latter conclusion is in line with my own research findings. Yet an important difference is that in Rudiak-Gould’s analysis

cultural and political meanings that emerge in the process of translating climate change through trajectory narratives that have been shaped by the complex and historically produced power structures within which this new discourse travels and is sustained. Trajectory narratives are defined by Rudiak-Gould (2013) as “discourses of the moral direction of society or the cosmos, with an associated sense of responsibility or blame for that trend” (Rudiak-Gould 2013: 10).

It is very tempting to understand the worldview of the Maasai (and other remote societies) in relation to natural dangers as “traditional”, and radically different from a “modern” understanding of the world. As one of the binary fruits of enlightenment thinking, we too easily create a dichotomy in which societies that are without science and technology are driven by superstition, whereas modern societies are allegedly intellectually free and have an “objective” view of natural dangers, such as climate change. Following Douglas (1985; Douglas and Wildavsky 1982; Douglas 1966) the common view has been that for all other societies that have come “before us”, every natural disaster is weighted with meaning and nature is thus seen as constructed and endowed with political, social, and moral significance. This is often thought to contrast with our understanding of modern society—that owes much to science—which is supposed to see nature as “it really is”, morally neutral and politically empty (Douglas and Wildavsky 1982). The authors’ objection to this alluring opposition is:

But no! Try not to get into an argument about reality and illusion when talking about physical dangers. [...] On this subject we shall see that there is not much difference between modern times and ages past. They politicized nature by inventing mysterious connections between moral transgressions and natural disasters as well as by their selection among dangers. We moderns can do a lot of politicising merely by our selection of dangers (Douglas and Wildavsky 1982).

Building on “cultural theory of risk”,⁹ in the following I explore the role of culture in risk perception and how beliefs about (the interaction

local communities embraced climate change, while in Terrat people were overall much more reluctant towards accepting it.

9 In line with Rudiak-Gould 2013, I adhere to the “general” model of cultural theory of risk rather than Douglas’s more rigid scheme based on group/grid distinction

between) society and nature, or worldviews, emerge as expressions of cultural priorities and preferences (Douglas 1985; Douglas and Wildavsky 1982) when the Maasai make sense of this new global threat. Following Douglas (1992), first of all (environmental) risks are undoubtedly always selected in ways that inhere in, protect and maintain a certain existing social order. Second, an important insight that has been reiterated by Rayner, Hulme and others in relation to climate change, is the universal phenomenon that moral and political beliefs are justified with appeals to nature (Hulme 2009; Rayner 2003). Nature is a mirror of societal behavior and thus operates as “a direct source of moral feedback for behavior, desirable or undesirable” (Rayner 2003: 278). The video fragment above underpins the highly-moralized tone of climate-change narratives. God is discarded as a causal agent and even fully removed from the explanatory horizon, yet anthropogenic causality and morality take center stage: “Humans are causing it, so humans should fix it”.

To explain different forms of causality attributed to natural dangers, Douglas and Wildavsky (1982) distinguish between two forms of pollution. The first concerns a strict technical type (like river or air pollution) that rests upon a clear idea of a pre-polluted situation that can be measured precisely and carries no moral load. The second notion of pollution is nontechnical and indicates a contagious and harmful state, with mysterious origins, which carries the idea of moral defect (Douglas and Wildavsky 1982). The latter, nontechnical pollution, which they refer to as “pollution beliefs” or “pollution ideas”, is of particular importance to my analysis. Yet when talking about observable changes in the environment or the weather, many of my informants referred to the first (technical) form of pollution. This is perhaps not surprising, as dwindling resources like grasses, plants, trees, rivers and water are more tangible, and indeed observable and measurable, than an abstract phenomenon like the climate. In the following analysis, I have reduced observations of climate change (or rather variability) to two main variables—rain and drought—because my respondents named them as the quintessential features of the

climate (rising temperatures were only rarely mentioned) in this environment.¹⁰

Nothing New under the Sun: On the Climate's Inherent Variability in Simanjiro

In a good year, the period of long rains produces an abundance of lush pastures, blossoming flowers, and sufficient crops like maize or beans to feed the family. It is a time of exceptional beauty and plenty. The rains give both people and cattle the chance to recover from the harshness of the dry season and regain their strength in preparation for the next dry season. There is no need for long-distance movement during this season, because the grasses and water can usually be found nearby. Families are united; there is time for leisure and ceremonies as there is enough milk and meat to share.

The contrast with the dry season could not be sharper: the area turns into a semi-desert with dust clouds covering the pastures. The water resources slowly dry up, and food for people and cattle gradually diminish. Both must travel greater distances to search for green pastures and water sources. The selected *illmuran* (young men, often called warriors) are sent out on their exploration journey (*eleenore*), and then report their findings in the traditional meeting (*engigwana engishu*) in which strategies for the dry season are planned. It is the time of scarcity. Women's daily activities become an ever-greater burden as women need to walk great distances to find firewood and water. Cattle and people lose weight and strength, and their concerns grow until the first signs of rain appear.

10 Although the climate consists of many more components than rainfall, its vital role in shaping and maintaining pastoralists' livelihoods (and religious convictions) legitimizes the overall focus on rain, and drought, as its counterpart (see Chapter 7, Attribution Science).



Fig. 5.3 Children milking a goat (photo by author, 2013), CC-BY-4.0.

The seasonal variations in Terrat's climate impinge powerfully upon peoples' day-to-day activities and their physical and social well-being, as well as upon the environment and the ways they perceive and relate to it. Mainly elderly villagers did not give testimony to (conspicuous) changes in the weather and the climate, nor were they familiar with climate-change discourse. Because they had never heard the term *climate change* (in any language), their accounts principally relied on the experience of sensory observations and (social) memory—i.e. the entire body of customary climate knowledge and environmental lore (Oba 2014). The ways in which social memory is passed on and reproduced in Terrat include warrior songs, in which *illmuran* sing about past hardships and adaptation strategies, and the names that are given to weather and social eventful years.

During interviews, my research partners and I asked informants whether they had observed changes in the weather, rainfall, or seasons compared to when they were young.¹¹ Their social memory echoed many dry spells, climate fluctuations and variability, years of hardships, environmental catastrophes, hunger, and events that were remembered

11 For translation of the concepts I relied heavily on the skills of my research partner Saruni Shuaka Kaleya, who did an extraordinary job of communicating the nuances in Swahili and Maa. Musa Kameika and Naini Morell were also indispensable in the whole research process. Language is crucial in the interpretation process, and especially challenging in this case as the term climate change is translated from Swahili to Maa, for which no official term is established, yet its linguistic politics reveal the struggles for meaning making. For a more detailed discussion of language and the translation dilemma, see De Wit 2017: 157.

by their own parents. Some elders recalled the years when they suffered from hunger. For instance, they mentioned years in which they were forced to eat the skin of their animals to survive. This was during the time when they were nomadic and did not use maize or other crops to supplement their diet. They pointed out two crucial coping strategies that enabled them to survive the dry season: mobility and drinking animal blood. Many elders referred to the period in which drinking blood was still a common practice, some with nostalgia but others with God-fearing disdain, which is a more recent sentiment inspired by Christian churches, mainly propagated by the Pentecostal church but is found in other denominations as well (De Wit 2017). But there was a consensus regarding the importance of both practices as vital survival strategies in the past. In brief, flexible adaptation mechanisms formed the lifeblood of a nomadic way of life in Maasailand, as hardships, environmental hazards, and catastrophes have been part and parcel of the highly variable climate.

