

# Everyday Weather

An ethnography of knowledge and environment in a Fijian village.



Nora Haukali

Thesis submitted in partial completion of Master's Degree  
Department of Social Anthropology, University of Bergen,  
June 2014



Front page picture: Walking to Lekanai during low tide

## Contents

Everyday Weather .....	1
Preface .....	5
Acknowledgements .....	6
Note on Fijian language .....	8
Map of Fiji.....	9
Map of Gau.....	10
1 .....	11
Introduction .....	11
Main focus.....	12
Earlier Approaches .....	13
Fijian weather .....	17
Island context .....	20
Gau .....	21
Methodology .....	22
Getting to Gau .....	22
Enrollment in Malawai’s social life .....	23
Language .....	28
Names.....	28
Chapter outline .....	28
2.....	31
The Cycles of Everyday Weather.....	31
Introduction .....	31
Morning in Malawai.....	31
The Rhythm of the Cycles.....	33
Saturday Fishing.....	35
Silent Knowledge .....	37
Response to Weather Phenomena .....	40
Time .....	43
Ecological Time .....	43
Garden planning .....	47
Spatial movement.....	48
3.....	51

The Perceptible Body: knowledge acquisition and management.....	51
Introduction .....	51
Knowledge acquisition.....	51
Learning .....	54
Sharing knowledge.....	58
Village economy .....	63
A transferrable knowledge .....	68
4.....	71
Thinking and Feeling Weather .....	71
Introduction .....	71
Prediction and Security .....	71
Tsunami warning in the village.....	73
Change of Winds.....	77
Deviation from the old .....	81
A Unique Knowledge.....	83
Lomani Gau.....	84
The Bricoleur.....	87
5.....	91
<i>Draki</i> and beyond .....	91
Bibliography.....	95
OTHER SOURCES.....	100

# Preface

From January to June 2013 I lived in Fiji, where I spent the majority of my time in the village of Malawai on the island of Gau. This thesis is a result of my fieldwork, and it is an ethnographic examination of the Fijian understanding of weather. How weather knowledge is used, shared, and managed between the villagers in their everyday life on a rural island, where people still live in close relation to the land. Gau is located rather in the periphery despite being part of the Lomaiviti Group in Central Fiji making it an interesting fieldwork location.

# Acknowledgements

First and foremost I want to thank the people of Malawai. Without you this thesis would never have been possible, and the warmth, generosity, and openness you showed by inviting me into your lives, changed mine. Vinaka vaka levu. This thesis is for you.

Joeli Veitayaki, thank you for welcoming me into your life, and for sharing your family with me. Without you my meeting with Malawai, and this great experience, would have passed me by. You have been of tremendous importance before, during, and after my fieldwork, providing me with new information and new questions through inspiring conversations. Thank you for all the help you have given me.

I owe a special thank you to my Fijian parents. Without you I believe I would have never survived life in Malawai. You patiently tried to answer my constant flow of questions in the best possible way, sharing with me every aspects of your life, and going out of your ways to help me in my search for “research data”. You made me feel comfortable, well-fed, happy, and loved. You will forever be my parents.

I wish to thank my supervisor Edvard Hviding. You inspire me with your love for the Pacific and its peoples. Thank you for the inspirational conversations when I first started my master’s program, the informative conversations throughout the writing process, and for believing in me and my project from the beginning. This has made the thesis possible.

To the Bergen Pacific Studies for interesting meetings and seminars, a great source of inspiration, as well as incorporating me into a social network where help, and comfort always could be found.

Thank you to my sister Claire, and my friend Ida who have read chapters, and drafts helping me immensely in the last part of this process. I am forever thankful.

And to my study group Erik, Osmund, and Mari; together we have shared many joys and sorrows. I am very grateful for our numerous coffee breaks, discussion groups, and late nights with just the right amount of wine. An extra special thanks to Erik, for being one of my

closest and dearest friends these past five years. Your great sense of humor and incredible friendship has been of great importance to me. The journey from a young novice to a graduated master student had not been the same without you.

I want to thank my Norwegian family. To my parents, thank you for your unconditional love and support. From an early age you gave me the opportunity to start exploring the world; through these opportunities you have given me my greatest gifts. Thank you for always understanding me. Lastly to my brothers, Ulrik and Jens; thank you for making me think of other things, and for that special bond only shared by siblings. Your wonderful passion for life has kept me sane.

# Note on Fijian language

The Fijian language requires a certain pronunciation of some of the letters as explained below:

*b* as *mb* in number

*c* as *th* in that

*d* as *nd* in under

*g* as *ng* in song

*q* as *ng* in longer

(Toren 1990)



# Map of Fiji



Lonely Planet

# Map of Gau



# 1

## Introduction

It was late afternoon the second week of my fieldwork, we were walking home from a funeral in Nacavanadi, Malawai's neighboring village on the north side. The intense heat of the day was on a retreat, the reef flat was bare, and the low sun was sparkling in the small ponds on the otherwise dry seafloor. We had arrived for the funeral early in the morning, and I felt tired from all the new information the day had provided. The people from Malawai had brought *dalo* (taro), pigs, and mats to the funeral, as had people from other villages. Who had provided for these gifts I did not know, but it seemed like a communal present to the family of the deceased. After the funeral was over, and the food was cooked and eaten, the late woman's family slaughtered a cow which was then shared between the present villages as a thank you for the food they had brought. The feeling of understanding nothing and the weight of all my questions made me exhausted. Not being familiar with the eating patterns on Gau I had not eaten much for breakfast – a huge mistake. I was hungry the minute we arrived for the funeral, not knowing people, and terrified of seeming like someone not tough enough to handle the village life, I said “no” when my Fijian mom asked me if I was hungry while we were helping with the preparation of the meal; the many hours of waiting were draining. Therefore after the funeral, the dinner, and the mandatory rest following a heavy meal, I shared the wish of a few women wanting to go home. Having only been in the village for a week I feebly asked them if it would be rude of us to leave, Malawai was only a twenty minute walk away, and the visitors from Vanuaso, the first village you reach north from Nacavanadi, had already left. They told me it would be ok to leave, but we had to wait for the low tide. It had not dawned on me that the ocean could complicate mobility, and when asking if we could not walk in the bush instead of on the beach they told me no; the inland river's water level would be higher with the high tide, making it impossible to cross. When the tide

withdrew I was accompanied by three of the youth men from Malawai not wishing to stay back and drink *yaqona* (kava), and their youngest children, who they carried on their backs. It had been an intensely warm day, and I was happy the sun felt less like a baking oven closer to sunset. I shared my thoughts with my company and they agreed. Actually they were a little worried. The last three weeks there had been very much sun, and it was too strong; it was not good for their gardens and crops. Normally rain would dominate at this time of the year, but not this year. Coming from the west coast of Norway it was for me normal to think that sun is good for the crops, not drowning them. I asked if the garden produce did not need sun as well. “No, it is too strong. The *dalo* and *yaqona* need rain to grow big. Things are changing, but only God knows why”.

### **Main focus**

The above vignette is a description from a normal day of my fieldwork in Malawai, during which many of my questions were answered, as well as many new ones were formed. My days in Malawai, and on Gau, were to a large degree spent moving about in the environment, either walking to another village, going on fishing trips, to the garden, or picking coconuts or fruit. It was through activity, as well as participating in daily conversations around the water tap, resting after a meal, and attending traditional ceremonies, I became aware of the possibilities and restrictions life on an island offers; how weather phenomena influence, and organize the everyday life. Weather is complex phenomenon, involving much more than the elements of rain, sunshine, and wind. I had assumed the knowledge of weather to be vast considering their engagement to land in their everyday activities. This assumption was accurate, however, a little too simple. The underlying importance of weather turned out to be greater than I had expected, and the general aim of the thesis is to explore the Fijian understanding of weather; what is weather in the Fijian context? With a focus on people’s everyday life I aim to give a deep and thorough understanding of the villagers’ knowledge about weather, and how is it used in their daily lives. There is today a great amount of research done on the topic of climate change in Oceania, as well as elsewhere in the world, but little is done on weather at a local, everyday level. What is weather’s effect on people’s daily lives? How, through every day activities, do they gain and use a special knowledge in responses, and adaptation to different weather phenomena? I wish to contribute to the anthropology of climate change by shifting the debate from climate and towards weather through giving an ethnographically grounded contribution in the form of an analysis of knowledge, and practice in a rural Fijian

island. Upon my first arrival it was clear that weather was a topic of interest. It was talked about daily, and as the case above shows, changes were noticed. People commented on how things not always were as they used to be, and weather, as described above concerning tidal water, influences the possibilities for movement in space and place. I am particularly interested in knowledge, how it is shared and used in the village, and how this works as a foundation for the wider social and economic context of the village life.

### **Earlier Approaches**

In Western thought there is a strong distinction between nature and culture that has its roots in the Enlightenment philosophy and Descartes' thesis on a fundamental dualism between the mental and the material (Hviding 2003: 249). Through this a dichotomy between nature and culture can be derived, on the basis of which human culture has made it possible to dominate nature. With this, nature is constituted as a specific, Western term with the distinction between nature and culture as a basis in the Western understanding of the world. Edvard Hviding (2003: 250) comments how non-Western views can seem exotic and strange to a Western observer, but it does not mean that their definitions are incompatible with the western science: "[...] non-Western peoples relate to their environments from beliefs and assumptions that may, or may not, be compatible with Western scientific ones."

Henrietta Moore (2004) also argues how established concepts cannot always be used analytically, and how it therefore is necessary to make use of the informants own concepts when explaining a phenomenon. She critically looks at terms often used by anthropologists, and emphasizes how the concepts have underlying presumptions about reality. Moore further writes how anthropologists must make new concepts, and look at how people use these in their imagined and engaged worlds. Through this new knowledge is created (Moore 2004: 86). Hviding (1996a: 180) also argues the importance of expanding the analytical tools to some not as deeply grounded in the Western ontology. With an underlying assumption of a nature/culture-dualism it will not be possible to develop a meta language for a comparative analysis of relations between humans and the environment, for such a meta language would need to be based on a mutual influence and closely related considerations rather than dichotomies.

In the current world there is a strong focus on climate change, and the rising of the ocean. Climate change has become a popular topic, and in anthropology much literature is

now written about these changes. Climate is not a new subject, however, and has for a long time been a topic within the social sciences (Peterson and Broad 2009: 70). As far back as Hippocrates there was talk about how change in climate, climate extremes, and seasonal patterns influenced human's activities (Harris 1968: 41-42 in Peterson and Broad 2009: 70). Hippocrates (2014: 41) argues the importance of considering the effects of the seasons of the year as they are different in both themselves, and at their change. The seasons, hot and cold winds, the water at a place, and the soil are all important aspects to take into consideration when pursuing the science of medicine. From this Hippocrates attempted to explain how different climates influence people physically. "Inhabitants of a region which is mountainous, rugged, high, and watered, where the changes of the seasons exhibit sharp contrasts, are likely to be of big physique, with a nature well adapted for endurance and courage, and such possess not a little wildness and ferocity." (Hippocrates 2014: 45-46). People from such climatic areas are contrasted to people from hollow, 'meadowy' regions, where the hot winds dominate over cool winds, and the water is warm. These inhabitants will have darker skin, be shorter, not well-made, and they will lack bravery (Hippocrates 2014: 46). People's physique and character will be largely assimilated to land, the most important factor being the seasons; where the seasons change the most, and are highly contrasted to each other one will find the greatest diversity in physique, character, and constitution.

Hippocrates used a comparative analysis of Asia and Europe to explain differences among humans, not similarity (Dove 2014: 4). He left out those who differ less from each other, focusing on those differing greatly, assuming, through his question, an underlying humanity where the "other" is different, but still human (Dove 2014: 4). Such a "climate theory", where the idea is that human character and culture is determined by the climate, was evident the two millennia after Hippocrates. Ibn Kahldûn, born in 1332, and considered one of the first direct ancestors of modern anthropology, goes beyond Hippocrates by not only distinguishing two fundamentally contrasting socio-ecologies, but also looking at the relationship between the two (Dove 2014: 7).

A reaction to the simplistic environmental determinism set in (Dove 2014: 2). Rayner (2003: 286) states how the chauvinistic approach, where the writers all were convinced the climate of one's own location was the climate most likely to result in a high intellect, and also used to justify racism and imperialism (Frenkel 1992 in Peterson and Broad 2009: 72), led scholars of the twentieth century to ignore the relationship between climate and society. However, Dove (2014: 2) argues that the perceived move away from climate in anthropology,

was more apparent than real. Climate was a concern in anthropological studies of subsistence practices such as hunting, gathering, fishing, and agriculture.

Malinowski (1926) wrote about weather magic as having an important function in the Trobriand Islands. The myth has a strong impact on behavior, both morally and socially. He shows how the myth is not an “idle tale”, but how it governs the social life of the people. Magic is a highly mythical aspect of Trobriand life, but though it seems to be present almost everywhere there are also times where magic is completely absent. When planting a taro or yam garden it is natural to use magic, but that is not the case when it comes to coconuts or bananas. The same is true for fishing. Shark fishing is a dangerous work and therefore “smothered in magic” (Malinowski 1926: 139), but fishing by poison inside the reef is easy and reliable, thus it needs no magic. Magic provides confidence and a belief in succeeding often needed when undertaking dangerous tasks, and is for example found when going out on the famous Kula trade. The wind plays a crucial role when making such a journey, and though they have vast knowledge about such sea travels magic is an important factor, both to make the wind blow and to abate it (Malinowski 1922: 225). Accordingly, a focus on weather magic was visible in Malinowski’s literature.

Peterson and Broad (2009: 73) states how anthropologists resumed concern for the topic of weather and climate due to the rise of political economy which created discussions of how unequal access to resources are created and maintained, and the interest in disaster research. Political ecology “[...] focused on how relations between humans and their environments are mediated by wealth and power.” (Netting 1996 in Peterson and Broad 2009: 73). Debates about inequality in access to resources led to questions about development policies around the world, and in the 1960s disaster anthropology emerged working on previous anthropological accounts of floods, earthquakes, storms, fires and volcanoes. The focus on the social elements of disaster directed the interest towards defining the social experience of those prone to be victims, and the attention to vulnerability, resilience and adaptation increased (Peterson and Broad 2009: 74). Today anthropologists are increasingly met by people telling accounts of change in weather and climate (Crate and Nuttall 2009: 9), and have for two decades been highly involved in the research of climate change (Crate 2011 in Dove 2014: 2). In his book *Climate Change and Tradition in a Small Island State: The Rising Tide*, Peter Rudiak-Gould (2013) writes about the Marshall Islanders’ interpretation and response to the doom lying over their country – the threat of the rising ocean making resettlement a necessity, and how the people have promised to stay instead of leaving. The

Marshall Islands is one of four sovereign states facing a future where nationwide uninhabitability is a consequence of climate change, the best-known threat being rising of the oceans (Rudiak-Gould 2013: 2). There are other consequences of climate change some of them being floods causing salt water to ruin crops, infrastructure, and cultivate disease (Barnett and Adger 2003: 324-326 in Rudiak Gould 2013: 2). In this context Rudiak-Gould (2013: 3-4) writes how the Marshallese people live with the possibility of a mass exodus as the only option, and with this interpret and respond to the threat.

While dwelling on the idea of climate, Mike Hulme (2009: 3-4) states how climate cannot be experienced directly through our senses like the wind we feel on our skin, and the rain that wets our hair, climate is a constructed idea where the sensory inputs are made into something more abstract, though an idea with much meaning. Climate has physical significance, one can for example not deny that the climate of the Amazon is wetter than that of the Sahara, but he states how it also has cultural significance in the fact that the climate of the Sahara means something different to a Bedouin than to one from Berlin. Ideas about climate are situated in time and space (Hulme 2009: 4), but the popular understanding of climate, and the dominating, is that it is a numerical and statistical one – “Climate is what you expect, weather is what you get.” (Hulme 2009: 9). The difference is difficult, and a difference is necessary when using it analytically.

Studies on ethno-climatology also have a long history. Old studies concerning signs of weather include Hesiod’s *Works and Days* (1914), focusing on meaning of the annual weather cycle and its regular occurrences, as well as Theophrastus’ “Concerning Weather Signs” with a focus on the irregular occurrences of annual weather cycles and these occurrence’s meaning (Sider and Brunschön 2007: 3-4 in Dove 2014: 9). Neither of them addressed changes over time, typical of these classical works, and the works were not self-conscious ethno-climatological studies, though they focused on local, folk knowledge (Dove 2014: 9). Theophrastus’ work refers to many observable conditions. “It is a sign of rain, if ants in a hollow place carry their eggs up from the ant-hill to the high ground, a sign of fair weather if they carry them down.” (Theophrastus 2014: 85). The knowledge he presents is locally grounded and place-specific, he highlights the importance of informants with locally situated knowledge, though lacking meteorological explanations to why signs work (Dove 2014: 10).

Due to the large focus on climate there are, today, fewer publications focused specifically on weather. A contribution to the field is Sarah Strauss and Benjamin S. Orlove’s



book *Weather, Climate, Culture*. This is an edited issue focusing on how ordinary people talk and write about weather and climate, shedding light on weather which has become so integrated in people's lives that weather's meanings and importance often are not reflected upon. The book highlights the importance of awareness, and understanding of weather and climate with regard to global warming. Although the book is rich in ethnographies, drawing on case studies from around the world, and people's relationship with weather, I feel that an elaborated, deeply grounded ethnography on weather and everyday existence in a tropical area is needed. Much literature on weather lacks a deep ethnography, and I believe my thesis to be an important contribution to the ethnographic research of Fiji. Making it particularly interesting considering the location of my fieldwork; a rural island in the Pacific, where climate change is visible, and where old and new knowledge creates unique ways of thinking of and responding to weather.

### **Fijian weather**

During my fieldwork I wanted to get an understanding of how Fijians, on a rural island in the eastern part of Fiji, understand weather. It can be easy to assume that *draki* is the Fijian equivalent to weather, as that is the dictionary's translation of the word. This is true, it is the word used to talk about weather. However, when I am looking at weather in Fiji I need to ask the question Hviding articulates in his article "Both Sides of the Beach": "[...] how are the natural environments of Oceania viewed, known and used by their human inhabitants?" (2003: 249). What is weather for them? What is the Fijian word for weather, and what does this word entail? How do they refer to different weather phenomena, and what is the relationship between weather and climate? Do they emphasize the relationship between weather and climate? I hoped that by focusing on people's interaction with their environments, where they plant and harvest different food, as a process, "the total environment" (Hviding 1996a: 180) would be given a more prominent position, integrating the local understandings and perceptions.

Arriving in Malawai I quickly learned the word *draki* to mean weather. It is used when describing weather and when talking about good or bad weather. The definition of good or bad weather, however, would be dependent on the context in which it was discussed, and who discussed it. *Draki* was often used in everyday conversations and it was also frequently discussed when drinking *yaqona*, weaving mats, eating, walking, and generally throughout

the daily life. It would be the amount of rain there had been lately, or the unexpected heat of the sun in the middle of the wet season, wind directions, or abnormalities in the expected patterns. In addition statements of how they had been lazy or too busy to remember to get firewood before the rain came, had not dug enough flumes in the garden, or forgotten to put beddings and *yaqona* in the sun to dry last time there was a sunny day, were all common topics related to weather.

As stated earlier, *draki* is more than wind, rain, and sun. It is an integrated part of people's lives, it can be felt in their bodies, and the knowledge about it is actively used to organize daily life, both according to work, and social organization. There is an interaction with the environment at all times, and this becomes a foundation for the village sociality. Ingold (1992: 40) calls this close relationship to the environment for "the mutualism of persons and environment." He states that ecological anthropology must start with the condition of active engagement (Ingold 1992: 44), and is proposing a theory of direct perception. Seeing is qualitatively different from knowing (Ingold 1992: 40). Whereas seeing happens in the private human subject with meaningless sense data passing quickly, knowing is the ordering of these data into enduring categories which are commonly held (Ingold 1992: 45). That is when we know what we see. In other words, the whole animal (human or otherwise) perceives, not only the mind, and the process of perception is ongoing through time. This type of perception is the same as the process of action "[...] we perceive the world as, and because, we act in it." (Ingold 1992: 45). By moving in and around the environment people will actively pick up and seek information, and because the structures and meanings that is found in the world are already in the information extracted in the act of perception, perceiving is knowing (Ingold 1992: 45-46). When one sees something information needed to know it is sought out, so to have seen it is to know it, but the knowledge gained through this form of perceiving is principally practical. In other words, when moving around in the place one live, picking up a stone, or a sea shell, feeling the wind on the skin, or the sun burning, one is engaging with the environment, and through this one will know and learn.

In Malawai the different meanings of *draki* were given in relation to activities. For example, during meal prayers I often heard *draki* being mentioned; one asks for rain or sun in regards of planting and harvest, or a calm ocean before crossing the deep sea if going to Suva by a smaller boat. Thus, *draki* is a gift from God and there is a general understanding that by serving God right, that is to pray often, go to church, lead a good life, be kind to one another, he will reward you with the weather one needs. For instance one morning before church I

mentioned a little resigned how Sundays always were so extremely hot, while frantically searching for my fan. My mom looked at me and said “Of course. It’s God’s day!”. At that time I had been in the village for a while, and it was clear that she thought I should have understood this.

In conversations with my language teacher I stumbled into a small language barrier; the Fijian word for climate change is also *draki*. But as I learned with time, although climate linguistically is translated to *draki*, its meaning is still that of weather. I heard villagers use climate change as an explanation to changing weather, but without really being willing to talk about it, and instead informing me that the changes tell them God is near. These changes are supposed to happen. I was told that the Bible says that when everything starts to change – people, weather – Jesus will return to the earth.

Other times the village inhabitants showed me the changes in weather by pointing to the seawall. When they built the seawall in the 1980s, the extra high tide would reach half way up on the sea wall, but now the water almost flooded over on days with an extra high tide, which would happen around full moon. “The ocean is growing, Nora”, I was told. It was obvious and apparent, and I was informed how it is due to large companies letting out much smoke destroying the ozone layer, making the sun warmer. This scientific knowledge is gained from the internationally recognized project “Lomani Gau” initiated and led by the prominent indigenous social scientist, and environmental activist, Dr. Joeli Veitayaki. This project will be discussed further in chapter 4; here the local explanations of *draki* meet the Western scientific explanations creating a new knowledge.

Thus, *Draki* is not a term limited to mean the physical meteorological actions in the earth’s atmosphere, it is something that is experienced and lived with on a daily basis. It is emphasized by Hulme (2009), how weather must be explained in the holistic experience of people’s lives, because that creates a description that focuses more on how it is to live in and with the weather than the actual changes. To do this an everyday focus is essential, and throughout my thesis I will show how *draki* is understood and used in different aspects of life, and how it influences the economic parts of life as well as the sociality found.

## **Island context**

Natural elements have shaped Oceania for thousands of years (Oliver 1989: 5). These elements include portions of three tectonic plates on which lands and seas in Oceania are based. These three plates consist of numerous separate plates, and when connected plates move apart the magma the plates float upon flows up through the created gap, building mountains. In addition to creating mountains, the plates can also cause earthquakes. Coral, a rock-forming element, is an important component in the tropical Oceania. Coral is made up of skeletons of certain marine animals and plants, attaching themselves to rocks or shells of dead marine creatures, consequently building up structures known as coral. Animals involved in this process live in warm, clear waters and the zone of coral formation change along with sea level rise and fall. Accordingly, dead coral reefs can be found on the slope of islands, “[...] in some cases as much as four thousand feet above or below present sea level.” (Oliver 1989: 5). These factors create diversity amongst the islands of Oceania; some islands are small atolls where dead coral is what dominates the parts of the islands located above sea levels, some are volcanic islands created of volcanic products, and others are continental islands such as New Guinea, New Zealand and Viti Levu, the largest island in Fiji (Oliver 1989: 6). The continental islands along with some of the volcanic islands are ecologically rich with great amounts of freshwater and a great marine life, in contrast to the atolls lacking the abundance of freshwater, and ecological complexity both on land and in the lagoon (Hviding 2003: 253). In the Pacific region there have always been vast changes in natural surroundings where cyclones, earthquakes, tsunamis, and storm surges not are a rarity. These weather phenomena along with the more regular wind, rainfall and ocean currents have contributed to the formation of the islands, the vegetation and the life of the people (Oliver 1989: 7). The big ocean currents have always been a huge influential factor in the lives of the Pacific inhabitants, affecting marine life, in terms of what marine organisms to expect at certain times, but also navigation and transportation between islands bringing along with it social and cultural consequences (Oliver 1989: 7-8).

In her article “The Relations of men, animals, and plants in an island community (Fiji)”, Laura Thompson (1949) gives a good account of different Fijian islands, specifically a group of island located south in the Lau Province, consisting of either limestone islands or volcanic islands. The volcanic islands have deeper, richer soil supporting different vegetation including yams and other garden crops, while the limestone islands lack valleys and streams present in the volcanic islands, however, the soil of these islands support a distinct flora.

Hardwood and other jungle plants absent on the volcanic islands, flourish on the limestone islands (Thompson 1949: 253-254). However, little horticulture was done on these islands in historic times because yams do not grow well in this type of soil. In short, garden production is limited on the limestone islands, but plentiful on volcanic islands, and forest products abundant on limestone and scarce on volcanic islands. Thus, the two island types complement each other (Thompson 1949: 254). In the early times, populated islands had one master fisherman. His tasks consisted of mastering the different fishing techniques as well as studying marine life in relation to tide, currents, the weather, the lunar cycle, and seasons, on the local fishing grounds. He was the one organizing communal turtle hunt, and large fishing parties, and through this he maintained an important balance between the community and its food supply (Thompson 1949: 261). Under the colonization, the local fisherman was not reinforced by the British, therefore losing his status. As a result, the local inhabitants noticed more disturbed fishing grounds, smaller catches and fewer organized fishing expeditions. Thompson (1949: 266) states that an “eco-cultural community structure” is an essential relationship for people wanting to perpetuate.

### *Gau*

Gau Island is the fifth largest island in the Fiji Group. It is located in the Lomaiviti Province, in central Fiji, 90 km east of Suva, the capital found on Viti Levu. There are 16 villages and 11 settlements on Gau; all located near the sea, with a total population of about 2700 (Murai, Veitayaki and Imai 2012). The interior land of Gau comprises a virgin cloud forest which has never been logged, housing the endemic indigenous bird *Kacau* (Fiji Petrel). The forests cover half of the island providing for its people clean water, wild food, building materials, and herbal medicine (Veitayaki and Murai 2010). The island is protected by a barrier reef like many other islands in the Pacific, a great provider of seafood both for the households, and as a source of income.

Gau has an especially fertile soil and, together with the mountains rising high in the center of the island providing a wet climate all year around, it is a prime location horticulture. This fertile soil is evident when looking at the garden crops on Gau. After having spent two months in the village I did not understand what the small, brown root crop at the Suva market was, and it was not before returning to the village, and asking my Fijian dad about it that I learned it was *dalo*. He laughed when I told him feeling pleased about how lucky they are in

Malawai where the *dalo* is large, and always plentiful. *Dalo*, cassava, and yams are considered the ‘true food’ and one of these true foods are always present during a meal, and are planted in abundance in Malawai. As well as having food in their gardens, wild yams grow in the deeper bush, and I was informed by a man accompanying me for a trip up the mountains, that they can go out and get this if a hurricane or strong winds uproot, and destroy their gardens. The ocean and the reef are also a great source of food; fish, seashells, seaweed and other delicacies, provides the islanders with their main source of protein, and I found that most villagers wanted to eat fish as often as possible.

Although Gau geographically is located in the center of Fiji it could at times feel like the island was in the periphery of the country, something I would experience. Once a month the ferry Sophie carries passengers to and from the island, but during my stay transportation was infrequent and seldom due to technical problems. There is an airplane arriving and leaving every Tuesday, but it is small and one can only bring so many pieces of luggage, so people normally find other means of going to the main land, such as locally owned glass fiber boats. The inhabitants of Gau are for the most part indigenous Fijians settled in one of the villages or settlements, living in a semi-subsistence economy, where most of the daily food comes either from the gardens or the ocean. There is no tourism on Gau, so money, which is needed for children’s boarding school fees, house repairs, décor, clothes, kitchen supply, radios, cell phones, and other necessities, is earned by selling food, copra, *yaqona*, oil, watermelon, and fruit to the market in Suva.

## **Methodology**

### *Getting to Gau*

I started my master’s program in anthropology at the University in Bergen, where I also had taken my undergraduate studies. Feeling drawn to the Pacific I was quickly put in contact with my supervisor, Professor Hviding. I was inspired by the classic fieldwork, having an urge to “do something different”, and through encouraging and inspiring conversations he suggested talking to his close colleague Dr. Joeli Veitayaki in Fiji. I was immediately interested. Joeli is originally from Gau, and through him I had a family and place to live before departing Norway. On my arrival I met up with him, and he informed me his family in Malawai village was waiting for me - I was welcome to stay as long as I needed, and wanted.

After a few weeks in Suva where I had the opportunity to attend a Climate Forum at USP, and gather some inspiration and new knowledge, I was again assisted by Joeli who knew of a boat that could take me out to Gau. With his help I managed to leave the urban streets of Suva fairly quickly and was spared frustrating waiting and organizational time that could have shortened down the time in the field. After 24 hours on a rather rustic government boat, and a shorter ride in a fiber glass boat from Qarani, a village on the northern tip of Gau, I went ashore in Malawai. The clouds were resting on the mountains towering high in the interior land, but over the village and ocean the sun was shining. The minute I set my foot in the village I was met by my Fijian mom, who fed me, and welcomed me to Gau and into her family. Together with her husband she lived with her niece, a five year old little lady who for me became a younger sister, but, as will be shown in later chapters, sometimes treated me like she was the oldest one as she had to teach me knowledge about village life normally taught by older siblings to their younger ones.

After having presented my *sevusevu*, asking village chief and the leaders of the two other family clans for permission to visit or live in Malawai, I was also officially welcomed to the village. During the *sevusevu* ritual a bundle of *yaqona* is presented, explaining one's mission in the village. My *sevusevu* was presented for me by the highest ranking man of my family's lineage, indicating that I now was a part of their family, giving me an important social belonging in the village.

### *Enrollment in Malawai's social life*

After a short week I was considered as one of the daughters in the household, both an honor and a privilege for me, but also a benefit for the villagers who have extensive training in organizing people after kin relations. Due to the irregularities of transportation I spent most of my time in the village, and during this time I had little contact with people outside the island. This put me in a very privileged position as an anthropologist in learning. Malinowski (1922: 11) writes that the society's structure is embodied into the humans; their sociality is incorporating and not definitely formulated. When I arrived in Malawai I was, by living with a family, inscribed in the already existing social framework of the village. As described by Marilyn Strathern (1992) social relations are, in some parts the world, what guides the people, in contrast to the western world where the general belief is that the individual shapes its relations being uninfluenced by the relation one already has. If the persons enter the existing

relations, however, it will create a different understanding of the world. Christina Toren (1990: 4-5) writes how her work from the chiefly village of Sawaieke on Gau, rests on the assumption that sociality in central and eastern Fiji is innate, how meaning is made by persons.

The social life of Fiji is highly constituted in the house (Toren 1990: 29), and sharing food is a hallmark of kinship (Toren 1990: 39). All members of a household do not necessarily sleep in the same house, taken into consideration that a household often includes three generations, a couple, their unmarried children, perhaps a son, his wife and their child, as well as the fact that young men might not sleep in the especially if they have a sister whom they should avoid of taboo reasons.

Social statuses are based on an interaction between age and gender. Most men are superior to women, though seniority also is important. Some older women rank higher than younger men, for example a girl's social status as the oldest amongst her siblings is limited as she one day will marry and move to her husband's family, but as the oldest woman she must still be respected by her younger brothers (Toren 1999: 50). Thus, all men are not superior to women, but generally wives are compliant to their husbands, while the husbands tend to represent women as their inferior in talk (Toren 1990:41). Seniority across sex is consistent with the sexual labor division in Fiji where land and sea are divided into four where land consist of deep bush and the village, and the sea the lagoon and the deep sea. Women's activities take place in the zone inside, that is, the village and the lagoon, while the men work in the open sea and deep bush. The strength of each of them is how they complement each other (Sahlins 1973: 38-39). Where they sit when they eat, and when they eat are also influenced by hierarchy. For example, men will eat before women, they will sit at the part of the house considered 'above', and they can wear almost anything they want, in contrast to women having to cover their shoulders and knees when walking inside the boarders of the village, though hats are not to be used by anyone.

As these examples show, the hierarchical system is clearly visible in the physical placement of bodies in the village. Toren (1990: 1-2) describes an above/below – *cake/ra* – axis which governs people's movement in the village. Drinking *yaqona*, eating, village meetings, feasts, funerals or worship are all situations when those of a higher social status will sit above, and those with a lower social status sit below. The *cake/ra* axis is physically happening on the same level; no one literally sits above or below anyone else, but since



*cake/ra* also is used when referring to different levels in the environment, for example, a chief can sit on a chair in the above part of a house, he is then both literally and figuratively above the others, “[...] it seems best to think of above/below as denoting a conceptual continuum whose extremes refer to a distinction between objects on different planes and to a distinction between people on the same plane.” (Toren 1990: 3). The house is an example of the above/below axis. In the below part of the house the kitchen is located, and in the above part one can find the sleeping area, often separated from the rest of the house by curtains, and in some houses a thin wall (Toren 1990: 33). The above/below axis is obvious during meals. A long, rectangular cloth is laid down on the floor according to the axis, and the members of the household will find their seats based on gender and seniority. The household’s oldest male will sit above everyone else, while men generally will be above women. The household’s wife will sit all the way at the bottom across her eldest daughter. The better food normally is placed above on the cloth and the women wait till the men are finished (Toren 1990: 56-57, Toren 1999: 51). Consequently, the meal is a concrete realization of the hierarchical relations within the family. That is, the food one eat, where one sit, and when one is served is a manifestation of one’s social status in the hierarchical relations.

What food the different genders bring is also part of these complex hierarchical relations. In daily life it is women who cook the meals, but when there is a traditional ceremony or party men make a *lovo*, earth oven. On the *lovo* they cook *dalo*, which are considered the “true food” (Toren 1999: 51), and pigs, which are considered the head of all land food (Sahlins 1976: 37). The men bring the “true food” to the table, taro, cassava, and yams. They also breed pigs, always served at ritual parties. Women’s contribution of fish is also an important part of the meal, but it is not considered as “true”, and therefore not a part of the ritual presentation (Toren 1999: 51-52).