Against this background, the first question related to pollution beliefs arises. If pollution indeed denotes an abnormal state, how does one, under such stochastic conditions, define the “normal” condition that is breached? In order to understand the reasons why climate change as a new global discourse enters as an alien idea, and is somewhat at odds with local realities, we need to make sense of the climate in Terrat and in the wider Simanjoro Plains, which is spatially and temporally highly variable (Leslie and McCabe 2013). This semi-arid environment is characterized by unpredictable, pronounced climate variability. As one informant explained, “[...] in our locality the climate knows a lot of fluctuations. One year you might expect rain and there will be no rain, in another year you expect drought and there is enough rainfall”. Some informants found my question about changes in the rainfall compared to the past incomprehensible and referred to this variability as being the norm. For example, one responded: “of course the rains have changed; they have never been the same in this locality”. A woman of approximately one-hundred years old reported, “There are no changes. The weather was like this from the very beginning. Sometimes there is less rain, sometimes there is more”. The climate follows a bi-modal rainfall pattern, consisting of short rains (November–December) and a long rainy season (March–May/June). The fact that many people

named different periods for the long and short rains also attests to an inherently variable climate.

Moreover, my informants pointed out that the unpredictable climate of this area was a great obstacle to cultivation, which was characterized as random trial and error. For example, one man told me that, “farming is some sort of gambling game, sometimes you win but more often you lose”. Yet, despite frequent crop failures many villagers continue to cultivate, as the benefits of one successful harvest may outweigh the costs of many failed attempts.

Socio-Environmental Context of Simanjiro

Depending on the altitude, rainfall in the semi-arid rangelands of Simanjiro averages around 500–800 mm (Igoe and Brockington 1999) or 650–700 mm annually (Sachedina and Pippa 2009). This drought-prone region is among the most diverse and complex grassland savannah ecosystems in the world (Baird 2014; Olson and Dinerstein 1998). Despite the lack of meteorological data available for the wider area, the defining characteristics of unpredictability and fluctuation stand out. My informants highlighted the extreme spatial rainfall variability in the area. For instance, Meshack, the traditional leader, said, “It can rain here in this *boma*, but look at that *boma* over there and you see, there is no rain at all!” So how does one define a norm—and, consequently, a deviation from the norm—within such a hazard-prone and unstable environment? Despite the fluctuations, there is of course an approximation of regular seasonal patterns within the irregularity. Yet, while a clear dry season can be discerned, the rains differ greatly from year to year and place to place. Hence, some of the climate-cognizant informants found this notion of climate change challenging; for them it rather echoed something that the Maasai have already experienced in the past, as the following interview fragment with the traditional ruler of Terrat shows:

Traditional ruler: The first time I heard about climate change was in 2009, when some people who were sent by the government were going around telling about climate change. And also there were some people who came to observe climate change [researchers] and I was taken to ewas (dry season reserve). I tried to ask them many questions, and they told me that it is the industries destroying the ozone layer. That is what these white men told me. [...] So, when I heard about these changes, I went

to Dar es Salaam, talking about climate change [together with Leboi]. [...] So now I really observed the changes because the Maasai have their own way of predicting rainfall, but nowadays it is very complicated. It is difficult to apply. You may apply but the answer may come in the wrong, wrong direction.

Researcher: And what did you think when you heard about it for the first time?

Traditional ruler: So, when I heard about this climate change for the first time, I thought it is just a repetition of the past. Because many years ago you may find five good years and then again seven not-so-good years. So, this is what I thought when I heard about climate change, that it is about these old changes of five good years, and seven bad years. But by then, I did not know about the industries yet. Because I am saying only what I know. Here in Tanzania there are no big industries, which could maybe destroy the ozone layer or change the climate of the earth.

Researcher: Do you understand now what it means?

Traditional ruler: I don't understand it very well because I did not carry on with those researchers. The government is not serving to educate people here in the village about climate change anymore. But I think that these changes are maybe those changes of five good years and seven not very much good years. We had many drought spells in our history.

[...] it seems that with our generation the situation is going in a bad direction. Also, the life expectancy of the people. In the past, people could live for 100 years up till 150 years sometimes. But nowadays a person can live only 70 years and we say "the man is too old, he is 70 years".

Notwithstanding the manifold statements about the lack of rain and intensifying drought and irregularities, communicating climate change is fraught with translation challenges, since global discourses on climate change tend to portray an unstable climate as a deviation from normality, albeit on much longer timescales than is recounted in oral memory. We spoke with an eighty-five-year-old man who had never heard of climate change. When we tried to explain it to him, he recalled the droughts of the past, and the years in which the Maasai suffered from hunger: "These are the same changes that we had in the past. First, there are seven good years, and then three bad years". His comments highlight how talking about changes in the weather and rainfall patterns cannot be detached from societal changes, since they go hand in hand with

accounts of people's general wellbeing, altered lifestyle and customs, and eroding values and morals. This finding is in line with Fleming and Jankovic (2011), who advocate a less reductionist view of the climate as "a framing device in which the verities of life such as food, health, wars, housing, economy, social movement, or local identity change synchronically with *Klima*".¹²

It is crucial to bear in mind that the villagers of Terrat have abandoned their nomadic lives based solely on pastoralism, and cultivation and living in more permanent settlements is common nowadays due to a history of enforced relocations into permanent settlements and land alienation.¹³ This has inevitably changed peoples' understanding of (and relation to) the climate. Mobility restrictions and the loss of grazing areas have changed their livelihoods and encouraged diversification strategies such as cultivation, and have deeply altered what it means to be Maasai. A middle-aged man commented on how shifting human—environment relations and changing perceptions of the climate go hand in hand: "It could be that the rains are less nowadays, but it is hard to tell because we are also more dependent on rain because we live and eat differently. Our mentality has changed".

In a similar vein, a middle-aged woman explained how she perceived a change in relation to ritual prayer, as opposed to the church:

The years have changed, and people have changed. Nowadays people are eating a lot. In the past, you could have one bag of maize, but now you buy a lot of bags and put them in store, and you finish all of them. Families are big now. Now we also don't take blood because the church has prohibited the drinking of blood. And when there was no rain, we would just take a goat and women prayed to God and sacrificed a goat, then it would rain again. During the days of sacrifice it rained a lot.

12 *Klima* is of Greek origin. It refers to the inclination of the sun in relation to the earth, which partly regulates the global climate.

13 The Tanzanian government's attempt to relocate and "promote" agriculture and the sedentary life goes back to colonial times when the Maasai were forced to live in one of the most desolate areas in the country, but was also part of Ujamaa, which established a nationwide villagization programme that forcibly relocated people into so-called Ujamaa villages. In northern Tanzania, this resettlement was known as Operation Embarnat (Maa: "permanent settlement"), and many Maasai herders saw this operation as another attempt by the state to appropriate pastoral rangelands (Sachedina 2008: 110).

A lady, approximately ninety years old, spoke about land use and the difference in individual property as opposed to open access: 'There was one year without rain when I was a child that I cannot forget. Nowadays it happens more often. But in the past land didn't belong to anybody, so we moved until we found grass. Now everybody has his or her own land, so you have to stay in your own land.' Another very old woman remarked about changes in the weather: 'Perhaps the weather has changed, but we have changed too. We used to follow the clouds; nowadays we have settled.'