*Tabu* (taboo) relationships between people are also part of hierarchical structure, and is highly visible in who one talks to. Toren (1990: 43) states how all relationships except those of cross-cousins are characterized by respect or avoidance. Avoidance often emphasized more heavily as a child grows older, and when sexual maturity is reached the relationships between siblings, and parallel cousins, of opposite sex, becomes forbidden. This has implications on who one can talk to, and who one should avoid talking to in the village. Same sex siblings, and parallel cousins normally have a friendly and relaxed relation, but the relationship will never have the same light tone as that of cross-cousins. Cross-cousins joke, tease, and make fun of each other, having a very close bond. In Malawai one could often

detect when two cross-cousins met. One of them would boldly call out an insult or joke to the other if passing his or her house and the response would be quick, and on the same note. Though I did not understand every word being said in the conversations, the tone, laugh, and noises would indicate it being the relationship of two cross-cousins. In contrast, those of parallel cousins of the opposite sex would not speak to each other, pretending not to see the other when passing in the village or being in the same room. Only when necessary would they exchange words. Toren (1999: 43) explains how this relationship is characterized by the description *veitabui* meaning ‘forbidden to each other’. In Malawai I stumbled into this relationship when my Fijian mom asked if I could go ask our neighbor to look at our water tap. It was broken, and he was known to be a handy man, having fixed it before. Normally it would be my Fijian dad asking, but he was in Suva, so my mom asked me. Being fairly new to the village I asked why she did not do it, I was not sure if he was comfortable speaking English. She explained how he is her cousin brother, that is, they are parallel cousins, so they do not speak to each other. Hearing this, I went down and asked if he could help us, and when he came up my mom only succinctly showed and explained the problem. He fixed it in silence, leaving as quietly as he had arrived. For me this seemed odd at first, but my mom told me it was completely normal.

When I arrived in Malawai, and was placed within the family, I was also placed within an already existing category of kinship; a category that villagers can relate to, and that is available at the local level. I was a young, unmarried woman, but by being considered a daughter in my new household the other villagers knew how to act towards me. For example, I ate with the women, worked with the women, and I dressed as women in the village should; covering my shoulders, wearing a skirt or *sulu*, a piece of cloth wrapped around the waist forming a skirt, and during traditional ceremonies I wore *jaba*, a traditional Fijian outfit. Early on in my fieldwork I received a few dating proposals. After politely having rejected the offers, explaining I was here mainly to do research wanting to focus on my school work, I was asked to not tell my Fijian mom about it because she would be mad if she heard, wanting to protect me from the young men in the village. I of course agreed to this, and we did not speak of it again. When my mom later found out through another source, the village is not too big, I told her it was an innocent request, and I did not want to make a big commotion. She told me that was smart and that we better not tell my Fijian dad, he would be very mad.

I was exposed for an intensive socialization into the village, and through this I was in the privileged position of experience the sociality’s possibilities, as well as the restrictions.

Being a young lady I primarily had access the female sphere of the village. Here I could partake in all the activities taking up a woman's daily life from fishing, weaving mats, and general gossip around the water tap. I quickly placed myself amongst the women both work wise, and during meals. However, the strict social taboos existing for all villagers did not completely apply to me. I did sit together with the women while eating, and showing the proper respect to men my seniors, but I did not have any *tabu* relationships. This gave me the opportunity to follow, and talk to both men and women in their work, concerns and joys. I often found that the men wanted to show me their work in the village so I would have an understanding of the work of the men as well, and not only the women's. I was therefore often invited to join, observe, and take pictures when the men were engaged in their work. This could be uprooting *yaqona* in the garden, fixing the *kawakawa*, making a *lovo*, or preparing the pig and the turtle for a meal. I therefore came to know both the men and the women, but, quite naturally, my relationship with the women in Malawai became a closer and deeper one. Through life in the village I exposed to the great joy of being incorporated into this net of social relations. It gave me a special belonging to Malawai, not only because I felt a great pleasure of being welcomed, but also because the villagers appreciated me taken on their way of life without any major trouble.

Towards the end of my fieldwork I got real confirmation that I was a true part of the village. Our neighbor village Lamiti had 25 volunteers coming from England to help them out at school, and build a house for the village nurse. While these young men and women settled into the village a few of the men in Malawai told me, while we were standing in the shade of a mango tree talking: "They are *kaivalagis*, but you, Nora, you are a Fijian. You eat our food, dress like us, and do the work we do". A *kaivalagi* is a foreign person, but normally used to describe Europeans or white people in general.

As will be shown throughout the thesis, the socialization was an ongoing process, happening every day through my entire stay, and through this, I became aware that knowledge is not taught formally, but acquired through watching and participating. I was not only an anthropologist trying to gain information for my thesis; I was a grown up child being taught how to live in the village. Seeing that knowledge is transferred in the activities of daily life, and to get a grasp of this it is an advantage to be constantly present. As an inhabitant of the village I found it natural to participate in all the village's happenings such as funerals, weddings, parties, greeting guests, as well as resting, talking, and cuddling with the children. This turned out to be quite valuable because it gave me an insight to the village life as a

whole, and through this I learned how my topic – weather – is a highly influential factor in daily life.

### *Language*

The day to day language in Malawai is Fijian, but most of the villagers knew English, some better than others. Although learning Fijian from a local teacher, as well as engagement in the village life, I never came to speak it fluently. However, though conversing in English with the islanders I was constantly moving between the two languages, both through trying to speak it, and listening. The Fijian discourse was therefore present at all times. Although language barriers could be an issue at times, the amount of time I spent in the village, and the constant reassuring of a phenomenon asking several people the same question, and I do not believe this to have hindered my research in any major way. Rather, it may have directed me towards the active engagement in village life, where I found valuable information. However, if there are any mistakes or misinterpretations in the text, they are to be considered mine.

### *Names*

The island and village names are stated in the thesis, but I have chosen not to use any names to ensure the anonymity of my informants, rather just stating the age group and gender. My Fijian family, however, are less anonymous than others, but considering the social kinship in Fiji, and the importance of my role as a daughter in the house, I found it impossible not to incorporate it.

## **Chapter outline**

Chapter two will explore how the natural cycles of moon, tidal water, winds, rainfall, sunshine, and blossoming of flowers not only affect daily activities, but also organize when activities have to be done. It explores how these cycles are connected to notion of time, and how it results in a special knowledge largely embodied, being activated through movement in the landscape.

Chapter three explores how this knowledge is gained through unstructured learning starting in childhood. It is shown how engagement with both people and the environment is essential to acquire the knowledge needed to live in the village, and I argue that the knowledge is a basis for essential parts of village life such as the economy and the sociality.

In chapter four I examine how this knowledge which is connected to the place and space, forms unique thoughts and feelings about weather, but also how the internationally recognized project Lomani Gau has influenced these notions. I argue that this knowledge, that is neither fully local nor fully global, creates a different, but important understanding of the ongoing changes in climate.

Finally, in the chapter five I will bring together the previous chapters and suggest how locally grounded weather studies is a profitable addition to the ongoing climate studies in regards of the ongoing climate change.



## 2

# The Cycles of Everyday Weather

### Introduction

In this chapter I will illustrate how knowledge about weather has a strong influence on activities carried out in Malawai; how weather phenomena such as moon cycles, tidal water, sunlight, rain seasons, and general precipitation help direct and organize people's daily lives. Through an ethnographic examination of everyday activities in Malawai I hope to highlight the models I find present in the village. These models of cycles and rhythms, such as tidal water and the lunar cycle, are knowledge the islanders have gained through years of close participation, and engagement with the environment. Examining weather as an intake into the everyday life, in a place where it is so immersed into daily activities, and where one mingles with the surroundings (Ingold 2007: 19), can give an understanding of these essential parts of life.

By using perspectives used by the industrial anthropologist Hanne Müller I will discuss that knowledge of the cycles is embodied through life in the village. This leads to an exploration of the notion of time where the sequence of events, rather than specific times and dates, are what is emphasized (Hau'ofa 2008). I will show that this knowledge is activated through movement and activities in the landscape, and that it is therefore important to be present in order to gain this information.

### Morning in Malawai

It was Wednesday and I woke up early. The rain was drumming on the rooftop, and this, together with the crowing roosters, made it impossible to try and go back to sleep. It did not

matter though; it was not that early, really. It was 6 am and my Fijian mom had been up for an hour already getting the fire ready to boil tea and bake a scone for my Fijian sister and myself to have for breakfast. Because of the rain that had dominated the last few weeks it took a little bit of work to get the fire started in the morning due to the wet firewood. This, along with the actual baking of the scone made it necessary for an early start to the day. Since I was quite a bit of an amateur in the Fijian kitchen my contribution in the morning routine was more appreciated when I helped my sister get dressed and ready for school – a fun, but time-consuming job when dealing with a headstrong little lady. After breakfast we walked the short route to the local primary school in the neighboring village, Lamiti. Being in class 1, and only five years old she was a little too young to cross the *kawakawa*, the long coconut tree bridge connecting the two sides of the Malawai River, and the temptations on the way to school, like a mangrove forest – the perfect playground – a few too many. We were followed by children in rain boots, rain jackets or with umbrellas trying to control their impulse of jumping in the puddles and getting dirty before the day had even begun. It would not have been appreciated by the moms cleaning and ironing the school uniforms on a daily basis.

When returning from school I met men on their way to the gardens, happy with the rain, their main focus being on the garden crops. The ladies responsible for the children's lunch later that day were not as enthusiastic, carrying baskets full of food and firewood up the hill to the school is a challenge. Though a pleasant mud slide downhill, it is less so uphill. They have the balance, patience and practice needed, but while working their way up they expressed a longing for a few dry days that would soak moisture out of everything from roads to clothes, laundry, and bed sheets.

Compared to the village's social life that most people find appreciatively relaxing, the Fijian weather is quick in its turn. When I came home after the trip to school, my Fijian mom and I agreed on getting firewood as it is important to create a storage at home during rainy weather so it can dry over the fire. We went out with baskets and knives into the close bush. As we walked in there it did not take long before the rain stopped and the sky cleared. In a few minutes the sun was shining, and the shade felt nice in the increasing temperature. Fetching firewood is a demanding and time consuming job, we wanted to make sure to pick the type of tree that burns for a long time and leaves little ash, as well as pick sticks from trees that were low on juices so it will be dry enough to catch fire. By the time we came back to the village it was filled with swarming life, sounds and smells. Women were washing and hanging clothes, bed sheets, pillows, and mats for drying to kill off bacteria, smells, and to



prevent mold; all in the heat of the sunrays. Conversations flourished from water tap to water tap, chickens were strutting around, children running, and men were laying *yaqona* out on iron roofs to speed up the drying process before heading to the gardens to weed. It was not only a shift in weather, but also in the pulse of the village, and work tasks.

The everyday life in Malawai is highly influenced by the weather. On heavy, rainy days there can be detected less activity in the village than on a day with mist or sun, unless the sun is beamingly hot, which slow down the village too. Weather is of great relevance for the inhabitants who live in an engagement with their natural surroundings (Ingold 1993) with regards to movement, work, and social life. Mobility is for example highly influenced by the cycles of the tidal water. When wanting to visit villages north of Malawai large parts of the stretch are walked on the beach and crossing rivers is necessary. It becomes difficult to move about when the tide is at its highest point, the water level in the rivers will be too high to cross, and the beach will be covered by the sea. Another aspect the tidal water directs is fishing and harvesting on the reef, as will be elaborated on further down in the chapter. Though weather is understood by many as uncontrollable (Sturken 2001: 163-164) it is not an unorganized, unpredictable concept. As exemplified above men disappeared to their gardens when the sun came out, and the women washed and hung clothes for drying. Although weather in Malawai, and weather in general, can change from sunny to cloudy abruptly there is a certain consistency in what weather is expected to dominate different seasons. Thus, there is an expectance of certain types of weather to occur at various times of the year. As fieldwork progressed these cycles became clearer to me. Where I first saw activity planning as something that was done from day to day, or for a week at a time, I would learn that despite a great freedom in planning one's own days, there exist larger cyclic frames which help organize village life. Where people know what food to harvest and plant, which fish to fish, or which fruits are ripe.

### **The Rhythm of the Cycles**

“To feel the wind is not to make external, tactile contact with our surroundings but to mingle with them. In this mingling, as we live and breathe, the wind, light, and moisture of the sky bind with substances of the earth in the continual forging of a way through the tangle of life-lines that comprise the land.” (Ingold 2007: 19).

People relate to each other not as closed forms, but based on the common immersion in their natural surroundings and landscape, in the ‘weather world’ (Ingold 2007: 19) Ingold (2007: 33) explains how ‘seasoned inhabitants’ have the knowledge to read the land as a register of wind and weather. Like the Yup’ik who can read the direction of the wind from the snow ‘waves’ on frozen lakes (Bradley 2002: 249; Nelson 1938: 41 in Ingold 2007: 33). But how is this important, immanent knowledge used in people’s everyday life? In order to understand how people in Malawai live and organize their daily lives, one needs to look at the ‘weather world’, how they relate to it, and live with it. How do they, in Ingold’s words, mingle with the wind, rain, and sun?

This mingling with the weather influence what people do at certain times of the year, week or month. When I first arrived in Malawai I had a notion that people would tell me long stories about their knowledge of weather, how it was perceived, what changed, what remained consistent, and thoughts about it. Being raised in an urban part of Norway my relation to weather was in form of playing outside, biking to school, possibilities of wearing sandals and swimming in the lake by my house, or in the ocean by my family’s cottage. My experience of weather was that it was discussed verbally. It was therefore confusing when, on a lazy, warm day, a lady from Malawai told me “Fijians look outside the window and think, oh it’s raining today, and then we don’t think more about it”. My heart dropped, I was in the initial phase of my fieldwork and I desperately tried to gain some information, anything about weather. It was difficult to remember my methodology professor’s anecdote about patience when doing fieldwork from the previous semester, in my eagerness to “learn anything there is to know”. Luckily this comment came from a pregnant mother of three, with a tooth ache who had other things on her mind at that moment. At first, weather was a matter it seemed like the villagers thought little of, something that was just there, but at the same time it was mentioned and talked about in several conversations each day. Comments like “*sa katakata sara ga*” (it is very hot), or frustration or happiness over wind and rain, were always on their lips.

What I would figure out was that their knowledge about, and interest in weather was in relation to something other than just the weather. As Michael Paolisso (2003: 76) states, “[...] this interest in weather is clearly less for weather’s own sake but more for the effects of weather on fishing and boating.”. In Malawai weather knowledge is highly connected to fishing and agriculture, and in order for me to understand a meteorological phenomenon I had to participate in the activities dependent on the given weather phenomenon. One of my first encounters with this “dilemma” where one is dependent on weather was when, on my first

day in the village, I asked my Fijian mom if we could go out fishing while I was watching her making pancakes for breakfast. She would gladly take me fishing, but she told me we had to wait till the tide was right. When I asked when the tide would be right she answered: “Saturday”. “How do you know that?” “I just know”. “Hm”. “I can know by seeing where it is now” she said as a conclusion, pointing the spatula to the current tide. I then understood that the tide would change from day to day and that it controlled when we could go fishing, but I could not understand in what manner. I had to go fishing with her and other women several times, together with asking many questions, before I started to get a grip of how it worked. I would also learn that their knowledge not only help the actual work, but it is used in planning when fishing is to be done, foods are to be harvested or planted or when to go to the doctor’s office.

### *Saturday Fishing*

Saturday arrived quickly; I was very excited for my first trip into the water. I could barely wait to get out there, but my mom was calm and relaxed, in no hurry at all. In the early morning hours the village store is open so she sent me down to get a few hooks in different sizes. The temperature was already disturbingly high and I was again delighted to think about my upcoming adventure, assuming the ocean would have a cooling effect. After the morning shopping it was time for breakfast. It was a large and heavy meal intended to give us enough energy to last the whole trip, and while eating my Fijian mom’s brother came up for a visit together with his 5 months old daughter. He lived in the lower part of the village, next to the sea so I asked him how the tide was now. I had still no clue as to what was a good or a bad tide for fishing, but I did not want to seem unintelligent, and he might also include some new information in his answer. He told me it was good to fish during high tide, which for me made no sense; the tide was on its way out! He reassured me though, that now was a good time for fishing. I do not know whether he said this because he knew exactly how the current tidal condition would influence our fishing or because he was confident that the women would never go out without the conditions being right. Although it is safe to assume that men also know how fish act according to tide and weather, some of them do go deep sea fishing at times, women are highly trusted because of their knowledge of when it is best to fish, which fish to catch where, and which fishing technique to use.

After breakfast and an argument about clothing – I was told to wear long sleeves to protect my fair skin from the sun, but I thought that would be too hot, so we agreed on a t-shirt with longer arms along with a hat – my Fijian mom fixed the lines and hooks, wrapping the fishing line around a shaped piece of wood. We were now ready to leave. It was a lovely day; the sun was blazing, the ocean beautiful, and a few women had already started to move outwards, walking on the bare ocean floor – the tide had withdrawn all the way out to the reef. On the way to the beach where we would prepare the bait we met many of the village's women. They were surprised and happy to see me, telling me I had to be careful so I would not scratch my legs on corals or sharp shells, and gave me small fish to chop into pieces and put in my bait bag. After the preparation of the bait we just sat down on the beach looking at the ocean. I was bracing myself for this new experience enjoying the airier feel from the wind, but the women were, I would find out later, actually watching the wind and the ocean; to look for movements and tendencies. After a while my mom showed me how to secure the bag for my catch and we started the long walk out to the reef. When standing at the beach the tide looked like it was still all the way out, but the further out we came the more water there was, and when almost having reached the reef and the water was till our knees, my mom said we were there. We were so close to the reef I could feel the heavy swells from the deep sea crushing against the reef wall; the ocean had never appeared bigger. While I was observing the oceanic powers my mom scouted for a good fishing spot. She placed me in an open area with a white, sandy bottom surrounded by corals, showed me how to fasten the bait on the hook, and moved a little further away getting out her fishing line. She was not so far away that we could not talk, but far enough so our lines would not interfere with each other or for us to compete for fish in the same area. She showed me how to use my arms when throwing the line, and told me to give it small pulls while in the water for the fish to notice the bait. I copied her; I got my line out and threw it into the ocean making sure not to hit the corals, instead to be in the white sandy area to avoid getting the hook stuck amongst the coral. As it turned out – fishing was not that easy! Properly securing the bait on the hook was my first problem, I did not fish as much as feed the fish; the sun was baking hot, I should have worn a long sleeve; and handling the line in the breeze, something my mom did with such ease, was difficult, it curled itself into a knot not one, but three times. When I caught my first fish I happily unhooked the hook, and held it up in the air to show my mom, quite unaware of its protection mechanism – spiky fins. It was a relatively large *kawakawa*, a brown spotted fish living in the corals, and feeling trapped in my hand it shot out its spikes, rather a huge shock than a severe pain, causing me to drop my trophy fish. My motivation fell as fast as the fish

disappeared, but my mom laughed and told me to keep on fishing – I would catch a new one. In the end I caught a few fish, and was generally happy with my achievement.