Thus, while following the clouds guided the Maasai's relationship with their environment and the climate, due to drastic changes in their ways of living, it is not fruitful to disentangle climatic and societal changes. What can we learn from these stories about change in relation to pollution beliefs? Following Douglas and Wildavsky (1982), since pollution beliefs are based on the idea of moral defect, they serve as a useful political argument because they trace causal chains from actions to disasters. Furthermore, as discussed below, these ideas about pollution are also the product of an ongoing political debate about the ideal society (Douglas and Wildavsky 1982). Talking about the climate is more than just a discussion of an atmospheric reality; it encompasses the socio-cultural, political and religious realms of society.¹⁴

On the Climate—Morality—Religion Nexus

Thinking about nature and climate in relation to culture and human society is as old as anthropology itself (and goes all the way back to intellectual forebears, who developed "climate theories", such as Hippocrates, Montesquieu, Ratzel, etc.; see Dove 2014). Recently, a large body of anthropological and social science literature is emerging that casts new light on these questions of morality, causality (blame/responsibility), and belief (rejection) in relation to climate change. Reception studies is one of such subfields (see Rudiak-Gould 2011) that seeks to account for a "located hermeneutics" (Livingstone 2005) by exploring the widely

14 This chapter focuses largely on the basic cosmology of the Maasai and the encounter with climate-change. Yet, I emphasize elsewhere that adaptation to climate change is intricately bound to the politics of land use and long history of marginalisation (de Wit 2018; 2017).

varying and radically different interpretations of the idea of climate change across the world. In the course of my fieldwork it became increasingly clear to me that what I perceived to be a climate change “void”, in the sense that climate change was not prominently discussed, in fact revealed something very crucial, perhaps even existential. While I was interested in peoples’ understanding of climate change and related (weather) observations, our conversations largely prompted stories about the loss of culture and respect, society, love, money, globalization, church, traditional religion versus Christianity—almost everything that encompasses the changing Maasai culture and ways of being and believing. Therefore, making sense of local climate accounts required broadening my “environmental horizon” and being attentive to the life worlds, practices and ontologies that overlapped in peoples’ rain tales. For example, many elderly informants recalled that they and their forefathers had adapted to the climate by “following the clouds as long as we can remember” and deplored its current impossibility. And while pondering the climate and environment of the past, their nomadic lifestyle was often invoked, but so was their cultural identity and what it once meant to be a “true” Maasai. I argue that understanding these stories of cultural and environmental decline is vital for making sense of how climate change is interpreted and translated. As many scholars have demonstrated, these “prior commitments” (Jasanoff 2010) or pre-existing political norms (Cass 2007) profoundly influence how people assess, translate, respond to and render anthropogenic climate change meaningful (or not). Moreover, they shape the ways in which responsibility and blame are attributed to society (Eguavoen 2013; Rudiak-Gould 2013).

On Temporality and Degradation

While the older group of informants often emphasized the physical hardships of the past and did not romanticize the nomadic way of life *per se*, their social memory similarly spoke of ecological abundance, and echoed the vigor of cultural norms and values that they perceived to be prevalent in those days. Sufficient grasses, abundant trees, plenty of water, animals, and flowing streams were all imagined as part of the ideal past and mentioned on a par with the rootedness of cultural

values such as respect, love, reciprocity, faithfulness and solidarity. In early ethnographies it is clear that mutual respect, *enkanyit*, formed the heart of Maasai culture and sociality. *Enkanyit* has been the lifeblood that sustained relationships of reciprocity and access to shared natural resources, and was expressed through appropriate greetings, forms of address and behavioral codes that differed according to age, gender, and kinship relations (Hodgson 2005; Waller 1999; Spear and Waller 1993a). The themes of love and respect were very prominent during interviews and referred to principles of solidarity and reciprocity that are said to be disappearing from society. Male informants often attributed this moral decline to encounters with other cultures, and processes of globalization and modernization, as Petro explained:

People were spreading love a lot. So they were visiting each other during the night and during the day, to exchange ideas and to spread love. But this is now disappearing. These things are changing because of the introduction of other cultures.

A very old man related the changes of culture and rain in society to the introduction of industrial oil, which can be understood as a symbol of a monetary economy:

Rain is a big problem. Things have totally changed and the one who changes these things is God. A big problem is lack of rain and human diseases. Increasing of diseases and this is due to industry oil that nowadays people prefer rather than butter. And also during the dry season—during hunger year—we drank blood from the cow and cooked it for kids, but nowadays you cannot do something like that. [...]

Men by and large spoke about money, modernization, and globalization in general, or a change in *oregie* (culture and customs). Fascinatingly, the group of elder women unequivocally deplored the eroding of *enkanyit* and *enyorotto*—the disappearance of respect and love—from society, which was often brought up in relation to the lack of rainfall. This female preoccupation with respect can be explained by a gendered conception of morality, as historically women were considered to be naturally more religious and closer to *Eng'ai* (see below). As such, they saw it as their responsibility to ensure the moral order of the daily world (Hodgson 2005); a role that they continue to assume and fulfil today (Hodgson 2011; see also the work of Todd Sanders (2004) on gender

and reproduction, power, ritual and rain in Tanzania). A widely shared explanation given by female informants of the decreased rainfall was based on the moral conduct of society, and the lack of *enkanyit*. The following quotes from female informants illustrate the close association between rain, morality and (more implicitly) gender:

The rains are bad nowadays because we are behaving badly; nobody is respecting each other any longer.

People nowadays cannot even greet you properly any longer. Our society is losing its culture, and people do not love each other anymore. This is what is causing climate change to happen.

When God decided to give us no rain, it is because we have sinned. People only want money nowadays. So they kill each other, have abortions and go to the mines.

When I hear that there are changes in the weather this is maybe because of wrongdoings like homosexuality.

Attributing responsibility for natural disasters (or climate and weather anomalies) to society is a common way to protect a particular set of values, which belong to a particular way of life (Douglas and Wildavsky 1982). Sufficient rainfall denotes a condition in which a stable and peaceful world is imagined, and things are as they ought to be. God is content and expresses Her satisfaction by blessing people with rainfall.¹⁵ In a year of severe drought, pollution beliefs speak about chaos and instability due to society's moral defects and invoke Maasai's cultural loyalty and religious faithfulness of the past. Faced with past and ongoing pressures from the forces of "modernization" and political economy, it is not surprising that for the Maasai, values that deserve protection are mostly related to their cultural identity, which they feel is under threat. In other words, discussions about the climate and the environment also have a temporal dimension in which a somewhat utopian and timeless culture (including knowledge and power) of the past is remembered, mirroring the ecologies of abundance.¹⁶ As mentioned above, this does

15 The Maasai supreme being Eng'ai is almost universally referred to as female.

16 An anonymous reviewer commented that "the utopian vision of the Maasai past is not just an imaginary time of abundance; it's an account of nineteenth-century Maasai dominance of the regional political economy". My answer to this is that social memory is shaped both by historical events and trajectory narratives (i.e. a

not mean that the climate or environment were (imagined as) stable; rather, these trajectory narratives of the past should be understood in the context of conceptions of time about the future to which I now turn.

Two questions arise in this context. First, what can we learn from an imagined pristine past and a perceived-to-be eroding present? Second, how do we give meaning to a relationship between nature and morality that is inextricably intertwined? I first briefly explore the temporal dimension before probing the question of morality and the climate in more detail. As mentioned before, rain tales about the past are a commentary on an ideal present. To paraphrase anthropologist van Beek (2000, 1999), there is a strong identification between society and the climate, as the latter forms part of a shared identity. What follows from this observation is that “we are the climate”, and conversations about the climate are meta-commentaries on society. As such, van Beek (2000) argues that climate-change discourses are a critique of society in which worries about the future are expressed. To explore the question of whether environmental degradation has repercussions on oral traditions (myths and other stories reflecting on the relationship between humans with their source of existence), van Beek explores projected futures in various cultures, and interrogates tales about end times.

Furthermore, van Beek argues that inherent to this message of decay, in which the present is less powerful than the past and the future is again less powerful than the present, is the notion of diminished resources as well as the loss of power and knowledge.¹⁷ And based on my own findings, because relations of reciprocity are vital in times of duress such as drought, talking about the climate of the past similarly evoked a nostalgia for a time in which faith, culture, love and respect were strongly anchored in the social and cultural fabric of life. Finally, according to van Beek, the explanation of this sense of gradual loss in tradition and ecology over time stems from the dynamics of orality. So in rituals and local discourse, tradition is considered to encompass the wisdom and practices that are passed on from previous generations,

culturalist narrative of decline, see Rudiak-Gould 2014) that inhere in a society/culture, and in which a particular future trend is imagined.

17 The discourses on tradition are different from the dynamics of tradition itself, which are flexible and adaptive (van Beek 2000). Horton also states that many African people see their cosmologies as timeless, which does not mean they are frozen (Horton 1975).

which is seen as a weak reflection of the past and leads to an even bleaker future (van Beek 2000). This observation indeed resonates with the ways in which my informants spoke about the current generation, and the fears they expressed about for example, “the direction of the bad changes for the future”. Rain was a tangible trope for contemplation and what Rudiak-Gould calls “in-group blame” (Rudiak-Gould 2014), as the following quote from Rehema, a female elder, illustrates:

Our culture is changing a lot because when we were young the children used to have respect for their parents. But this generation does not listen to their parents. [...] Today there is no love among the people; that is why life has changed. Today you can identify somebody who is poor, but in the past you could not because of love among people. [...] There are also changes in rainfall. In the past there was enough rainfall but currently there is not enough rain, which puts people in trouble. These changes in rainfall are caused by the church. Because in the past we used to sing in case of a bad year. We sang, gathered together with the women and sang to God “give us the rain”. We were also going to *Oloiboni*. He told us “do this and do that” and the rain came. But today people are not visiting *Oloiboni* any longer—that is why it is not raining as usual.

Here too, temporality and the trajectory narratives of culturalist decline play a role, which go back to the colonial encounter but also to the more recent establishment of the first Christian churches. In the quote above, Rehema attributes society’s moral failure and the lack of rain to the introduction of the church, although she is a Christian herself. When I asked her about this, she explained that early Christians were very different from the contemporary Christians, because the first churches (e.g., Catholic) were much more tolerant towards Maasai culture, while the more recently established denominations (e.g., Pentecostal) have suppressed varying forms of Maasai cultural expressions and material culture, like wearing ritual attires and jewelry. The trajectory narrative of cultural decline is coupled with in-group blame—a causal and moral explanation of that trend—in which the Maasai are ultimately to be blamed for their own cultural abandonment (cf. Rudiak-Gould 2013, 2014).

Her account also touches on other dimensions related to the second question posed above. In order to make sense of climate change “realities” (both observation and reception) in Terrat, we need to gain insight into the complex interconnection between the climate, morality

and religiosity, which is in turn vested in local institutions and systems of power. It is important to note that, although we owe many conceptual polarities (e.g. nature/culture; body/mind; fact/value; subject/object) to Enlightenment thought and practice, the contrast between the “sacred”, “religious”, and “spiritual” as opposed to the “secular” realm is a residue of the same purification process (Armstrong 2009; Taylor 2007; Hodgson 2005; Latour 1993). Nevertheless, as Hodgson (2005) argues, while this opposition might hold true for some societies, the case of the Maasai reveals that until the twentieth century the secular and the sacred were one and the same.¹⁸ Indeed, the Maa religion has no word for religion; they have adopted the Swahili term *dini* (from Arabic) (Hodgson 2005). Therefore, in line with Hodgson I use “religion” as an analytic term to probe and discuss the beliefs, convictions, (ritual) practices and experiences that express a relationship to some powerful divine being(s) or essence(s) (see Hodgson 2005), and to explore the stories that reflect on the Maasai’s relationship to their source of existence (van Beek 2000).

On Continuity: *Eng’ai ai!*

God is God. Who enables the sun to shine and the rains to fall. *Eng’ai* means three things: God, sky [or heaven] and all its contents, and rain (*Koko Theresia*).

The most common answers to the question of what could cause these changes in rainfall were “I don’t know”, “Only God knows”, “We cannot know God’s secret”, “God brings us the rain”, “God decides”, “It is God’s plan and She changed a lot”, “Nobody can change the years but God and we can receive the changes from God”, “Nobody but God is causing this, so nobody is causing it. Just the condition of the weather by God Herself is causing these changes”. Thus, while the former section revealed how people are seeking an explanation within society—the climate as a mirror of society’s behaviour—the realm of

18 Philosopher Charles Taylor, in his seminal book *A Secular Age*, has also stated that it does not make sense to distinguish between aspects of society as we do in the West, such as the political, economic, religious etc. Hence, the role of religion in “early” societies should be treated as interwoven with everything else rather than as a separate “sphere” of its own (Armstrong 2009; Taylor 2007: 2).

rain ultimately and exclusively belongs to the sole supreme entity, *Eng'ai*. And it should be emphasized that in addition to the gentle eschatology mentioned above—in which time might be running down and fading away gradually, an idea in which the present is a weak echo of the past—for the Maasai, the future remains an inaccessible domain shrouded in obscurity. Considering the precarious bond that has existed between Maasai pastoralists and rain, it comes as no surprise that the nature—culture connection is engrained with religious and symbolic meaning and ritual interaction. My conversations with people revealed that an intrinsic transcendental and moral connection exists between God, society, and the climate: indeed, the most significant word in Maa, *Eng'ai*, simultaneously means God, rain, and the sky (or heaven). The weather is a tangible manifestation of *Eng'ai*, a way to communicate Her satisfaction as well as discontent with the people. Sufficient rain is received as God's grace, while prolonged droughts are understood as a curse. Drawing on early ethnographies (such as Merker 1910; Hollis 1905; Johnston 1902), Hodgson (2005) describes the Maasai and their relationship to the environment and religious practices as follows:

As pastoralists, Maasai had a close customary relationship to and dependence on the environment for their sustenance and social reproduction. Nature and its elements were understood as manifestations of *Eng'ai* or expressions of Her will, and were therefore central to Maasai religious beliefs and practices. The symbolic meanings of these aspects of nature were dynamic and contextual; they were shaped (and reshaped) through their use in ritual practice, and, in turn, shaped the form and content of these practices (Hodgson 2005: 25).