Simultaneously with the tide the women came in to shore, looked into my fishing bag and gave me an abundance of the fish and seashells they had captured. Feeling like a freeloader there was nothing I could do but to smile and express my gratitude, and promise myself to become a better fisher so this would not repeat itself. An improbable promise of course seeing that Fijian's will go out of their way to make newcomers feel welcome and taken care of. Nevertheless, I had learned and felt in my body what heavy work fishing is, the heat of the sun burning your skin, the surprising heaviness of holding the fishing line and giving the bait more credibility as an actual fish by pulling the line towards you, letting it out again. The women knew how to place their bodies according to the wind direction and ocean currents, both important for where the fish hook would end up in the sea, and for controlling their fishing line and equipment.

Walking back to the village I was holding my bag in my hand towards the ground. My mom saw and told me “put it like this”, showing me how she had it over her shoulder. “Oh, but this is fine” I answered, thinking of the fishing entrails potentially running down my clothes. She looked at me with a strict face and said determinately “after we have been fishing and walking home, we carry the bag like this”. I quickly put my bag on my shoulder, she smiled satisfied, and we walked home.

### *Silent Knowledge*

Hanne Müller (1996) discusses this type of learning and knowledge, giving the example of when she learned to weld. By introducing what she calls “silent knowledge” (taus kunnskap) she shows how knowledge is learnt by observing, trying and using one's senses, and through this creating an individual, subjective knowledge, that at the same time is related to a shared, public language of knowledge (Müller 1996: 226). She did her fieldwork at an industrial workplace in Norway where the knowledge needed was transferred silently, the knowledge was embodied. She learned by imitating the movements of the teacher's hands and body positions, and she explains how imitating the instructor was easier said than done. The instructor's arms were different, and the welding electrode moved in different ways depending on who was using it (Müller 1996: 227-228). Talking was a small part of the apprenticeship; few concepts were used, and most of the learning was done through practical

training with one main rule – count to three. Not necessarily an easy task without the help of a clock (Müller 1996: 227). To be able to understand and learn the art of welding she had to access the source of knowledge through practical learning. She had to find her own, individual ways of making sense of the learning process, and she illustrates how vision became important for her in knowing when to move the electrode at the right moment so as to avoid it of getting stuck in the weld pool. She recognized in the welding pool a moment in the egg water right before it starts boiling. There was a bubble in the weld and when it popped, like a bubble pops in a pot of boiling water, she moved the electrode away so it would not stick to the liquid coming from the bursting bubble (Müller 1996: 229). This practical knowledge is both based on context, it can only be learned when being present at a certain place within a certain relation, and at the same time there are professional criteria translatable to workplaces all over the world where certified welding is practiced (Müller 1996: 226). Through her experiences at the workplace Müller shows how knowledge that is personal can still be considered as exact. Thus, only by using herself as a tool she was able to gain information about the silent knowledge, which is knowledge not accessible through general scientific methods such as interviews (Müller 1996: 230).

In my own fieldwork silent knowledge became important, I had to learn that much of the villagers' knowledge is silent. Their many answers that "they just know" were based on their practical experience over time with a phenomenon; the knowledge is in their bodies in relation to activities. As exemplified above it was not only difficult for me to understand the tidal water, but it was also difficult for my mom to express it. I had no experience with it; I did not know how to formulate my question so they would make sense in the context, making it difficult to answer my question. I learned from them the only way possible, by learning the way they themselves had learnt. When we went out in the water, on the other hand, she could show me how it was done. The verbal instructions consisted of "do it like this", "put your line here" showing me by doing it herself. After that I was left with watching her, though she threw in a few scattered instructions to move my fishing spot, and point to where I should go. I also noticed the way she placed her body according to the wind, not letting it mess up her fishing line, how she handled the fish after it was caught, and for how long she stayed in one place. Furthermore, I had been up close with the ocean currents, winds, sun, and tidal water. I had mingled with the elements (Ingold 2007: 19). By doing this I did not only learn about the Fijian island environments of land, sea, and weather, but also how people in Malawai, particularly the women, learn what they know. After this first Saturday I noticed that the low

tide was almost all the way out in the morning, around 10 am, when we walked out on the dry ocean floor to start fishing. We placed ourselves quite close to the reef, and while standing there the water started creeping up my legs as the tide slowly came in. By the time we were done fishing, around 3 pm, the water was covering almost the entire beach, creeping up towards the tree zone. I saw it, but was too busy watching the women cleaning their fish to pay attention. Later that night though, when walking down to the lower part of the village to deliver fish to my Fijian mom's dad, the water had pulled out again. The next days I was busy, and it was not until four days later I observed the morning tide. I was sent down to the village shop which was open from 7-8 am, and located right on the sea wall. Neither the village shopkeeper, nor the shoppers were in a hurry so I decided to wait outside to be able to watch the calm sea. That is when I noticed; at this time on Saturday the tide was already far out, but now it was still in. It seemed to be changing quite a bit from day to day. I shared my observations with an older lady, and she told me "yes, the tide will change from day to day". There will be two high tides and two low tides over a time period of 24 hours, and for each day they will shift with about twenty minutes.

The two low tides will occur approximately 12 hours apart, as well as the high tides. A full high tide and a full low tide occur every six hours. In other words, if a high tide peaks at 10 am, the low tide will peak around 4 pm, and the next high tide will peak around 10 pm following a new low tide 4 am. However, as stated, the tidal water shifts every day with roughly twenty minutes, so in reality the low tide occurring 12 hours after the first will happen at around 4:20 am. This result in the tidal water sometimes leaving the ocean floor bare all day long, then other days leave the tide in almost all of the day; affecting fishing, harvesting, and mobility. In the village, if we had an errand in Qarani, the village where the hospital, post office, and government station were located, we had to plan our departure depending on the tidal water. To be able to cross outside the naturally growing mangrove forest between the villages of Nacavanadi and Vanuaso, the tide had to be low. If one were to leave the village, either by boat to another village or to Suva, the tide had to be high for the glass fiber boat to be able to come all the way into the village. The same is true for fishing; women would decide when to go fishing depending on when the water would be high and low. As with everything else this was knowledge they knew intuitively, they just knew, and to my surprise I one day learned that there also is a way of knowing when the tide change from low to high, and from high to low.

It was after lunch and a rooster started crowing. I asked my Fijian dad if it was a youngster, learning to crow, since it was clearly not sunrise. My dad laughed and told me no, the rooster was crowing because the tidal water was changing. He looked out the window seeing the tide was low, so the water was now turning going back in. I found this fascinating. How could the rooster know the tide to be coming in? My dad shrugged his shoulders saying, “I don’t know. Maybe they feel it in their bodies. It’s like the elephants in Thailand, there were no elephants dying because they could feel it coming in their bodies”. Here referring to the tsunami in Thailand in 2004. He became silent for a while before he started speaking again, now telling me the tale they were told at school. It was about a rooster having been out walking on the low tide, and accidentally stepped on an open sea shell. The sea shell had closed, leaving him trapped, so when the tide turned he had called out for help, and that is why the rooster crow when the tide turns.

The information about the rooster knowing the tidal water to change was so hard for me to grasp that all I could answer was “cool”. He looked at me, smiling, and saying, “but that is just a story we tell small kids”.

### **Response to Weather Phenomena**

When I started to get a grasp of the tidal water, both trough being engaged in activities with the people of Malawai, and through stories and conversations like the one explained above, I saw that it was much more than just water pulling out and coming back in. In their book *Weather, Climate, Culture*, Strauss and Orlove (2003: 4-5) set out to examine “the wide range or ways that human groups in different places and times think about and respond to meteorological phenomena.”. In Malawai I noticed that their response to the daily, repetitive or cyclical weather was with action – how to plan everyday activities. That is, the cycles are incorporated in their planning of time. Therefore there is a logic to what needs to be, and can be done at certain times. The tidal water was my first real indicator into this since I spent most of my time in the early part of my fieldwork with the women. An afternoon in May I was sitting by the water tap with a woman living next door while she was cleaning her pots. We sat there talking when another lady came up from the village’s lower level. She had been out net fishing with some other ladies from downstairs, as the lower level is called, and they had gotten plenty of big fish. She was very excited, talking with body and hand gestures indicating the size of today’s catch, and how one of the ladies had been running around in the



water trying to scare a large fish into the net. They both laughed heartily of this. She told us they were going out tomorrow as well, and my neighbor and I decided to come along. Both of them looked at me wondering if I was able to wake up at 6 am to go fishing, jokingly indicating that I liked to sleep till 7. I smiled teasingly and said I would have my mom wake me up. It had to be this early because the tide would be on its way out in the early morning hours, leaving the larger part of the day with low tide. So, if we wanted fish we had to go at that time.

Evidently, the tidal water is an important part of the equation when planning fishing trips; however it is not the only factor. Fiji has a two season climate (Sahlins 1962: 22). Around mid-April the wind will change, the wet season will end and the dry season will begin, although the dry season in Gau is not so much dry as less wet. The high mountains and hilly landscape provides the island and its inhabitants with much moisture in addition to having a highly fertile soil. When the wind shifts from the wet, stormy North West winds to the steadier, dryer South Eastern trade wind the village life shifts with it. With regards to fishing, the use of fishing nets became evident. The wind stirs up the ocean to such a degree that fish will not notice the commotion made by people walking in the water, causing the fish to swim away. This was explained to me when we were net fishing without luck. It was a calm day; we had been out for an hour and gotten no fish. Yesterday there were fish in abundance, and one of the ladies said it was because yesterday it was windy and rainy. The fish did not notice the people then, in contrast to today, where the quiet ocean made it easy to notice the movement of women in the water.

Net fishing is carried out in groups. Two women will stretch out the net forming the letter “U” with a very wide shaped curve. The rest of the group will walk away from the net, forming a circle with the women holding the net, and the net itself. When everyone is in position, the women run towards the net using hands and feet to splash the water, creating a great fear for the nearby fish that, hopefully, will swim straight into the net which ends they pull together creating a trap where the fish are unable to escape. This type of fishing is called *qoli*, whilst fishing with a line is called *siwa*. So if someone said “*Au sa lako i qoli*” (I am going fishing), we would know it would be fishing with a net, and not fishing line.

Admittedly I detected some women from Lamiti go net fishing a few times when the wet season was upon us; however, the women of Malawai only did it during the dry season. The heavy emphasis over the advantages of net fishing compared to fishing with a line during

this part of the year, and the obvious change of fishing technique around the months of April and May gave me a strong impression that this different method of fishing was in relation with the windier weather. Though the cooler temperatures might also be a reason, because the temperature is more bearable to run around in during May than it is in January, when the humidity is high and the sun produce extreme heat.

Ben Orlove (2003: 126) states how despite the year being a natural unit, there are great differences in the extent to which people emphasize and recognize the year from culture to culture. In Western cultures, he writes, the year is important, giving the example of how in the United States patients having suffered from a stroke are asked to state their age and the year, along with his or her own name, and the name of the president. These questions are considered the most basic questions possible to ask due to the answers being facts that best remain in the mind. For other cultures, however, the year is a less striking unit. Schieffelin (2002 in Orlove 2003: 126-127) describes how the Bosavi of Papua New Guinea had no word for 'year'. The crops in their subsistence system did not grow in an annual cycle, and it was not till the missionaries arrived that the concept of 'year' was introduced. Crops could be planted and harvested throughout the year, and nuts and fruits appeared in different months. Exact age was not important as long as one kept track of individual's relative seniority. The same was true for the Baganda, living it what is now Uganda. They had no words for year in pre-colonial times, agriculture led them to speak of different time frames rather than years (Orlove 2003: 127).

In Malawai the cyclical seasons were predicted, but not so much in terms of words, but action. When we entered the dryer season I noticed my Fijian dad shifting his focus from planting to weeding, he was clearing new spots from weeds, and the occasional tree, to prepare for the planting of new crops. One day while we were in the garden he told me that he now was preparing to make a new yam plot. Unlike *dalo* or cassava which can be planted in the same plot after they have been uprooted, yam gardens need to be moved for each year; the earth burned, and the soil turned before planting new yams. Yams are planted in the dryer season, needing more sunshine, and less rain in the early stages. Thus, my Fijian dad was getting ready for the dry season by shifting his focus from planting to weeding. Likewise, the women from the example above went out fishing with a net because they were predicting the weather to be windier, it had been windy the day before, and together with it being the dry season it was natural to assume it would be the same amount of wind the day after.

In other words, cycles of flowers that blossom, tidal water, wind direction, precipitation, sun, and moon all affects what the people chose to do at different times. These surrounding rhythms, largely embodied, are closely connected to their conception of time.

## **Time**

A quote that quickly became my all-time favorite was “after breakfast”. It was with few, if any, exceptions the answer when asking what time a social event started which was considered to be happening from the start of the day. ”After breakfast” could be the answer to when we should leave the next day or what time to meet up in the Community Hall for weaving. Even for the opening of the new bridge, built by the government, in Lamiti, where the Prime Minister of Fiji came, the answer was “after breakfast”. Specific times were rarely something to be dealt with in these situations, things sort of happened when they happened. As shown above, the tidal water is of course an important factor when going to villages north of Malawai where one is dependent on walking long stretches on the bare ocean floor when the tide is out. That is, during planning of activities the cycles of surrounding environment were taken into consideration, but a clear time was rarely set.

## *Ecological Time*

Hou’ofa uses the term ‘ecological time’ when describing time in Oceania. In Fijian the term for the past is *gauna i liu*, where *gauna* means “time” and *liu* means “front” or “ahead” – the time ahead or in front (Hau’ofa 2008: 66-67). The past in front is therefore leading into the future behind, as Hau’ofa so nicely put it, a dog chasing its tail. In other words, the conception of time is circular, fitting “[...] perfectly with the regular cycles of natural occurrences [...]” (Hau’ofa 2008: 67), that is, time is tied together with the regularity of seasons. These seasons are marked by phenomena appearing in the natural surroundings such as cyclical appearances of certain birds, flowers, moon phases, winds and weather patterns (Hau’ofa 2008: 67). Put the other way around, the cyclical seasons in Oceania fit the conception of time, and time is to such a degree incorporated into these cycles that precise dating is of no importance (Hau’ofa 2008: 68). Hau’ofa states that now, when dating of events is possible it is also used, but for many people in their everyday lives, like for people in the past, it is not so much *when* an event happened, but rather “[...] *where, how, and in what sequences* they occurred that was important.” (Hau’ofa 2008: 68). The specific date or time of

day is not that important. As is found with the Bosavi where the absolute age of an individual was not the most important aspect, rather knowing where to place the person according to seniority (Schieffelin 2002 in Orlove 2003: 127). The same was true in Malawai where age, among other things, was dependent upon marital status. I, a single lady in my mid-twenties, was considered a youth while women younger than me in age were considered adults because they were married with children. Men on the other hand could be considered youths till they were about 45 years old, regardless of marital status and children. This will have an impact on where to sit during the *yaqona* ceremony, where the chief and men of higher status and older age, will sit at the upper part of the room, and those younger further down, with the women at the bottom (see chapter 1).

I was told by an older woman that their elders had named the months after what were available in the gardens or in the ocean. She told me the name of some of them and explained how it indicated what fish to fish and what to plant or harvest in the garden. When I tried to ask what month it happened in she could not say for sure. The same was true for when I asked when they started to plant yams. However, my Fijian dad said we could start soon, next month (which was June), but he would wait a little, maybe until September. He wanted it to be dry, and he had plans to weed some plots first. I thought at the time that what time to plant might not be so specific, but in retrospect this might be because they are not used to talking specifically about months in relation to harvesting. Then it is, as Hau'ofa states, more important in what sequence things happen. Weeding is done after the planting of root crops such as *dalo* and cassava is finished, after that one starts preparing the yam garden. As stated above a yam garden needs to be moved, and preparation work is therefore necessary. This does not mean that the months are not used to organize life in the village. For example, in the Methodist church they have a longer 11 am service the first Sunday of the month. They will not have an early morning or afternoon service this day, instead they will meet in the Community Hall after dinner where one of the family clans will sing hymns for the two other clans, while their work is to bring candy for those singing. The first Sunday of the month is always a beautiful evening.

Not having to plan too much was often cherished as one of the main village advantages. After a heavy lunch I was keeping some of the men company at the porch of a house by the beach and one of them gave off a sigh while smiling, and asked me if I did not find life wonderful. Relaxing like this after lunch, he said, is not possible in Suva, where I had just returned from. There you could not plan your working day as you would like, and rest

when it was good to rest. I had to agree with him. This slower paced village life quickly became my preferred life-style leaving me with few worries.