Although *Eng'ai* manifests Herself in different forms and goes by many different names, the Maasai religion is a monotheistic belief system. Despite the mass conversion to Christianity that took place in Maasailand relatively recently,¹⁹ tales about the weather in relation to God and society form a testimony to this persistent and intricate relationship. While the Maasai's adoption of Christianity (or Christianity's adaptation to the Maasai) has entailed ruptures in certain cultural and religious forms and practices, a continuity in religious conviction and belief can be observed

¹⁹ For example, as late as 1969 it was estimated that there were no more than 300 practicing Maasai Christians in the Evangelical Lutheran Church, even though many more had been baptized (Groop 2006).

in exploring climate—society interactions. I argue that the continuity of an entrenched faith in *Eng'ai*, which helped smooth the conversion to Christianity, for the very same reason makes climate change (and the ways it is translated) difficult to accept.

The notion of an inner spirit or soul (*oltau*) is also important to the Maasai. As Hodgson demonstrates, conversion was seen as a process that took place outside of an individual's will; it was instead found in the readiness of a person's *oltau* (Hodgson 2005). Disentangling "Maasai religion" or cosmology from Christianity is unfruitful. As with any tradition or culture, Maasai culture, religious beliefs and practices have always been in flux, highly diverse and dynamic (Spear and Waller 1993b). Furthermore, what are now considered "Maasai" practices and beliefs are amalgamations that resulted from complex histories of exchange and earlier encounters with other ethnic groups. Christianity is also just as dynamic and idiosyncratic as the Maasai religion, and must thus be understood in its local expressions and manifestations (Hodgson 2005). For example, Terrat has a highly diverse proliferation of churches; the different denominations all have their own prescriptions, convictions, values, prayers, doctrine, (ritual) practices, (sacred) symbols, media, and material forms, etc. I do not seek here to map out the complexities associated with these various cults, but rather to point out that climate change is translated via the ontological and epistemological context that results from the encounter between Christianity and Maasai religion. While it is clearly impossible to exhaust all its constituents, we can distil some basic patterns of the pre-existing norms and commitments. As such, my take on Maasai "tradition" or culture aligns with a "coproduction theory", which treats it as the 'result of creative friction between past lifeways and newer influences' (Rudiak-Gould 2013: 11).

As an influential and externally imposed belief system that has travelled to Maasailand, we might very well draw lessons from the ways in which Christianity has taken root in the African context in general and in Maasailand in particular. Horton (1975) discusses comparative African pathways of conversion, and finds that the acceptance or rejection of Islam or Christianity is based less on the external religions themselves and more on the pre-existing thought patterns, values and socio-economic structure in the receiving society (what he refers to as

their “basic cosmology”). However, instead of seeking to find selection principles in either the basic cosmology or in external variables, I focus on the interaction and relation between the two in the “fusion of horizons”, which is the moment when an existential meaning occurs (Gadamer 1975). I approach interpretations of climate change as agentive cultural expressions or translations that emerge and become meaningful through existing interpretive horizons.

In the following, I discuss continuities and ruptures, with a focus on *Eng'ai* (supreme being) and the *oloiboni* (the local diviner and spiritual healer), who both appeared prominently in local rain tales.

According to my informants, the major difference between the Maasai religion and Christianity lies in the ways of worshipping—which relates to ritual practices and the enactment and strengthening of relations of reciprocity—and not in the “essence” of faith or believing in God itself. Informants spoke about faith at times as a way “to be faithful to” someone or something as a deliberate activity, thus implying a personal choice. There is a large body of literature on the anthropology of religion dealing with the difference between faith and belief, which is beyond the scope of this chapter, and I explore the terms here *ethnographically*. In their conversion process, their image of the divine being had remained largely unaltered; *Eng'ai* is still *Eng'ai*, as one elder woman explained:

There are not two Gods, there is only a single God. The only difference is the way of worshipping. That is why people used to surround a tree called *oreteti*. That is a tree that they believed when you surround it and sing God can listen to your prayers. [...] And normally they went to *Oloiboni* and tried to make him their God. But actually, there is only one God.

The Supreme Being played (and continues to play) the quintessential role as provider of rain, and all-natural phenomena—particularly those related to the weather—were understood as a manifestation of Her divine powers. The weather thus echoed God’s judgement—a common theme in religious traditions worldwide. In Maasai society, praying and asking for rain required mediation through authorized practices and ritual forms of purification, which were guided by the spiritual diviner

and prophet.²⁰ Yet the realm of God (and thus the climate) could not be known. Anthropologist Spencer (2003: 6) has argued that the Maasai see God as an all-powerful and arbitrary force of providence whose intentions cannot be known, even by the prophets, “who have no more than a dim notion of the nature of the cosmos”. As mentioned before, this notion of God (and the transcendental) as an undisclosed sphere inevitably influences ideas of the future. Spencer (2003: 6) goes further to argue that “the flamboyance of Maasai ceremony and self-regard is offset by a sense of resignation to an unknown and unknowable future. They see themselves rather like Plato’s prisoners in a cave, ill-equipped to delve into ultimate truths”.

While I am hesitant to speak of “ultimate truths”, my informants highlighted the notion of an unknowable future; they refuted any attempt to probe future climate scenarios, or any ideas of the future for that matter. Questions about the future were always cast aside with laughter, followed by “we cannot know”, or “only God knows”. Yet mediation with God was common and necessary, as the Maasai used sacrifices and (communal) prayers in attempts to repent their sins, re-establish social and moral order, and reinforce their bond with *Eng’ai*. Women served as the midwives between *Eng’ai* and Her people, for women were given the power to create new life (Hodgson 2005; cf. Sanders 2004). The forms of mediation and intercession with *Eng’ai* have changed since Christianity has made its way to Terrat, which has affected ritual practices that for example regulated access to natural resources.

On Rupture: *Oloiboni*

In the past, the mediation of rain took place through the ritual prayer under a sacred tree (*oreteti*), or close to a water source by sacrificing a black sheep or a goat.²¹ As women were considered to be more religious than men, to have a greater sense of spirituality and to be closer to *Eng’ai* (Hodgson 2005), this ritual was carried out by several women (in different stages of fertility) who prayed and sang naked while surrounding a dam. This ceremony was guided by the *oloiboni*, who was

20 According to my informants in Terrat, this practice has drastically declined over the years, but is still widely practiced in some other parts of Maasailand.

21 It must be a black one because this relates to morality and signifies a gentle God.

responsible for the timing and for giving instructions to the participants. The rain prayer now takes place in church, under the guidance of a pastor. Yet any member of the church (not only the pastor) can instigate the rain prayer. Whereas many elder women did not rejoice in this Christian democratic principle of praying for rain, others argued that the God of the church is still capable of bringing rain, “perhaps a little bit slower though” and “less powerful than in the past”. Overall, there is a decreased sense of the bond between God, society, and rainfall, for which people sought an explanation in either the lack of ritual or the loss of faith.

Mediating rainfall has always occurred through the dominant (religious) authorities and was brought about in connection with a transcendental force, *Eng'ai*. This hierarchy inevitably touches upon notions of power, and the question emerges: who has the authority to mediate (the epistemics of) the climate and rain? Female informants in particular have attributed the lack of rain to the fact that this ritual prayer through sacrifice has ceased to exist and blame the church for prohibiting this practice. One older woman recalled the effectiveness and power of this prayer: ‘After we carried out this practice by surrounding a dam, the rain occurred the same day and not any other day. The same day the rain fell down. But nowadays the church is not allowing us to go’.



Fig. 5.4 *Koko* (elder women, or grandmothers) dressed for a circumcision ceremony in the neighboring village Sukuro (photo by author, 2013), CC-BY-4.0.

The ritual prayer guided by the power of the *oloiboni* was important to bring rain, but faith also played a vital role. As one old man (non-Christian) put it:

When I was young people went to pray for rain with *oloiboni*. Praying for rain is about faith. When people went they had very strong faith, they were very faithful to him. Nowadays people go to church because they love church. It is difficult to know if they are truly faithful. The *oloiboni* is not remembered because they pray for Jesus. But the difference was that people were faithful and he gave the instruction of what to do. Now in church there are no sacrifices. In church there is only preaching.

A middle-aged man who was quite happy in church explained: “We do not longer believe in the power of *oloiboni* so we directly pray to God. Sometimes we make a special prayer for rain in church so that the rain may come. God normally listens to our prayers. When we realized that the rains came when we prayed to God, we left the *oloiboni*”.

However, many women made opposite claims. While generally being content with the church, they regretted that the ritual rain prayer—and their own role as moral mediators therein—no longer existed. While expressing their disdain about the contemporary *oloiboni*, in terms of channeling rainfall they found them to be good ritual leaders in the past, as they gave precise instructions about what to do. It is crucial to note that the *oloiboni* was not the one empowered to bring rain himself; rather, he was endowed with the power to mediate rain through *Eng'ai*. As one *koko* explained: “We visited the *oloiboni* and he tried to do something. Sometimes it would rain but not because of the *oloiboni* but only because God decided to give us rain”. Rain and power are intrinsically connected, particularly in a context where rain sustains all forms of life (for studies on rain and power in Tanzania, see also Sheridan 2012; Sanders 2004). Therefore, it comes as no surprise that rain is seen as a sacred matter that in part, both conceptually and linguistically, coalesces with the Supreme Being. When it rains, people exclaim, “There is *Eng'ai*!”. The disappearance of the ritual rain prayer—accompanied by the collective sacrificing of a black animal as a gift for *Eng'ai*—has entailed a weakening of the ways in which people (mainly women) sought redress for society's behavior and maintained a relationship with *Eng'ai*. This ritual power and redress were important regulatory principles that guided access to

natural resources and relations of exchange and reciprocity, which were crucial in adaptation to climatic fluctuations and drought.

Hence, they also find the explanation for the lack of rainfall in the eroding power of the *oloiboni*. Apart from the church, there is a more intrinsic reason for the *oloiboni*'s loss of ritual authority. When I asked people whether they still believed in the power of the *oloiboni*, many replied that this depends on the faith of the people. As Leboi explained: "God also depends on the faith of people. If somebody believes in the church he may succeed there, if they pray to the Maasai God they may also succeed there. It depends on the faith of the people".

Because of people's strong resentment of the diviner, I had assumed that this attitude also entailed a new and exclusive ontology that discarded his powers altogether. However, it appeared that the *oloiboni*'s powers are not necessarily "unreal" or that they cease to exist, but rather that getting in touch with him or establishing a bond involves engaging with ungodly spirits and the realm of the "occult". Furthermore, just as one's spirit or soul (*oltau*) operates like another inside oneself, who decides for you what to believe, the power of the *oloiboni* is not an intrinsic agentive force that belongs exclusively to him that he can exert over the people. Put otherwise, in addition to his own derogatory practices (that have become known as such as propagated by the Christian church) that in part corroded his power, for the *oloiboni*'s power to "work" he needed the dialectical enforcement from below that is enacted through people's faith. As one (Lutheran) man recalled: "When I was young others went to pray for rain with the *oloiboni*. It is about faith. [...] The difference was that people were very faithful, and he [*oloiboni*] gave directions for what to do in case of diseases. Now in church there are no sacrifices. In church, there is only preaching".

In this section I have explored the historically complex and intricate relationship between society, rain, and God, in which morality featured prominently and was sustained through ritual prayer and other ceremonies. These rituals fulfilled a particularly vital role in the face of severe drought in order to maintain social cohesion, strengthen relations of reciprocity and keep society together (for a comparison with Brazil, see Taddei 2013; 2012). Furthermore, whatever the external influences that brought about new cosmological configurations, and institutional

or ritual ruptures, the deeply entrenched notion of *Eng'ai* remains the quintessential lifeblood that serves as the foundation for this bond.²²

Climate Change as Disenchantment

The radio is one of the primary sources of information on global discourses in Terrat. The radio's reach in Maasailand makes it the only platform in their own language that weaves connections to international and national concerns and local environmental realities. Orkonerei Radio Service (ORS community radio) is headquartered in Terrat.²³ Its main vision is to enhance knowledge and educate the pastoralist community for the purposes of development by promoting accountability, equality, peace and unity. The service also seeks to empower Maasai women by establishing radio community groups and donating radios to women. However, I found that while the majority of men own a radio and listen regularly to radio programmes, women do so to a much lesser extent. Moreover, when women are at home, they have less time than men to sit and listen because they are burdened with an array of time-consuming household tasks. Hence, among my informants there were more climate-cognizant men than women, and often they had received the relevant information from the radio.

The ORS is an important source of information for the Maasai because it is the only radio station that broadcasts in the Maa language. It connects the Maasai to global concerns and mediates culture and tradition. In a sense it thus invokes and remediates notions of Maasai identity. The story of Babu (elder man) is a good example. When the radio station was established Babu was invited to present a programme

22 This is not to say that *Eng'ai* is stable and unchanging, as peoples' relation to Her were and still are continuously enacted and sustained through certain cultural and religious practices, but because both Christianity and Maasai religion are monotheistic belief systems, conversion afforded a certain continuity in religious experience of a continued existence of the Supreme Being. This is different from the encounter with Christianity and many other local/Indigenous religions in the world, where local deities and animist ontologies were largely perceived to form a threat to the gospel.

23 The radio station was initially owned by the Institute of the Orkonerei Pastoralist Advancement, which is a voluntary community membership organization founded in 1991. From 2009, the of the radio station's ownership was transferred to Orkonerei Mass Media, a Maasai-run company.

called “*Orngara le Maa*” [to unite the Maasai] about the Maasai language and culture. The programme seeks to unite all the Maasai throughout Tanzania and Kenya by informing people about their language and traditions. During the programme, Babu receives phone calls from Maasai from many different regions and they ask him questions about particular Maa words, ceremonies and habits, etc. According to Babu, this radio programme is very important because he has observed many cultural changes that are eroding important values such as *enkanyit*. He explained:

People are not following the Maasai tradition as in the past. For example, to make holes in the ears. Also, when there was no milk they could drink the blood from the cow but nowadays people are no longer doing that. The major effect is that people are leaving the culture and some people are dying.