The biggest adjustment for me turned out to be flies; before arriving in Malawai I did not know that such quantities of flies in one place actually existed. I quickly got used to arms waving over the food to keep the flies away or children waving long sticks over the table having been assigned guardians of the food when meals were enjoyed together in church or amongst women in the Community Hall while weaving. Over dinner with my family I had a little rant about the flies always flying around me, trying to blame it on my use of sunscreen rather than being sweaty and smelly. They comforted me saying the amount of flies tells them that a certain type of flower is “pregnant” and that it is almost at its peak, so the flies would decrease in not too long. I tried to ask for a more specific date, but the answer was “it should be very soon. It should be around now”, and a few weeks later the number flies had drastically reduced.

Likewise, when waiting for the first moon of the cycle, the precise date was not heavily stressed. I noticed this when one rainy day I was crossing the *kawakawa* on my way home from Lamiti when all of a sudden realizing how extremely high the high tide was. I ran up to my family telling them about it, but they just said “Yes, it should be a full moon today, it gives us a high-high tide”. Their attitude when I told them my “news” indicated it being something they expected, the time was about right for a full moon. I had earlier that month been in conversation with one of the adult men in the village while he was telling me about the first moon of the month, where it would rise, how long it would be up for and how both the size and time on the sky would increase the closer it got to the full moon. I asked when the first moon would come and he said “around the 20th or 23rd, something like that”. The exact date of when the full moon would come was not the most important, but rather what one would do when the first moon came. For example, when the tide was high during the night, and there was a moon some women would fish with a line after dark. The moon light would cause the fish to swim around compared to when the moon was absent, and the fish would lay still, or sleeping as I was explained. Orlove (2003: 127) comments on this, stating how weather characterizing each season might start earlier some years, and later other years.

As well as the man knowing roughly when the first moon of the month would appear, my family knew that the full moon was to be expected any day soon, and that it would bring with it an extra high tide. The next day my mom said she wanted to go out fishing. I was a

little surprised; she did not go out fishing that often because it was not necessary due to my constant trips into the ocean and people's generosity when it came to sharing their fish with me. I was going to the garden that day so I did not go with her, and it was not till she came home that she told me she had been fishing outside the reef. I did not understand how that was possible, the reef wall was normally covered in water, but she told me that when they get "high-high tides", they will also get "low-low tides" leaving the reef bare to stand on. When standing on the top of the coral reef, one can throw the line outside of it, into the deep sea. I asked her if she knew this when she went out fishing. "Yes, we know. When there is a high-high tide we know there will be a low-low tide". She said it as a matter of course; she knew it from past months, and past fishing trips. Thus, the past was with her in her activity, leading her in her present doings. As Hau'ofa (2008: 67) states: "That the past is ahead, in front of us, is a conception of time that helps us retain our memories and be aware of its presence. [...] What is ahead of us cannot be forgotten so readily or ignored, for it is in front of our minds' eyes, always reminding us of its presence." In this lies much of the basis for their knowledge; when the past is in front of them they know what is to come based on what has happened before, in that sense time is cyclical. Through this stability, changes and deviations are detectable. These natural signs are also connected to the human activities – also circular – such as agriculture, and harvesting of marine food, voyaging, festivities and rituals (Hau'ofa 2008: 67). Ingold (1992: 40) argues "[...] it is possible for persons to acquire *direct* knowledge of their environments in the course of their practical activities." Thus, knowledge about the natural cycles is learned through engagement with the land and sea. This was once pointed out to me by a lady well into her fifties. It had been three days of heavy rainfall, and we were sitting outside a house talking when she told me it would be good to go out fishing now. I asked her why it would be good, and she answered there would be plenty of fish wanting to eat. When it rains, she said, the catch is often poor, so fishing in rain is not ideal. When she saw my excited reaction to her information she continued saying that they often know the rain will come because there will be plenty of fish before a big rainstorm. I asked her how she knew this. She looked at me like she did not understand why I asked a question with such an obvious answer, replying: "we know because we have been fishing our entire lives". It is through the experience of doing something several times much knowledge is gained. This conversation was a rather rare one during my fieldwork; normally I would gain information by engaging in activity with people, forming questions along the way.

## Garden planning

It was March, and together with my Fijian dad we were walking to his garden following the Malawai River, which comes down from the mountains and culminates in the ocean right outside Malawai. While trying not to slip in the mud and following my Fijian dad's pace he told me short stories, and shared observations along the route with me. There is a special spot in the river where the highest chief on Gau, Takalaigau, will travel to after having been named chief. There Tui Malawai, the Malawai chief, will bathe him as a part of the initiation of becoming chief. He showed me traces of cows, a big frustration as the cows walked all over their gardens, eating what they found tasteful, taking naps in the garden plots, and then leaving the plantation all destroyed. The remaining watermelon after the last harvest a few months earlier was trampled to pieces and eaten a week after harvest. The cows were supposed to be safe in a fenced area, but this was often destroyed by the cows as they wanted the green grass on the other side. Walking further, he also told me how the large mango tree we passed all of a sudden had died many years ago. Strolling around the village and bush area with him was a great source to information and worked well for the both of us – he loved to share and teach, and I loved to listen and learn.

We arrived at his garden and sat down on a fallen coconut tree to rest and drink the coconut milk from a *bu*, the green coconut, a refreshing beverage in the heat. In order to get these, one needs to climb the coconut tree. Seeing that my dad was getting older, almost being considered a *bubu*, grandfather, and I not very skilled at climbing coconut trees, we were grateful for the tree on the ground. It still had coconuts growing and we could just pick off the green ones when feeling like it. His garden is large, and in the middle of it the Malawai River runs through, separating it into two sections. As we were sitting there we decided first to do the work, then to take a look at the garden that is located on the other side of the river, for inspection and to pick chili. He had planted a new plot in January, but the unexpected sun had ruined most of the sprouts, and those that had survived were later destroyed by the cows that also ate the left over watermelon. *Yaqona* and *dalo* are both planted by using a part of the already uprooted crop. When a *yaqona* tree is uprooted some of the stems are put aside and cut into pieces of the same length for later being put in the ground to set roots, and grow big. The same goes for *dalo* where a part of the stem is replanted. This was what he was focused on today, and had been doing for the most part the last months. He was going to plant new *dalo*, and I was going to dig a flume between two *dalo* plots. The rain had been hanging heavy over the village the last weeks, but today was sunny and warm, and the work was hard.

After an hour we were finished and we both looked at each other's work before crossing to the other side for an inspection. There he showed me the spot with the destroyed *yaqona*. The January heat was not usual, he said. It lasted for a long time and it was burning his skin when working. All he wanted to do was to go to the garden and swim in the cool river. Normally when planting new crops in the sunshine, he puts some old grass or weeds over, protecting the crops from direct sunshine, but this time he had forgotten. He was not very happy because it meant he had to uproot some more *yaqona* to plant new ones, he would prefer his *yaqona* to grow big and increase in value. As we walked further to the plots with his large *yaqona* he asked if I could see how one plot had green healthy *yaqona* and how in the other one they were kind of yellow and not so happy. I could not see it, but he told me it was true. It was because he had not dug flumes that were good enough in that one plot. The amount of rain on Gau is great for most of their crops, but the crops are dependent on having well dug drains for the water to run away. "We want the plants to get the water, but we don't want the water to stay" a youth told me at one point. So my dad planned on uprooting the *yaqona*, and would ask his younger cousin if he could help him. He showed me new plots where he wanted to weed and have his new yam garden, and where he was going to plant his next watermelon garden. Painting for me a picture of how the garden would become, telling me he would do it slowly and steady, when the time was ready. After having picked some chili for my Fijian mom and some breadfruit for me he told me we should go home. He felt restless in his body, a pain like feeling, and told me he thought it would rain soon. So we started on the walk home, and by the time we reached the edge of the village the rain started to pour down, and I was pleased we had dug the flume and planted the *dalo*.

### **Spatial movement**

The above example shows how through walking and moving in the environment my Fijian dad was able to tell me stories connected to different places in the landscape. His knowledge was connected to the places where we walked. Like the story of how the chiefs bathe in the Malawai River or how his *yaqona* are feeble due to over watering. Through fieldwork, as stated in chapter 1, I became aware of how knowledge is shared outside a structured framework, one learn by doing. Edvard Hviding (1996b: 239) describes how in Marovo, in the Solomon Islands, place names are signs of, and in history. The place names communicate important aspects of the history and identity of the people, and are mediated in everyday experiences (Hviding 1996b: 228). The past of the ancestors' journeys are represented as



paths, and through these paths a people's shared history, kinship, and territory are embodied (Hviding 1996b: 239). In an example Hviding (1996b: 243) presents twenty-eight place names mapped and named for him by elderly custodians of the territories described, and "[t]he selection emphasizes places known and regularly visited by the coastal people who claim and control the areas, and who are inextricably associated with the histories embedded in the seascape." He gives an example of how he is out fishing with the leader of a *butubutu*, a kin-based group, and when passing a group of small coral islands his companion pointed to one of the islands telling him it was a most sacred place containing a stone chamber with a skull of the important ancestor and chief Haele, representing the powers of his kin group over that special place (Hviding 1996b: 252). However, the "signs in the seascape" do not only represent genealogy. They are encountered in everyday activities among reefs and barrier island coasts. The signs are in the environment often forming important parts of meaningful activity (Hviding 1996b: 267).

Hviding shows how stories are connected through travel in landscape. The knowledge is embedded in space, and can be shared through movement in this space, walking in the environment. My Fijian dad was an excellent story teller, but there was little use for me sitting asking him questions at home, it was when walking around he would start to share his stories. The deepest knowledge is rooted in direct engagement with the environment, and visible through activities. In the same way the women shared their fishing knowledge with me during the fishing, much other knowledge connected to the surrounding areas of Malawai was explained to me while walking and movement around. People talk about things when they do them, and I had not gained insight into these topics had I just been engaged in conversations with people.

In the next chapter I will discuss how this knowledge is learnt, how it is managed through the social cycles of the village life and economy.



# 3

## **The Perceptible Body: knowledge acquisition and management**

### **Introduction**

In the previous chapter I described how the rhythmic patterns of the surroundings are a basis for the organization of village life, and how it ultimately is connected to ways to of think of time, and how the knowledge of these rhythmic patterns are activated through movement in the landscape.

In this chapter I am exploring the way knowledge is learned. How does one learn how to use the environment? Much of people's knowledge has its roots in an early awareness of weather, and the underlying importance of weather in regards to other aspects of life. I will give a thorough elaboration, using Christina Toren's (1990) work on how children on Gau learn about seniority and gender, to show how the weather knowledge is acquired, and how, through economy and sociality, it is managed.

### **Knowledge acquisition**

One Saturday afternoon in June when walking by the beach one could see women all over, standing in the waterfront fishing, accompanied by children. We had a long morning, the tide would be in all day, peaking around noon, and the weather was grey; rain, wind, and a rough, choppy sea had been the case the passing week. Despite the cold weather, the village was full of noise and life as usual. The children were home from school, playing around or running errands for their parents, while the grown-ups were socializing, cooking, washing clothes,

filing garden knives or getting ready to go fishing or to the garden. I was accompanying my sister downstairs where she was dropping off lunch for her grandfather, he was old with his wife living in Suva, and was always taken good care of by family members. After we had been down and also cuddled with some of the younger children, we went for a stroll around the village to say hello to people, always nice, seeing that many of the villagers were old and less mobile to move around themselves, and we did not see them as often.

This morning there were many more women around in the village than usual at this hour. Due to the tide most of them were not going out to the reef to fish. Instead, they were planning to fish on the beach where the water would be a meter or so deep with the tide at its peak. For this reason they had more time for chores around the house as the tide would not be all the way in for a few more hours. After a while we moved back up where my mom was getting ready to go out. My Fijian dad was already in the garden, going to weed a new spot where he was planning on planting new watermelons later on. On a normal Saturday my little sister would stay in the village while we were out fishing or in the garden, but as we were fishing on the beach today she was going with us, if only for playing at the beach or with the other children. One of the perks of fishing in the water's edge is the little effort one needs to use to get to the fishing spot. Both when fishing with a net and when fishing with a line one needs to move the body a lot either to get to a good location or in context with the catching in net fishing, and this was also evident when we came to the beach. The generation of older women, who I normally did not see fishing, was already in the water with their fishing line. Children, both boys and girls, were also in the water with their own lines, fishing with a speed and skill I still only could dream of, helping their older family members with the weekend's food in between playing with friends. The atmosphere was light and happy and jokes, shouts and stories were flourishing. We started fishing, and I noticed I mainly got one type of fish – a small, greyish one. I told my mom and apparently it was season for *matu* – a tiny, tasty delicacy preferred by many children. It lives in shallow water, and is in season around the month of June. This was the main reason why so many of the women were fishing close to land this day. A group of women were further out, closer to the reef, but in general most of them were standing in the water on the beach by the mangroves that covers the seashore around parts of Malawai, and the surrounding areas. The time passed, the women fished, the children were watching them, playing with their own glass fiber boats made out of planks or running around in the bush right next to beach.

After a few hours of fishing the women were contemplating the water level pulling out very slowly. The high tide had lasted for a long time now, longer than usual, and they wondered if it could be the bad weather this past week that caused it. After some time it became clear that the water slowly pulled out then came in again, like a quick moving tide. It did not dry out the ocean floor all the way out to the reef, but it pulled the water some meters out, and then it came back in. The women figured it was a small *ua loka*, which is a tide that comes in and goes out quickly, tidal waves or a storm surge, described by the villagers at previous occasions as dangerous, and the worst the ocean had to offer in terms of extreme weather. There had been a warning for it a few days earlier on the radio they told me – I was horrified! I had heard stories about it from the time hurricane Tomas had destroyed parts of the village three years ago. Despite the strong winds the hurricane had brought with it, it was the *ua loka* coming together with the hurricane that was guilty of the largest destruction. The large waves it brings with it flushed over the village and when hitting the mountain it bounced back to the ocean pulling with it parts of the village. A few houses were completely ruined; roofs, windows and doors were ripped off. Others only lost a number of window shutters, and most of the houses on the lower level got water in under the doors and through windows. And here we were, standing in the water's edge, everyone aware of the forecast. I quickly reminded them of how they previously had told me it was the worst kind of weather they could get, and how my Fijian dad had said seriously "it's good when they don't come" when we talked about it. "Yes, yes. Sometimes they are bad, but not always", I was told by one woman while others nodded confirming. They went back to fishing and I had to settle with that answer. I knew I was in no immediate danger, I had spent almost five months on the island and trusted them in knowing when to watch out, but the mellow attitude with which they met this, to a person raised in Norway, dangerous weather forecasts still marveled me.

As often before, their knowledge about a phenomenon became evident to me by my own lack of it. As Hurricane Tomas was evidence of, an *ua loka* could cause extreme damage. That time there had been a storm coming up together with the tide being at its highest. There were many factors in play, and people knew what to look for. Birds can fly low, the wind is stronger, the direction of the wind and the ocean will gradually change, and older people told me they could feel the bad weather inside their bodies. The bones would be aching, not stopping till the weather arrived. The Saturday in June was a grey one, but apparently not so grey that the *ua loka* would have an impact putting people at risk. All this knowledge is often taken for granted, an implicit knowledge, by people in the village. They do not talk much

about it; they expect others to know what they know. Knowledge is slowly learned through processes of close participation and engagement.

### *Learning*

As shown in the case above the children were running around, accompanying their mothers, grandmothers, aunts and older sisters who were fishing, and through play and fun they were observing their family members, imitating them and listening to what the women talked about. Children's learning process is well described by Christina Toren (1990) from her work in Sawaieke on the western side of Gau, where she shows how children learn about gender and seniority.

A general agreement is that children need to learn how to become adults, and for this they need to be taught. Toren describes how children are discouraged for asking adults question, and therefore learn most of their knowledge from friends and children slightly older than themselves (Toren 1990: 168-169). During my fieldwork one of my main observations was how, when asking about their physical labor, knowledge about ripe fruit, which coconuts to pick or why a certain type of fishing was good that day, the answers I got were often "I just know". As stated previously I learned early on that they knew this by everyday engaging with processes happening in their surroundings. Fishing, agriculture, getting firewood, washing clothes, picking fruit, walking to different parts of the island were all activities not separated from the cycles present on Gau. However, it took some time for me to understand how people knew this, but by living in the village for some time it became a natural necessity for me to know some of this knowledge, and when I gradually was taught, together with watching adults interaction with children, and village life in general I started to get a grasp of this.

Learning in Malawai is highly unstructured. One learns through participation in life, by observing adults and older peers as well as observing when fruit is ripe, when it rains, what a full moon looks like, where it will rise, and where it will go down. In general, learning happens by taking a part in daily life activities. Being informed verbally is also part of this learning process, but it normally happens in relation to an activity, as shown in chapter 2, where my Fijian dad would educate me while we were walking through the bush on the way to his garden. It is important to highlight that this emphasis on unstructured learning is in relation to life in the village. In school children follow a structured learning program where the different subjects are taught by teachers using textbooks and blackboards in their teaching,

asking them questions, and sharing information verbally. The focus in this thesis will be on the learning taking place in the village, outside of school.

On Gau children are not ‘talked to’ by their parents or other adults (Toren 1990: 171). Babies and children receive plenty of cuddles, love and adoration, and when sad or restless they are picked up to be soothed and cuddled with, but a mother rarely converse with her child, even after he or she has learned to talk. This, and the discouraging of asking adults questions to make the child quiet and passive in their company, resulting in children often seeking answers with older children; Toren describes it as an active exchange (1990: 175). Here young children talk to, and play with, babies and toddlers, trying to make them interested in an object and such. Other children may dictate their younger ones around in their play, and Toren gives an example of an older sister, four years ten months, and how she teach her younger siblings which mangos are perfectly ripe, and which are overripe. She tells her younger brother, three years two months, to pick up mangos, and when he comes and shows her his findings she discards two of the three saying “Bad ones. Look, this is a bad one, it’s too soft.” (Toren 1990: 175). She is teaching her brother and sister what a ripe mango should feel, and look like by actually showing them and actively talking to them. It seems like the general knowledge is ‘filtered down’ from adults to children through overlapping age in different peer groups (Toren 1990: 179). During my own fieldwork I noticed this behavior up close, not between children, but when my 5 years old sister did it with me.