For Babu, the radio programme is very important for keeping Maasai traditions alive; reminding the Maasai of their own traditions and language. However, while remediating tradition and cultural values, the radio also plays into the complex relationship between Maasai traditions and the disenchantments associated with modernity. As Englund (2011: 2326) compellingly demonstrated in his study of the role of the radio (and the hundreds of mundane stories that radio listeners shared) in Malawi, “insights emerge into how Africans pursue their desires under the condition of globalization”.²⁴

But in Terrat, the radio also increases listeners’ disenchantment with the world, and informs them of the dangers of globalization. For example, people hear about scientists who reject the existence of God, about nuclear wars, environmental destruction, industries, explosive weapons, air pollution, cancer, and climate change. When Babu heard about climate change on the radio, he thought it referred to a change in culture and the lack of respect in society. One ORS radio programme “*Mazungumzo ya Mazingira*” [Talk about the environment] devoted an entire episode to the topic of climate change. A special guest was invited, called Hassan, to explain the concept to the people:

24 The role of the radio in Maasailand merits its own ethnographic study. See for example the work of Englund 2011.

Hassan: It is the change based on environment, e.g. temperature, moving winds and rainfall. These changes are repeating all the time. [...] Scientific investigation found that changes are occurring [...]. Climate change can be human induced, and it is also naturally occurring. This is because human activities pollute the atmosphere. Human activities like burning charcoal and burning forests increase the level of CO₂ in the atmosphere and causes global warming. The industrial revolution, which began in 1730 caused emission of poisonous gases that made a layer of thick gases, and allows rays to penetrate, but prevented gases from escaping. These poisonous gases come from different places such as industries, volcanic eruption, burning charcoal or forest, explosion of weapons used in wars. [...] Trees that normally absorb carbon dioxide are being cut and this is very dangerous.

His advice to the people was to minimize industries and the burning of forests, and to motivate people to plant trees to reduce gases like CO₂. This explanation seems rather complicated for people who have never heard of CO₂, the atmosphere, the industrial revolution, or even science. Moreover, a giant leap is made between the global causes (industries) and local responsibility (planting trees). Another invited guest explained his ideas about climate change:

Frederik: This is caused directly by human activities. How does this climate change take place? Like I said. Directly by human activities. A human being because of her poverty can go into the forest and cut down trees for different purposes. For example, for charcoal burning and the smoke that is produced in this process is directly released into the atmosphere and causes climate change. This ozone layer is destroyed, and some holes are appearing, ozone layer depletion. [...] We are also the causes of this thing, since we are cutting many trees, burning charcoal [...].

The rest of the programme was dedicated to tree talk and how to sensitize people about tree planting and prevent them from cutting down trees. The anthropogenic approach to the climate features prominently in climate-change discourses. The NGO in the video fragment described above also explained to the group of actors that they should “stop praying to God for it is not God’s fault”, and that they have to plant trees instead, since humans—including the Maasai—are responsible. While in the educational movie the actors obviously accepted this scientific explanation, as Leboi has been perfectly able to reproduce it

in different public fora (including in his accounts to me), the reality of interpreting and translating climate change proved much more subtle, stubborn and complicated. In one of my many conversations with Leboi, he asked me a question that I had grown familiar with in the course of my stay in Terrat, and it evoked a fascinating and controversial point in the translation of climate change: “Is it true that there are people in Europe who call themselves scientists and who don’t believe in God?”

Researcher: Yes, that is why many people in Europe maybe don’t believe in God because they cannot find proof that God exists, because science is all about proving things and if you believe that you have to prove something before it can exist, you might lose faith in God. And instead you focus on science and technology. What do you think about science Leboi?

Leboi: I do not know the meaning of science. Probably you learn about that when you get education.

Researcher: Okay, well for example this climate change is based on scientific findings by measuring the temperature and rainfall.

Leboi: If these scientists are saying that climate change is happening, I can say it is true, these men may be correct in some things maybe. But if those scientists are saying there is no God, they are wrong. Because when I was growing up my parents never told me that God was present. But one day when I was still very young I was walking in the forest. I was alone. Suddenly, a very big and dangerous snake appeared and then I screamed: “Eng’ai ai! Oh my God”. I just mentioned it. So, I questioned myself and wondered: if my soul [oltau] itself seems to know about God, then really She must be present.

Leboi: So if these scientists say that God does not exist, do they have a different God?

Leboi’s confusion about the meaning of science was quite common; several others inquired about it too. And despite the scientific rationale that dominated these climate-change explanations, according to my informants it was impossible as well as completely senseless to reduce the narrative solely to a secular causality. The sheer idea of having no God (as those scientists and some NGO workers appear to claim) must mean that they have at least a different God, as Leboi’s *oltau* has revealed to him. The ways in which climate-change discourse and its scientific

underpinnings is translated by different mediators (radio makers, NGOs, educators, government officials, scientists, etc.) can be characterized as a hermetically sealed ontology in which human-induced climate change has discarded God as a causal agent or final moral arbiter. This explanation or translation does not resonate with the ways in which the villagers of Terrat perceive and relate to the climate, which is a cosmology based on inclusivity and continued transcendence. While for some it seemed possible to embrace (at least parts of) the new cosmological configuration called climate change—including a new vocabulary that speaks of industries, CO₂, and the atmosphere—nature's entanglements remain characterized by inclusivity, with *Eng'ai* as the seat of life and rain. This particular translation of climate change seeks to dislodge the weight of a relationship between rain, God and society, with a profane worldview emptied of God and purged of "superstition". The scientific complexity of the story also played a part in the demystification of nature. From Leboi's account we also learn that accepting or rejecting climate change is not a binary choice. His meaning-making process is agential, as he put forward his own conditions within which he can accept (a part of) this new prophecy. In other words, he is willing to accept the explanation for the idea that the weather/climate is changing, but not if he cannot stay true to his own set of values.

The example of Rebecca, a middle-aged Maasai woman living in Terrat, exemplifies a more general point about causality. We met Rebecca in Arusha during one of the many climate change workshops in which my research partner and I participated. Several Maasai villagers attended this workshop from different regions along with a few researchers and NGO workers. During the meeting, which was designed to sensitize grassroots people to the subject of climate change, I wondered what residents of a village like Terrat would possibly make of these graphs, models and statistics presented to them in PowerPoint. After we realized that one of the participants lived in Terrat, we got the chance to ask her these questions once we were back home. She explained that she was invited by PINGOs, the organizing NGO, after attending a village meeting in Terrat. When we asked her what she thought about climate change she replied: "It was very tough to learn about climate change because it was my first time and it was very complicated. But I myself

cannot know what causes these changes. Only God knows. Only God is the One who changes everything”.

For Rebecca, *Eng'ai* remains axiomatic in the ultimate judgment of the world, manifested in the weather. Similar to the process of embracing Christianity, the new climate-change discourse involves several approaches to belief and understanding that are not necessarily mutually exclusive. Leboi contends that the realm of rain is under the purview of *Eng'ai* and cannot be explained by science alone: human beings or industries might play a role in destroying the environment, but it is up to God whether to endow people with rain or not. In a similar vein, villagers perceived the role of scientists (at least what they were told about science and scientists)—who not only claim to be able to predict the weather, but also discard the existence of God—as some sort of self-declared apotheosis, the ultimate form of hubris. For indeed, nobody but God can decide about the rain and the climate. One of the schoolteachers who measures rainfall in Terrat explained to us that “People do not trust the information from the weather forecast on the radio because they do not know where they get the information from. Because there is no communication with God. Only if they communicate with God will they trust it”. A middle-aged man (here *mzee*, Swahili for older man) who seriously questioned the notion of climate change asked me the following revealing questions:

Mzee: We hear nowadays that scientists say there is no God, is it true?

Researcher: Yes. Some at least. [...]

Mzee: I think there is a God because She is the one who created us. Do you have an oloiboni in your country? [...]

Researcher: No. Not really [...]

Mzee: In your country there is no rainfall? Because in our country we say the rain comes from God. How do you explain rain? What about a thunderstorm? We say that it is God talking. What about in your country?