Children are often directed to pick fruits, coconuts or firewood for the household, and they embark the job in groups where they teach each other the same way the little girl, exemplified by Toren (1990), taught her younger brother and sister. In our household I was often sent out to fetch coconuts with my sister. In the beginning I went with my mom, and learned that most of the coconuts I picked were either too small or just simply “not good”. Though I could tell that the very dark, spongy ones were not of good quality, the fact that some coconuts were not suitable had never dawned on me. My sister on the other hand knew exactly which coconuts were perfect for use; she picked them up, shook them, listened to the amount of liquid inside, weighed them in her hands, and based on these observations accepted or dismissed them. By doing this she showed me how to find the right coconuts. If I wondered if a coconut was good I held it up, she would give me a precocious smile, shake her head and find a suitable one, holding it up for me to see. As she knew which coconuts to pick, but could carry maximum two at a time, we were sent out together as the perfect duo; and through her

caring teaching I learned, and I was very proud the day I came home and only two of my twelve coconuts were unfit for use.

Toren uses examples of how children talk to each other, and interact in the process of learning, but also how adults, especially ladies will have their children call out if someone passes the house, for example “Mika, come and have breakfast! (Toren 1990: 180). Not telling someone who passes your house while eating to come join you is considered very rude, and in Malawai too, mothers would have their kids shout out invitations telling them what to say, and laughed heartily when the child did as told. Children are rarely taught what to do by parents using specific words, but encouraged by imitation and while observing adults. Children’s games age 5 and younger often imitate adult behavior (Toren 1990: 178). They can be given a little bit of cassava and a sharp knife and with this playing to cook and prepare food simultaneously with their mothers, or given strips of dried pandanus pretending to weave mats. They pretend to smoke, play guitar on a piece of wood, and put flowers behind their ears. They follow older children listening and talking to them. In addition to this they may spend hours just sitting and quietly observing men or women carry out a task (Toren 1990: 178). Toren makes use of these examples to show how children learn about seniority and gender, because in all interactions with people, growing children are made aware of the distinctions to be made in regard to seniority (Toren 1990: 183).

When it comes to learning about weather knowledge in Malawai, children observing adults was to me especially evident. In the example above the children were around their female relatives while fishing together with peers from the village switching between helping out fishing, and playing around at the beach and in the water’s edge. Here they catch up on conversations between the women and closely observe techniques used for this particular task. Another example of this was during the *tugadra* fishing.

In the Malawai River that runs through Malawai Village there lives a seasonal fish named *tugadra*. *Tugadra* is a fatty fish expected sometime between March and May. The fish will during high tide swim into the river and when the tide pulls out will, in large schools, swim out to the ocean again. Fishing for *tugadra* is therefore done during high tide with two large nets, one starting where the river meets the ocean, the other starting further up the river, and they slowly walk towards each other. When they meet they will pick up the fish caught in the circle of the net. The other way of fishing *tugadra* is right before the tide pulls all the way out, and the fish leave the river. They use several nets, and each net is connected to a big



wooden stick on the short side. Two women hold one net and they place themselves in the mouth of the river. They put the nets horizontally into the water with a hint of an angle, never letting it go. When the fish leave the river in streams they swim straight into all the nets which are then lifted up and women and children energetically and skillfully gather the fish into big bags that later will be shared between all the families in the village.

We had been waiting for the *tugadra* to arrive for some time, when it was first observed in the river. It was a nice festive night in the Community Hall, the youth men were being celebrated for the work they do in their gardens, when women and children started to shout and run outside - the *tugadra* was finally here! The children were electric, running into the water with their nice clothes, and women running home to find fishing nets. This fish created much commotion and pleasure amongst everyone. It was a communal activity, and children were in the water together with their relatives, some were allowed, others, especially the youngest ones, were told to get out of the river straight away by strict grandmothers. The older children helped picking fish out from the net, a job that needs to happen quickly so the net can be put down again to guard the river mouth, not letting fish escape. The younger children, who out of excitement did not hear their female kin shout them in, were around, watching, helping to carry the individual fish bags into shore where the fish were placed in a large pile, and after the fishing was done divided so each household got their fair share of fish, depending upon the amount of household members.

Evident during these fishing trips was how children watched fish being handled, picked up, and how the fishing was carried out as well as trying a little. There was only one girl in the village going out fishing at the reef with the adult women. She was fourteen, and had a sabbatical year from school to help her old grandmother living in the village, and therefore considered as an adult, though an adult in learning, when it came to providing for the family. She would go out fishing with her grandmother who, while out in the ocean, showed her how to do it, letting her observe and then try. I noticed this myself with my Fijian mom. When meeting a task I did not handle she said “give!” took it, and did it. This was not because she did not want my help, but she wanted me to observe how she did it so I would learn. It took some time before I figured this out being used to my Norwegian dad always explaining while showing me how to perform a new task, or helping me with something I did not understand when I was younger, as well the written or verbal explanations emphasized in the Norwegian education system. Hanne Müller’s (1996: 226) describes how her experience with teaching within a written or oral discourse made her learning process of

welding confusing, referring again to her perspectives on silent knowledge. As an apprentice she would often have the wrong technique hindering her in properly performing the task. When her instructor walked past seeing this he would clasp her shoulder, she would step back watching him do it in silence. He did not use words to explain, but when he did it she could relax, not only watching the instructor's bodily movement, but also the weld pool, and how it looked when it was properly done (Müller 1996: 229). This silent knowledge she argues works as a foundation for practical action. She shares Maurice Bloch's (1991 in Müller 1996) errand when wanting to emphasize the importance of silent knowledge, but additionally she wishes to emphasize how private, individual experiences work as a premise and is a necessary condition for the exact execution of knowledge (Müller 1996: 226). As with Müller's welding teacher my Fijian mom gave me the opportunity to carefully watch the performance of a task, how she moved her hands or body. This was often related to cooking; when to flip the pancakes, how to knead the bread dough or scrape coconuts. Despite expecting me to watch her she did give me a few instructions while doing it, for example while trying to teach me to open the coconut. "Look. Do you see the line that goes around the entire coconut? You want to hit that. Lift your hand high, and...", then she went silent lifting her hand letting gravity help out and with this lowering it with speed and accuracy opening the coconut in two clean knocks.

### *Sharing knowledge*

Observation became important, and I should learn that bodily techniques (Mauss 1935) differed, and that this difference plays a role in movement. During my first weeks of fieldwork Malawai was bathed in sunshine. The heat was suffocating, but it also dried up the ground. This, of course, was not something I thought about before after the first rain. There had been signs indicating it would come. My Fijian dad told me he felt uncomfortable, the body was restless and his joints ached, and when the night fell upon us the rats were creating quite a disturbance up on the roof. The rain started; the rat fights were replaced by the drumming of drops on the roof, soothing us to fall asleep. The next day I accompanied my dad to his garden for the first time, and when moving around in the village and the outskirts so far had been easy, this was a whole new chapter of village life. Though, I would get quite acquainted with it over the next months with the monsoon season acting as anticipated. Whereas I got my flip flops stuck in the mud, slipping when walking barefoot and somehow ending up being covered in dirt, my village cohabitants walked quickly and effortlessly. As

the months passed I watched them when walking around, how they moved their bodies and feet, when they used flip flops and when they took them off, and towards the end I realized I had gradually changed my own way of walking, imitating them, teaching my own body to live in the village.

Accordingly, there is an interaction not only with other people, but also with the environment of land and sea which is important. One would constantly find children running around in the village, sliding and skating on the mud, scratching their toes and knees, climbing trees, picking up rocks, sticks and crabs from the ocean. However, senior kin also teach their young ones about weather signs. In Fiji, women often move to the husband's home after marriage, it was therefore common to meet more women who had moved to Malawai in their later years, than men. I was surprised when one of the younger ladies one day told me she was from a village in Viti Levu, a village not located by the ocean, and that before she came to Malawai she had never been fishing. She was an avid fisher, and she was very good at it, going out several times a week. She said when she had first arrived her auntie (her husband's mother) had taken her out everyday teaching her all she knew. She had listened, watched, and tried, and after six months she knew how it was done. Similarly her uncle had also taught her much, he would for example, when going to church, located at the upper part of the village with a great view over the reef and ocean, tell her "Look. Moala is black. That means bad weather is coming". Moala is an island in the Lau group, east of Gau, normally not visible from Malawai, but when bad weather is approaching Moala will sometimes turn dark in the horizon indicating what to come. I was thrilled when she told me, because I knew it. My Fijian dad had also told me this while we were watching over the ocean, he was often commenting upon small things like that when they happened. If a bird was flying low he would ask if I saw how low the bird flew and how its tail was divided looking like a pair of open scissors. "That means bad weather is coming". And when the first moon of the moon cycle, as well as the first "first moon" I witnessed in the village, became clear on the sky he called me out on the porch telling me how it was the first moon, and how the moon would move over the sky as it increased in size.

He told me this because he knew I did not know it, as the young woman's uncle shared information with her too when she was new to the village, and because they recognize the importance and relevance of this knowledge to life in the village. During my stay my sister often got local medicine when having a cold or feeling ill, some of the children's medicine was easier to find, for example the medicine where one use the bark of parts of the mangrove

tree, and mixing it with warm water. Other medicines consisted of the skin of several trees. I asked my mom how they knew and she said it was my Fijian dad who knew most of it, he had learnt it from his elder kin when he was young, and what she knew she had learnt from him. This is except for a certain medicine for women that her mother told her of when she fell ill while she was a young girl. Thus, they were made aware of weather signs from a young age, and this knowledge is highly used in their daily work.

Thus, it is not only through peers your own age or a little older that one gains this knowledge, but information is also passed down by elders to their younger. What is essential here is how this knowledge appears through activity. Ingold (1992: 40) argues “[...] it is possible for persons to acquire *direct* knowledge of their environments in the course of their practical activities.”. A connection can be made to Hanne Müller (1996) when she is arguing how the silent knowledge only is activated when it is used. I would like to suggest an expansion of these perspectives; knowledge is also made explicit through events in which people socialize, where they perform and act together. Sociality is constituted through a common practice by people who stand in close relations to each other.

It was 10am and the sun was shining. One of the women were waiting for me, we had to leave now before the sun would be at its highest. The youth in Malawai’s Methodist church were attending a youth rally in form of a choir competition in Lekanai, a smaller village a good two hours walk from Malawai. The tide was low, and if we left at this instant we would even have time to eat lunch, or a second breakfast, at her brother’s house in our neighboring village, Nacavanadi. After a small stop there to hear the latest gossip, and taste the cow from yesterday’s village party, we started our journey. It was one of those rare sunny ‘California days’, where the sky was all blue and the breeze cooled us down. The rocks on the bare ocean floor never seemed to bother my Fijian friends, they walked in a quick pace noticeably without recognizing the sharp objects scattered around. I did not want slow the group down so a black and blue toe and scratched foot sole had to pass. We arrived in Lekanai warm and happy, only having time to change before we walked up to church. The day was a success, singing and laughter dominated – I had rarely felt such a belonging. It was late when we decided to walk home, but now the weather situation had changed. It was moon lit and clear, but throughout the day there had been heavy rain falls, leaving the roads muddy and slippery. As most of us wanted to reach Nacavanadi, hosting a dancing party this night, before midnight we had to speed it up. The tide was now in, making it impossible to walk the shorter route on the outside of the mangroves, so we had to follow the old truck road, located further

into the interior of the island. The rain had left puddles, and the mud was sticky, and this time I could not keep up. Where I got my flip flops stuck in the mud, slipping when walking barefoot and somehow end up being covered in mud, my Fijian friends walked quickly and effortlessly. After the amazing feeling of being part of the group all day, I felt bummed for being such an obvious outsider when we walked home. At least the moon was big, lighting up the opening in the forest, helping me see.

Their sociality was evident through my lack of it. My social belonging to the group was undermined by not being able to walk in the terrain. Though I managed to get from the starting point to the ending point I was falling behind. Not being a Fijian they would never have left me behind, and two or three people were walking with me, but my struggle to focus on where I was putting my feet excluded me from the social conversation they were having, not to talk about the rest of the group laughing and chatting far ahead of us. This knowledge of knowing the environment, the embodied interaction, in this case of walking in the mud, was a condition for the village sociality. When I walked I was not only left out of the conversations, but they saw that I did not walk as well as them, making me an outcast.

In contrast to Leach (1976 in Ingold 1992: 47) stating that internal perceptions are influenced by the verbal categories used to describe it, Ingold argues how the awareness of sharing a common world makes translation of percepts inessential. That is, one does not need to share perceptions through language to feel a sense of community. It is through the direct perceptual involvement of fellow humans together in action in the same environment sociality is given. Ingold (1992: 48) draws a clear line between environment and nature or the 'physical world', and rejects the belief that the perceived environment is a separate domain, an item of culture. The environment is not perceived separately before action, it is through people's action in the world people know the environment, and perceives what it offers.

In the previous chapter it was shown how the present cycles in the surroundings, and weather patterns were organizational for the village life. While this is true, it is not the only organizational rhythm in the village life. The cycles are also distinctly social. During my first weeks of fieldwork the days looked very much alike. People woke up, had breakfast, men went to their gardens, women went fishing or weaving mats, we had lunch, relaxed, and so the days went by only interrupted by the occasional funeral, *yaqona* party or church meetings. After a while, however, when my new life had started to sink in, and I started to gain a more nuanced view of the daily rhythms I understood that some weeks were different than others.

Here was a structure, one had obligations to the village, and these were to be followed. The first week of the month is called “village week” or “healthy living”. This week is set aside for cleaning of the village; the men will cut the grass in the communal parts, the grass around people’s private house the household itself is responsible for, though if one fails to do this for a while people will complain seeing that most people walk around on others property. Drains are supposed to be dug, a good drainage system is important to prevent water accumulating into puddles, destroying the ground, and making it difficult to move around. Houses should be cleaned up, and if a new rubbish hole is necessary this is the week to dig a new one. Rubbish holes are located at the outskirts of the village, and are earmarked for rubbish that will not burn, such as tin cans. When the holes are full they are closed, and they dig new ones. So, village week is to generally clean up the village, rake leaves, pick up garbage and make it presentable. This is especially important during the wet season when the rain is heavy and frequent, making the village drenched, and the grass grows quickly. The second week of the month is to “look for money”. If the village needs money for a repair, the church needs money, or money in generally needed this is the week for women to weave mats to be sold, and men to make copra or sell *yaqona*. The first two weeks of the month is therefore set aside for communal work, whereas the last two weeks are for private work. The men can be in their gardens the entire day, women weave mats for personal income, or do the work they want and feel is needed. Of course this work can be done the first two weeks of the month as well, but the joint work must be done first and is prioritized.

As well as these two weeks the men will have to cut the grass at the school grounds on Mondays, this is done together with Lamiti as the school is shared between the two villages. On Tuesdays the youth go to their cattle farm, fixing the fence, a job often necessary seeing that the cows like to wander through the fence, while the other men gather firewood for the burning of copra. The village has a shared copra burner, which is used to make copra do be sold in Suva. Before this was a more profitable business, but now the copra industry has to a large degree been replaced by selling *yaqona* at the market, a good with a higher profit margin.

As seen here, the cycles of the village life were not only visible in the physical environment, but also in the social life, and these cycles are closely connected to the economy of the village.

## **Village economy**

Sahlins (1962: 120) states in his book from the island of Moala in Fiji that “the family unit is the principal productive unit in nearly all sectors of the economy.”. Sahlins shows how the mode of production is characterized as familial. It is the family unit’s production that makes up for the greatest portions of general production; control over gardens, coconuts and consumption goods (Sahlins 1962: 120). Jobs are either men’s work or women’s work; few tasks are carried out by both men and women. Accordingly, labor is clearly divided by sex, and through a model he shows how female and male spheres are visible in the landscape (Sahlins 1976: 40). There is a dualism in organizing the society where male and female, sea and land, chiefly and common, are in opposition of each other. There are social groups categorized into land people and chiefs, where the land people are the true owners of land having first inhabited the islands while the chiefs came later by sea, taking up leadership over those living in the inland regions (Sahlins 1976: 24-25). This division constitutes a cultural organization of the natural differences, for example, land and sea people share products. The land people’s job is agriculture, especially taro, and providing cultivated food and pigs to feasts. The sea people on the other hand bring fish and turtle. Christina Toren (1999: 53) shows how this is not an indication of hierarchy, but balanced reciprocity. The other form of reciprocity is a more complex exchange – “[...] the essential model of the domestic division of labor, rehearsed all over Fiji [...]” (Sahlins: 1976: 38). Though men sometimes go out deep sea fishing it is the women’s fishing, netting and collecting in the lagoon on a daily basis that is the main source of seafood to the family. Women also weave mats in the village, whereas the man’s work is in the interior bush cultivating crops. That is, in his model he shows how the division of labor is placed in the landscape where the women’s activities are “inside”, in the village and the lagoon, surrounded by the men’s domains of deep sea and deep bush. The strength, he says, lays in how they complete each other (1976: 38-39).

The garden produce is a key factor in the village economy, and the importance of this aspect of life is evident. Families are, in respect to gardens in cultivation, an exclusive group. The adult men of a family group are said to have their own gardens to take care of, and in which they plant and harvest. However, the gardens as a whole are normally controlled by the family elder (Sahlins 1962: 126). Sahlins was told that one large, common garden was normal amongst an extended family before, but today there are personal, modern pressures which have brought gardens to be personalized.

“Property relations in the extended family are clearly subordinate to social relations: a man should in no way disobey the wishes of his senior, and least of all with respect to vital economic matters relating to the collective welfare.” (Sahlins 1962: 126). The family head is an effective supervisor of the family’s gardens (Sahlins 1962: 127). Root crops are used in ceremonies, and given as gifts in funerals, weddings, and gift exchange. One of the families in my village had a strong family head, controlling large areas of land along with other ways of earning income. He had many adult sons, nephews and grandchildren who all had been given their private garden from his land areas. One weekend I was going to attend a workshop on the western side of Gau, and due to shortage of fuel the boat that was supposed to pick me up in Malawai had to pick me up in Qarani instead, which is a good three to four hours walk away. Since I had never been there before my Fijian mom told me to ask one of the youth men in our church to take me there. I agreed, and when he walked passed our house later she called him in and asked him. He said that would be no problem, but I had to go with him and ask his grandfather’s permission for him to be away from the garden work that day. The men in his family were doing communal work in each other’s gardens to increase efficiency in the planting process. We walked over to his house, where his grandfather sat on a chair at the upper part of the house. I explained why I had to go to Qarani and why I needed a chaperon, and if he would give his permission to let his grandson follow me there. He listened carefully to what I had to say, and told me that would be no problem.

The family head is an effective supervisor of the family’s gardens (Sahlins 1962: 127). In the family described above all the men in a family contribute with food crops for shared family dinner, but they were also contributing when the family was expected to give a ritual presentation, *reguregu*, at a funeral or wedding. The *reguregu* could consist of *dalo*, pigs, *yaqona* and if the person was important, even a whale tooth, though the two latter were normally given on the behalf of the village. This private economy is closely connected to the village economy. The death of a woman from Malawai, but married into Lamiti, resulted in an evening meeting in the Community Hall. The village leaders and elders were deciding what the different family clans should bring as *reguregu*. Some had to bring *dalo*, some pigs and women had to contribute with mats, another very important contribution to village economy. The village was as a unit planning what goods to bring to the funeral, and this communal gift to the family of the deceased was collected from the three family clans in Malawai. The importance of families having enough goods to contribute to these occasions is essential, contribution to the community being heavily stressed.



However, life in the village is not only based on families. As shown above, people are not freely left to only do work in their private gardens, there is an expectation of people to contribute to the village, and in today's world money is needed for this. The global market is an evident part of the villagers' life, though it often takes on a form that fits into, what Christina Toren (1999: 27) shows, is called 'the Fijian way of life'. Toren describes how she was met with a view that in the village people take care of each other. The village life is a life where nothing is paid for, many kinds of food are available, and money is not used. Money is considered the 'European way of life'. Her Fijian language teacher told her the essence of 'the Fijian way of life' stating how, when living in the village, one can eat when one is hungry, and drink *yaqona* when one wants to drink. If visitors come they will be looked after, and if they need anything they will get it straight away. This presentation of the village is in line with 'the way according to kinship' standing in contrast to the European way where everything is paid for resulting in alienation of one's relatives. This, Toren (1999:28) states, does not take into account the contemporary village life in Fiji, denying historical change. The village economy is mixed between subsistence and cash economy. Wanting a secondary education for their children, modern houses, furniture, and radios, money becomes a necessity. As well as education and commodity goods, villagers engage in relations with each other based on money; buying or selling food, and sometimes even labor. This is mainly obtained by selling cash crops (Toren 1999: 28). When Toren did her fieldwork copra was the main cash crop, but by the 1990s *yaqona* was a more lucrative option (Toren 1999: 28 n(1)). During my fieldwork in Malawai this was still the case. Copra was sold by some, often to the village shop for store credit, but most of the villagers relied on *yaqona* for their main income, as well as watermelon for quick cash, as this only takes 3 months from planting until harvest. Food could be bought from neighbors, either bundles of *dalo* or fish from the men spear diving.

Toren further elaborates that despite the fact that money has become an inevitable and important part of the current economy, the villagers manage to assert their ideals of 'the Fijian way of life' as reality. A sharp distinction between an ideal commodity exchange, associated with the European way, and an ideal gift exchange, is made (Toren 1999: 28). 'The Fijian way of life' is synonymous with the dominant hierarchy in Fiji which is why money can be problematized. In commodity exchange money has a neutral value, fulfilment or maintenance of social bonds is not important in these exchanges. As a gift exchange on the other hand, money, like any other gift, marks continuity in the obligations between kin. Money is only

viewed as problematic when it calls into question the existing social relations (Toren 1999: 29). Toren illustrates how a transaction of money Europeans would think of as a commodity transaction, was made into taking the form of a gift. Her Fijian teacher refused to accept money on a daily or weekly basis for the lessons he gave, but that did not mean he refused money. Instead the money was given at irregular times, presented as a gift in exchange for the gift he was giving through teaching (Toren 1999: 30). It was a reciprocal gesture where both parties acknowledged the others labor. When a woman pays others to make a mat for her she will preside over a *yaqona* bowl complimenting their work, and when she pays over the money that too, is a reciprocal gesture. “The transactors are explicitly recognized as kin and the exchange is seen as an expression of the continuing obligations obtaining between them.” (Toren 1999: 30).

To ignore the fact that the current village economy is a semi-subsistence one, and not a full subsistent economy, is not tolerated. It is a clear failure of fulfilling ones obligations to the village, as well as an insult to the intelligence. The co-operative store in a village is one of the few places where transactions are constituted as commodity exchanges; this is because it belongs to a context symbolically outside of the village (Toren 1999: 32). It is important to note that it is the villagers who construct this ideal separation between gift and commodity exchange. This allows them to behave as if the distinction between them is definite.

These obligations stated by Toren (1999) are obvious after having spent some time in the village. In Gau most of the villages have a generator providing for electricity after night fall, but in Malawai this generator was broken. It had been broken for more than six months, and now the village had decided to gather money for reparations. I was informed of this one day when asking my mom if anything was happening the upcoming week. Things had a tendency to just happen, with everyone knowing, but me, so I had gotten the habit of asking in the beginning of each week, if she knew of any upcoming plans. She told me that we would go to Nacavanadi for the opening of the new health clinic on Wednesday, and that on Thursday there was a *solu*. She told me as a matter of course, so I had to ask a little further to understand what she meant. A *solu* is a gift, I was explained, but it is not voluntary, everyone has to give money. Apparently we would gather in the Community Hall on Thursday where each woman was going to give 50 Fijian dollars (FJD) for her household to a communal pool, money that would be going towards fixing the generator. As a thank you the men would cook for the women. We had a festive evening to look forward to, she said. There would be

*yaqona*, as there always is when people come together in Fiji, and the women would hand over their *solu* to the man responsible for accepting the *solu*.

The week went by, Thursday arrived, but with a certain edge. The women were furious, the men had decided they did not want to cook for the night, so the night would go as planned with the women giving their *solu*, but there would be no food, everyone would eat home first. The women were angry saying that they had to find the money for the family, and the men did not want to do anything. Although, they agreed that a generator was necessary, they felt it was in their place to be a little angry at the men “who only wanted to drink *yaqona*”. Due to this, the new time of the *solu* was after dinner, so later that night, when we were full, and my Fijian sister was asleep, my Fijian mom and I got ready to go down to the Community Hall. As always she was the one to tell me what I should wear, and after having made us presentable we went down. I was a little anxious, thinking we were late, but I had nothing to worry about. Except the men sitting drinking *yaqona*, and the youth pounding, and mixing it, there were only a handful of women present. My Fijian mom told me the women did not want to come because the men did not want to cook. We took our seats in the lower part of the hall, and one by one we went up giving our *solu*, being thanked with a “*Vinaka vaka levu*” (thank you very much) and three claps of hands. We sat there relaxed, talking to each other, drinking a little *yaqona*, while women came after being finished with dinner and getting children to bed. Despite the angry note earlier, we had a very good time buying *loli* (candy) in the village shop, and my favorite part every time there was a *yaqona* party, there was singing. It was the women who sang this night, loud, clear, and sometimes playful, making us imitate different animal sounds to the joy of everyone there. Towards the end of the night there was a public petition where the man who had been responsible for accepting the *solu* called up those who had given, and the amount they had given. Those not having been able to pay yet were also called up with a reminder that this was not optional, and a *solu* had to be given to the man responsible for the village’s economy as fast as possible. Since it was the women giving, the men preformed their thanks for the gift, clapping their hands in the fashion done at ceremonial happenings, in tradition with the Fijian way.

This example shows what Toren (1999: 30-31) argues, how ignoring that the village has a semi-subsistence economy is not tolerated. If one refuses to take part in the giving of money gifts is to publicly fail at acknowledging a link to the village. The importance of being able to contribute is essential in being part of the social life in the village. In Malawai the only ones excused from giving a *solu* or any other form of communal giving, were young men who

had planted a new garden less than three years ago. Seeing that the *yaqona* takes at least three years before being ready for harvest, it was not expected for them to have the cash necessary.

The importance of money was often highlighted to me in conversations, and the main crop in relation to personal economic growth was, as previously stated, *yaqona*. Young men in their twenties had an especially large focus on this. It was important to build a future they said; telling me *yaqona* was their “money in the bank”. The longer it was in the ground the more value you got for it. Starting a family requires cash to buy mosquito nets, bed sheets, kitchen supply such as pots, and possibly even a house. Planning and being ready for this was therefore necessary. Men already settled with family need money for school fees, clothes, food and general house supplies. When transportation is available a large amount of products such as root crops, *yaqona*, watermelon, fish, mats, fruits, and coconut products, amongst other things, are sent to Suva either to sell at the market for money or to be given to family members living in urban areas. The abundance of village food, the size of it, and the quality is a luxury for urban dwellers who normally shop at the supermarket or the market. These familial gifts are repaid by sending flour, sugar, tinned food, milk, knives, and other goods not available in the village, or cheaper in the city, back to the island. This exchange of goods is an important part of the village economy.

### **A transferrable knowledge**

As shown above, weather knowledge is not only used to provide the family with food, though this also is a very important aspect. Having enough food for each meal is a necessity in the village. I would often notice that there were *dalo* or cassava left the day after it was cooked. Due to the heat these leftovers were not eaten the next day, but used as food for the pigs. Before returning to Norway I visited a lady from the village now in Suva, having just given birth at the hospital there. She was longing to going back to the village where the food was free, and plentiful. We talked about the prices of *dalo* in the Suva market, and she said the price was very high, and the quality not good. She told me she had become quite aware of the amounts of food they have in the village, and how large parts of it is given to the pigs. “We are very lucky in the village, we have enough food, and we don’t have to pay for it”. This is true, and an important factor highlighted by almost everyone at one point or another. The root crops, the pigs, *yaqona*, and mats are also used for funerals, or as a thank you to people having given a gift to the village. For example, there was a large thank you party for the New

Zealand ambassador when he came to Nacavanadi for the opening of the health clinic. The money to build it had been given by the New Zealand government, and when he came a large traditional ceremony was prepared for him where whole *yaqona* trees, large pigs, whale teeth, *dalo*, and mats were given to show the appreciation for the gift him and his country had given them.

Together with this, a cash economy has become important in present day Gau. As the *soli* example showed, commodity goods are owned, both at a private level, and as in this occasion, at a village level. However, the cash economy is, as stated by Toren (1999), transformed into ‘the Fijian way of living’. That is, it is not only a pure economic transfer where kin relations are irrelevant. In the *soli* we had in Malawai, the money, though not optional, were given as a gift. It was accepted as a bundle of *yaqona* is when a person is presenting his or hers *sevusevu*; with a thank you and clap of the hands. Toren (1999: 40-41) explains how in *gunu sede*, drinking cash, a fundraising event where a bowl of *yaqona* has a price of 30c or 50c, and is paid by one member of the village to be given to another for him or her to drink, money is made into an object in itself. During Toren’s stay, all the villagers on Gau were raising money to send their rugby and basketball teams to Suva to partake in the annual inter-island games (Toren 1999: 38). To do this, they met for *gunu sede* once a week to raise the money. Through this event they raised the money needed to pay for the trip to Suva, but due to the money’s qualities as a transaction where a person’s kin relations are not taken into account, the *gunu sede* helped to symbolically ‘launder’ the money through ceremonial exchange, where a certain amount of money was exchanged for a bowl of *yaqona* (Toren 1999: 41). The money transaction was then not considered as a pure, commodity exchange, but an exchange where social kin relations were of importance.

Stated by Strauss and Orlove (2003: 8) “[...] even the most routine and apparently banal observations of the weather can serve concrete economic ends and also broader moral concerns about proper conduct.”. Thus, weather knowledge is used in important aspects of daily life; their vast, detailed knowledge has come in regard not only because they live in close relation with the environment, but also because it has a function in the life of the people. The knowledge works as a foundation for successfully partaking in the cycles and rhythms, not only of the physical world, but the social organization of the village. One is part of the sociality of the village life both by physically being able to keep up in the terrain, by talking and taking a part in the social conversation. Another is being part of the village economy,

which is also, at its core, a highly social arena. Knowledge about the weather is therefore important to be able to take part at the various social levels of the village life.

As Hanne Müller shows, the personal, silent knowledge she learnt while welding could still be connected to the technical criteria of welding, and can be transferred to every international welding workshop exercising certified welding. This is also true in Malawai. The knowledge about weather, a personal knowledge learnt by acting in engagement with the environment (Ingold 1992) is managed to be a part of both the local village economy, and the global one, through taking part in the commodity exchange emphasized in the urban areas. But this is not only true for the economy; it is also true for the weather knowledge, as will be elaborated on in the next chapter.

# 4

## Thinking and Feeling Weather

### Introduction

“Our different cultures shape the way that we think and respond to the weather[...]” (Strauss and Orlove 2003: 6). In the previous chapters I have argued that in order to get an understanding of the weather knowledge in Malawai it is necessary to follow the villagers in their work and through this learn the knowledge the way the villagers have learnt it. As stated in the first chapter, *draki*, the Fijian word for weather, has much meaning connected to it. This is influenced by people’s work, religious beliefs, and the environments where they live. In this chapter I will examine how weather knowledge and management, as well as weather’s impact of daily life, creates a unique understanding, as well as reaction to the stable incidents, and deviation from the known cycles. The way people think and feel about the weather is also influenced by global and scientific factors through the project Lomani Gau, initiated by Dr. Joeli Veitayaki. By elaborating on this project I will show how the weather knowledge in Malawai is unique due to the meeting of two different systems of knowledge which form a new knowledge appropriated to the local, village lifestyle.

### Prediction and Security

The Norwegian Meteorological Institute (<http://www.met.no/Meteorologi/>) states that meteorology is the study of actions in the earth’s atmosphere. These processes constitute what we understand as “weather”. Thus, meteorology is the study of weather. Further it is explained that meteorology includes all the physical processes occurring in the Earth’s atmosphere, what we daily think of as weather – clouds, precipitation, and wind. Meteorology

is presented as a physical dimension, something happening far up in the sky, out of reach for the human eye, but which influences us according to the weather that occurs.

Weather's importance in our lives is an old phenomenon; one can assume it has always played an importance. According to Marita Sturken (2001: 161) weather in the Western world has to a large degree transformed into a "technological experience" where information is gained through satellite television or internet, and "[...] no longer something one goes outside to register, that one experiences on the ground and in the flesh.". Sturken exemplifies how the Weather Channel portrays the world through satellite images, rarely on a grass root level, creating an image of a global story (Sturken 2001: 171-172), often focusing on dramatic weather (Sturken 2001: 166). Furthermore she argues, in the world of the Weather Channel, weather has little impact on the work environment for people. It is presented as affecting the drive or travel to work, but while working, the weather does not have an impact (Sturken 2001: 173). Through the Weather Channel the viewers are told the story of how weather is uncontrollable, dramatic, and exciting, but science has provided the ability to predict it. This prediction will save people; it is a form of knowledge working as a shield against the future (Sturken 2001: 187).

The satellite views of earth used during a weather forecast gives the impression of it being one planet, one world, and one dream (Sturken 2001: 172). Tim Ingold (1993: 209) describes how discussions and debates in the Western world have a strong focus on "global environmental change" which he interprets as a process of separation between the people of the Western world, and the rest of the world. He presents the contrast of how, through the Western school system, we learn to look at the globe in forms of an image which is drawn, thus we see the world as a solid globe we are standing on top of. This is coherent with weather forecasts' use of pictures taken from above. It creates an image of a world people are separated from; a distinction from earlier times when people imagined themselves as placed within the nucleus of the globe looking out through the sphere the world consisted of (Ingold 1993: 210). The movement from a spherical to a global view of the world has given rise to a belief that the world can only be seen by leaving it, and many resources have been used to turn this imaginative flight from the globe into a reality. As a result perspectives such as 'local' and 'global' have appeared where the former, representing ordinary people, is considered as illusory and incomplete, and the latter as real and total (Ingold 1993: 211). In a global perspective life is lived on the surface of the world, and not in the center (Ingold 1993: 213). According to Ingold there are still people who live in a relationship with the world



today that is spherical. Through this kind of engagement with the world and the different lifecycles and ongoing processes in nature one will gain a unique knowledge of the local conditions. A knowledge production and a worldview that is often forgotten or has vanished in the Western discourse where people to a larger degree are separated from the globe. In Ingold's (1993: 214) words; here in the Western world we do not live in the world, but on the globe, consequently being unable to partake in the essence of cycles and rhythms.