Researcher: We say that it is just friction between hot and cold air.

Mzee: Ai, ai, ai, it seems that science is really trying to say there is no God at all!

The role of the scientist is perceived as a self-declared “weather prophet” and is therefore rejected, for he assumes to be able to unearth God’s secret and thus incorporate Her power. It appeared that some cognizant informants were (in their own ways) able to relate to the scientific rationale underpinning climate change and its anthropogenic origin, and to take it seriously. But the notion that science could develop models for the future was irreconcilable with their own worldview. Eli, a forty-year-old man, explained:

I have heard about climate change on the radio. First of all, temperatures have increased. And also rainfall has declined. Industries which emit fumes in the atmosphere are causing this climate change to occur. And also, the application of weapons, explosive weapons during the war which turn the ground soil to come up. And also, cutting down of trees. [...] But nobody can answer the question how it will be in the future, because nobody can predict.

Although the church leader has taken over the ritual power to pray for rain from the *oloiboni*, the deification of the latter ultimately led to his own symbolic (and institutional) downgrading. Thus, whereas the pastor now assumes only a mediating role, the *oloiboni* has been taken to task for claiming to possess prophetic qualities, inspired by the Christian values that have been propagated. The fate of the scientist—who not only intervenes in the realm of *Eng’ai* by claiming to have forecasting skills, but at times even denies the existence of God altogether—seems to be similarly disqualified.

Yet the fact that people did not express “trust” in science and scientists does not mean they discarded all anthropogenic causes of climate change. As mentioned before, there has always been a strong bond between society, morals and nature, which means that humans *do* have agency to bring about cosmological harmony. From historical sources, we learn that *Eng’ai* (as in God, sky and rain) had a dialectical relationship of mutual dependency with *enkop* (the land or earth). So there was a complementarity between *Eng’ai* and *enkop*, heaven and earth; both possessed the agency to alter and maintain the relationship, for both humans and *Eng’ai* created and nurtured life (Hodgson 2005). So, bringing deforestation, population growth, and even industries and CO₂ into the causal chain of blame and pollution beliefs was for some informants acceptable and reconcilable with their own “prior

commitments". But discarding *Eng'ai* as an agentive force was considered to be a true disenchantment of the world.

The traditional leader who was very well aware about climate-change discourse, contested the initial Maa translation proposed by the radio station workers, *engibelekenyata engijape engop* [a change of air and earth]. He proposed a remarkable alternative: *engibelekenyata* (a change by *Eng'ai*). He explained: "You talk about rainfall, plants, temperature. Is there anybody who can change these things? No! Only God!" He also contended that the official Swahili version should not be translated literally (*mabadiliko ya tabia nchi*). As he stated: "*Nchi* [meaning country, earth or ground] is referring to us, but it is *not* us. We should not try to translate directly, because it will be misleading. You should look at what this means for us". According to the traditional leader, while explaining that industries are the principle cause of climate change, the domain of rain, air, and sky (or heaven) is, ultimately, in the hands of *Eng'ai* (De Wit 2018).

Concluding Reflections

Recently, scholars have begun to critique attempts that view religion as the basis for climate denial/rejection and thus merely as barriers in the larger pursuit of adaptation. What these perspectives share is the idea of a somewhat passive recipient whose local belief system stands in the way of a correct interpretation of climate change (Fair 2018; Kempf 2017; Donner 2007). Instead, I argue against this purification and rather wish to foreground the need for what Fair calls, "the potential for more-than-scientific yet not anti-scientific responses that are locally meaningful and morally compelling" (Fair 2018: 11). More critical scholars have recently identified different explanations for denial, such as in-group blame and trajectory narratives of decline (Rudiak-Gould 2014; 2013), or the incommensurability between specific spatio/temporal configurations (Rubow and Bird 2016); or the extent to which it offends a separation between sky and earth (Donner 2007). According to Donner (2007), denial and skepticism are a philosophical problem and are due to the conflict between an idea of human-induced climate change on the one hand, and the ancient belief that earth and sky are two separate domains on the other (Donner 2007). Donner's point seems to hold true

in Maasailand, yet there appears to be room for a “negotiated reading” (Hall 1980)²⁵ in which an interpretation becomes possible that is not necessarily antithetical to science. This means that, for example, both the industries and moral decay within society can be blamed for climate change, while at the same time it is in God’s hand to express and define the directionality of this change. By moving away from the idea that the public has a “knowledge deficit”, the emancipatory potential of public engagement approaches such as reception studies, lies in the fact that it sees the “plurality of perspectives among the lay public as the place to debate and build democratic consensus” (Bravo 2009: 4).

In this vein, I propose that the traditional leader’s pronouncement that “You should look at what this [climate change] means for us, the Maasai” is the Maasai prerogative for translating climate change. I have argued that the overall lack of climate-change discourses can only partly be explained by an absent state that continues to neglect one of the country’s most marginalized populations. As such, global climate narratives that foreground crisis scenarios do not resonate with local concerns, as people have other pressing issues to deal with: they lack the most basic access to health care, education, water, land, pastures, infrastructure, medication, vaccination and so on (De Wit 2018). In this chapter, I have argued that we need to examine the complex set of prior commitments—including entanglements, ruptures and continuities—that shape how this new narrative is appropriated, received and translated. I have sought to explore the historically produced norms of the Maasai villagers of Terrat within the broader historical, environmental and socio-cultural “interpretive context”, as well as epistemological and ontological dimensions that account for the possible incompatibilities between (the translation of) global discourses and local realities. Against the background of the longstanding marginalization of the Maasai and increasing pressure from a globalizing world, (partial) rejection of climate change as an incipient new doomsday scenario about the world should not be understood as a form of ignorance, but

25 Literary theorist Stuart Hall, who is closely associated with reception studies, proposed a communication model of encoding and decoding as a form of literary analysis in media studies. He focused on the key role of the reader/viewer, exploring the possible degree of negotiation and opposition among the audience and distinguishing three positions: (1) dominant (hegemonic) code; (2) oppositional (counter-hegemonic) code; (3) negotiated code (Hall 1980).

rather as an emergent knowledge space that affords agentic potential for resistance. In line with cultural theory's basic commitments, risk perceptions emerge in ways that enable people to stay true to one's own set of values. Comparable to Rudiak-Gould's findings in the Marshall Islands, among the Maasai in Terrat a culturalist narrative of decline, embedded in a gentle eschatology, speaks lamentably about the Maasai's historical engagement with the forces of modernity (e.g. Hodgson 2011), leading to in-group blame about the loss of respect (*enkanyit*) in society. Yet, contrary to the Marshall Islanders who almost unanimously embrace the new prophecy, the Maasai picture appears to be more heterogeneous and fraught with friction and incommensurability. This means that prior commitments alone cannot account for or predict how interpretation (ultimately) takes place, but more attention is needed for a contextual or empirical hermeneutics that explores the dynamic appropriation process within which reading and explaining takes place. I have demonstrated that the Maasai's relationship to the climate (as an element of the complex entanglements between Christianity and Maasai cosmology) remains embedded in an inclusive ontology in which society, morals and nature are interwoven—a way of living that ceases to make sense when purged of *Eng'ai*. The relatively new field of reception studies in climate anthropology is only beginning to reveal its potential to understand the various contextual factors that shape how people interpret and give meaning to the contemporary idea of climate change.

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