As shown in previous chapters, village life in Malawai is highly connected and participatory in cycles and rhythms in the environment. The growing cycles of certain crops, rainfall, wind, the lunar cycle, tidal water, and when certain fish, fruits, birds and flies appear, are connected to calendars and time. The knowledge is obtained through living in the environment, by mingling with the world, learning its rhythms by acting in it (Ingold 1992, 2007), creating a knowledge that is activated through participation. This knowledge is managed in everyday life through work, and movement in the environment affecting economy and sociality. The conception of weather is highly influenced by people's relation to the environment, differing from what Ingold explains as the Western view, where one is separated from the world. In my own fieldwork I was quickly introduced to a way of reacting to weather phenomena that differed from what I was used to in Norway.

#### *Tsunami warning in the village*

On my second day in Malawai there was a tsunami warning on the radio. It was a quiet day in the village; men were in their gardens, working or taking a cool dip in the river, women and young children resting after lunch. Not yet being accustomed to the extreme heat in Fiji I was laying on the cool floor resting, bordering on napping. With a jerk I was drawn out of my heat hibernation by my mom calling out: "Nora! There is a tsunami warning, wake up, we must be ready!". I asked her when the tsunami would come; ready to hide all electronic equipment and my notebook, with two days of field notes, in water resistant bags. She told me, much more relaxed than a minute earlier, we would have to wait and see. And that is what we did. She went outside to hang clothes for drying, and I was left to myself unsure of what to do. I learned the abrupt warning about the possible danger was just an attempt to scare me, as she did the same thing the next day when we were in the Community Hall weaving with the other women. There was a warning, but she was not at all as worried as she first gave the impression of. Being a little stumbled by the suddenly mellow tone, I went outside to my dad who was sitting under the shade of a tree, next to the church looking out over the ocean. I asked him what he was doing, and he said he was observing the ocean and the waves. He

continued, saying there had been an earthquake further up north, probably in the Solomon Islands, causing the possibility of tsunamis other places in the Pacific, and it would be fruitful to watch the waves for signals. I asked what signals we were looking for, and he said we should see if the waves got bigger. In case of a tsunami both the size and rapidity of the waves would gradually escalate, creating a warning. So there we sat, watching the waves while my Fijian mom hung clothes in the sunny breeze, and the neighbor woman was singing in her kitchen while cooking. The sky was blue, the sun kept shining, and the ocean was calm so after a while we started talking about the family structure of the village, and I soon forgot all about the tsunami warning in my effort to understand the complex system of clans, and families. It was the first days of my fieldwork and I was just learning to know Fijians – the situation was mesmerizing to me. What had seemed so dramatic at first was met with such calm, relaxed attitudes.

My expectations of the “proper” reaction to a tsunami were highly influenced by Norwegian media, and the horror in Thailand December 2004, a story much covered in the news, which I watched from my living room in a safe distance from the ocean. The people of Malawai, on the other hand, live right next to the sea, but they too feel safe. This lack of vulnerability was shocking to me two days into my fieldwork. Whereas I thought of tsunamis as something horrible, a warning indicating a real and certain danger; the villagers were quite relaxed in their response to it. One aspect of it is the geographic territory of Gau. Seeing that it is a large hilly island, people feel ensured of always being able to move further up and closer towards the center. Malawai consists of three levels, the downstairs level is considered the main part of the village, but there is always an opportunity to move further up which creates a certain security. In a conversation with my Fijian dad this became apparent. I had been down in the village with the young men while they were fixing the *kawakawa*, the coconut bridge. This bridge was built after the destructive hurricane Tomas flushed out the old bridge three years earlier (see chapter 3). It is made out of coconut palm stems, and other trees found in their forests such as *dogo*, a type of mangrove tree, and *nokonoko*, a tree related to the pine tree, but which is much stronger. These types of trees can withstand large amounts of water, hence suitable for bridge building. The building technology is a heritage from their elders, something they are very proud of, and often use as an example of how they always will survive what the weather brings them. As well as the knowledge of building the *kawakawa*, it was emphasized by the villagers how they would never have to sleep out in the open or starve due to destruction of houses or gardens. In addition to building the *kawakawa*

the villagers know how to build the Fijian houses *bure* which are a heritage from the elders too. These houses are made out of local materials found in the bush. As well as building materials the bush provides food where wild yams and wild pigs are to be found. While tracking in the bush with one of the villagers, he told me they would go to the bush to find wild yams if there had been strong winds destroying their gardens. If the winds came from a certain direction it could uproot *yaqona* and root crops resulting in less food while waiting for the garden crops to ripen again. *Dalo*, for example, need to be in the grounds for about eight months before they can be harvested. Men would normally go and cut off the leaves of the garden produce towering high if there is a forecast, but if the weather comes abruptly it can be of great damage. The general feeling towards the possibility of extreme weather such as storms and hurricanes, and a statement I often heard was: "It is not like in Suva, where people might lose their homes. Here we can find everything we need to survive in the bush". There was a fairly relaxed and confident tone concerning their knowledge and their island's resources.

As stated previously, the hurricane Tomas, which came together with an *ua loka*, destroyed houses down by the seawall. My family used to live in a house right next to the seawall where the river joins the ocean. Every time the radio forecast anticipated an *ua loka*, a hurricane or strong winds along with a high tide, my Fijian dad told me that he used to close the window shutters, make sure the doors were properly screwed in, and take all sorts of precautions just in case. When the tide is low the ocean is not an immediate danger because the water is so far away from the village. He told me he would not sleep well at night, thinking about what could happen, so he would be awake most of the night listening to the weather, observing the possible changes. When I asked if everyone did the same thing when there was an extreme weather forecast, my Fijian mom cut into the conversation and said with a snort that no one was as cautious as him. And he completely agreed. That is why they, years before hurricane Tomas, decided to move to the village's upper level where his mother had a house and where he had grown up. They closed down the house by the seawall and moved upstairs, giving the family a little more peace at heart. My mom was also happy; she was not as worried about the extreme weather, but rather how the sea affected her during her daily life. On the days with strong winds and higher tides, often noticed during the trade winds, the waves would flush into the old house and kitchen, a large inconvenience in a place where much of the social life happens on the floor. But after having moved upstairs they did not have to worry about this anymore, and they do not.

People who are still living downstairs have a fairly relaxed attitude towards the warnings given to them concerning extreme weather from the sea. This was illustrated to me by my neighbor when she told me about the days before and after the hurricane Tomas struck. The day Tomas was anticipated to the shores, the people of Fiji were told to evacuate up to the highlands if possible. My neighbor told me how she was the only one of those living downstairs who moved up. She took her children and went up to live with her uncle (her husband's father). When the night came and the storm hit the village, everyone sought shelter in the Methodist church at the upper part of the village while the water rushed into the lower part, and the wind ravaged. Despite the serious incident people fixed their homes and moved back down to live with the memories of the storm, but as seemed clear in conversations, with no bigger worries than before. One woman told me they were safe, they were planting mangrove trees along the shore, and these were protecting them against the waves and ocean. A parallel can be drawn to chapter 3, where the women fish during the *ua loka* knowing it was anticipated to happen, but still position themselves in the water.

As described by my neighbor in the case above, there were no urgent worries in the village when a tsunami warning was sent on the radio, as there were few worries when the *ua loka* warning was sent in June. This does not mean that people do not have thoughts about the weather they get in the village, but it is dependent upon the situation they are in. Thoughts about weather are expressed in regards to the situation in which it is needed.

What also needs to be taken into consideration is how the tsunami warning appeared during the tsunami season, which is from mid-November till mid-April. Although I only experienced one warning during my stay, I feel it is safe to assume that the hurricane forecast was expected at that time of the year, seeing it was hurricane season. Additionally, such forecasts often remain a warning, never turning in to an actuality. This can be a reason why the villagers were so relaxed concerning the warning. My Fijian dad, who is both interested in weather knowledge, but who is also a little more cautious than other villagers, found it smart to observe the ocean for a few hours after the warning. He could then see if there were any signs of a hurricane. Living in the upper part of the village we were also more secured from a potential tsunami. Some weeks later I asked a lady living in the lower part of the village what she thought of tsunamis. She did not seem to be especially concerned about the prospects of a tsunami; she told me how they were planting mangroves at the seashore to protect them. What she seemed more concerned about was how the ocean now is higher, the waves breaking over the seawall when the tide all the way in. Through comments such as the one concerning the

rising ocean, as well as observations of attitudes towards extreme weather forecasts it became evident that the changes causing the greatest concern were those regarding everyday life. As shown in chapter 2, several smaller cycles constitute the year, working as an indicator. For example, all the flies informed the villagers that a certain flower was almost blossoming, being “pregnant”. Furthermore, the full moon brings with it both an extra high tide, and extra low tide opening up for the possibility of fishing in the deep sea while standing on top of the reef wall. Though these weather phenomena are smaller, and the lack of fruit, as will be exemplified in the section below, might not in itself be as extreme as a hurricane, they are all part of the organization of daily life. Accordingly, changes in smaller cycles might be something to be more concerned about in the long run in relation to the daily life of the village.

### **Change of Winds**

It was one of those nice, seldom cool nights in Malawai and a few of the women were teaching me how to make Fijian candy for a party in the Community Hall. Lying on the soft mat covered floor, with the smoke from the frying pan thick over our heads, we were gossiping about village life in familiar female fashion when the conversation abruptly changed to the frustration over the present lack of fruit. I had asked when the mango season would start, there were plenty of mango trees in the village, but during my entire stay they had not functioned as anything but a hideout on sunny days, casting great shadows. They told me there had barely been any mangos last season, and they were not sure if there would be much in the upcoming one, though they hoped for it. Mangoes can be found from November until January, that is, during the hot, wet season dominated by variable winds and storms. These winds affect which fruit are available, and the amount, at different parts of the year. I was told upon my arrival to Fiji in January that during the Christmas of 2013 there had been a hurricane, and the strong winds had torn the mangoes off the trees affecting the quantity of mangos available for eating.

Fruit was especially popular among the younger generation in the village. It was a common sight to see children on the roofs, in trees or with long sticks trying to pick oranges, guavas, passion fruit, *wi*, a fruit from the *wi* tree, or a seldom mango, growing out of season. The search for fruit was a large part of the children’s daily activities; they would either go on expeditions mainly to pick fruit, conveniently stumble into a tree during other play or parents

sent them out to fetch some for the family. My Fijian sister was an energetic little miss with a huge passion for fruits and tree climbing, a great combination. One could always count on finding her in her uncle's guava tree if the afternoon was going to an end, and she was not yet home from school. One could also count on it not being easy to get her home unless we let her pick a few more guavas. Then we would go home, sit down on the front porch eating guavas, teaching each other English and Fijian by talking, singing and joking. She was one of the main providers of fruit to our house, the sort dependent on the season, and though she preferred eating it herself she would always share. She was also the one my Fijian mom brought along when she needed a huge bag of guavas to send to family in Suva.

However, fruit are not only part of the children's daily life. They are an essential food throughout the day in the village; it is used to make juice in the heat, for the children to bring to school, to make jam, and to eat in-between meals. Being an important snack in the diet throughout the day, it is easy to understand the women's frustration over the lack of it. At the time we were talking about the subject it was the season for *kavika*, water apple, and after my observations, everyone had plenty of *kavika* in their houses all the time. The children ran around picking it in their t-shirts sharing reluctantly with adults if they asked, after all, they had worked hard for the catch. In addition, when going on visits around the village I was always offered a *kavika* or three. One is dependent on money and availability when buying tea or other food in the village shop, but fruit, on the other hand, is a free commodity found around the island. One does not need to prepare it, pay for it, and it often lies around people's houses. I shared these thoughts with the ladies while we were making the candy, and they agreed. Yes, there were plenty of *kavika* this year, but it was the first time in many years there had been a good *kavika* season. "You see, everything is changing Nora. There are less fruit and fish, and more wind" one of them told me. I asked her why everything was changing and she said with a question mark: "I don't know, maybe climate change?" But she was not interested in, or able to, talk more about climate change, and the conversation quickly turned to how I should roll the dough to perfect my baking skills. Some days later we were sitting outside, this time the two women having taught me to make Fijian candy, were cutting and straightening each other's hair. I carefully asked the same lady again – what she thought about the changes – as they clearly seemed frustrated over it a few days earlier. She told me it does not matter, because the weather comes from God, therefore the weather we get is his will, and when it is what God wants it is not bad. We have to respect what God gives us, and trust him. She told me they knew changes would come; one can read about it in the Bible. Not only

changes in the weather, but also changes in people; when these changes are starting to happen it is not long before God will send Jesus back to earth. Those are the deviations they are supposed to look for when wondering when Jesus will return. So things might be changing, I was told, but they were good.

This confused me because I had recently noticed irritation regarding wind. A sunny day in May some ladies and I were sitting on the beach looking at the ocean and the wind, having a moment before the day's work would start. The sky was blue, only a few light clouds scattered around. The ocean was light, sparkling in the sun, and the wind offered a cooling effect, causing the occasional coconut to fall with a dump down in the sand. While on the reef fishing, each person would be absorbed with their own work; it was not a time for talking or discussions, but for focus. I therefore found the period after having left the village boarders and before going out fishing sacred. It was a place just for women, where we could be female in an open, relaxed way. This was a place where they joked, teased each other and would share gossip, stories about their children, own childhoods, and thoughts about the future with me. Or we would just sit there very quiet, together, and enjoy the relaxation, which was what we were doing that day.

While sitting there, getting ready to go into the ocean, one of the ladies told me that it would be a challenging wind to fish in. I did not understand, and she said it was hard because it came from several directions. I looked out to the reef, tried to focus on the wind, and unfortunately having to accept that I did not see what she saw. We walked out in the clear waters in-between corals and small fish, and as we reached the reef and got started I found out it was a difficult wind to fish in. I was not able to see it beforehand, but I could feel it now. It changed direction every ten minutes or so, making it hard to decide where to throw the line. Fishing among the corrals, one chooses an open spot to throw the line so the hook will not get stuck. When the wind changes direction the line will also change its course, making it impractical and cumbersome to fish. In spite of the inconsistent wind the catch turned out quite good, and by the time the tide was so high we had to start moving in towards shore, everyone had enough fish for dinner and for their children to bring to school the next day. When we came back to the beach, we met another group of ladies. They had also been out fishing, but they had gone out with a net. They had caught plenty of large fish, among others, my favorite fish with white meat and bigger bones making it easy to separate from the fish meat. While we had found the wind as a disadvantage on the reef, it had been of great help for the net fishing group. When they stretch out the net and walk around in the water there is a

possibility of scaring the fish away, but today this was not a problem due to the wind. It had been a successful day for them. In addition of the advantage of the wind, they had gone fishing when the tide was going in, a smart time to fish as the fish come in with the tide. After fishing we again sat down on the beach cleaning our fish, eating fruit, coconuts and a little taste of a seashell one of them had picked, before we returned to the village. Later that night I told my Fijian dad about the wind we had when we were out fishing, and he shook his head in frustration. He had also noticed the wind that day, how it changed too often, and he did not like the inconsistency. Winds like that are difficult to relate to, and cope with.

When going fishing that day I spoke with the two groups of ladies who had been using different fishing techniques. The ones I had been out with did not care much for the changing wind, as it complicated their work, noticeable to me as well. The ladies fishing with a net however, said the conditions were great. For them it did not matter if the wind changed directions, they were pleased with the amount of wind and the disturbance it made in the ocean. To understand this one must consider what Brace and Geoghegan (2010: 287) emphasize; how people's understanding of climatic phenomenon must be placed within a context because it might change according to local landscape and environmental challenges. Weather and how it is talked about has to be contextualized into everyday life and the needs one might have there. The women going fishing explained the wind as good or bad based on the fishing technique they had chosen for the day. I could often hear women complain about the wet weather during the monsoon season. The children got sick, the clothes would not dry and the pillows could start to smell weakly of mold if there were not a sunny break in-between the rain showers. However, when asking if it was not common to have this much rain I was told it was supposed to rain like this now. It was more of a general frustration regarding weather, similar to Norwegians looking forward to spring after a long, cold winter. However, when the sunny dry weeks appeared in January, few people were happy with it. My Fijian dad who had planted watermelons, and waiting for them to grow was happy, but at the same time he was worried, he had other crops in the garden dependent on rain, his newly planted *yaqona* being one example.

People were noting changes in the wind, but it was not specifically the fact that the winds were changing that affected people's thoughts and feelings towards it. Rather it was weather's influence on their work and lives that formed peoples thoughts. For example, when different types of fruit are supposed to appear or be ripe is also connected to the expectation of other events. One fruit sort can indicate the end of the wet season, which furthermore is a



reminder of how it is time for weeding in the garden. When alterations in the natural cycles occur, already existing knowledge might not be valid anymore.

### *Deviation from the old*

The weather is changing, and people notice it, and explain it according to the situation. During my stay it was especially noticeable after the seasons changed, when the rain and humidity started to decrease. As I was told by the villagers upon my arrival, the winds changed direction during the month of April; going from the wet, monsoon season, to a cooler dry season. It was not a sudden change, but slowly the nights started to get cooler, and the days got shorter. The wind had changed direction; the dry season was upon us. During my first weeks in Malawai, when I was not yet accustomed to the heat, my Fijian dad told me that when the hurricane season is over, around April, people will play in the afternoon, and one has to shower during the daytime because it will be too cold to shower at night. I asked what he meant by play, and he said the youth men will play rugby after having been to the gardens. I looked at him, not sure if I believed it; it was difficult to think that a place so hot could be any cooler. As he had stated, of course, by June youth were playing rugby and practicing for the Gau tournament, the days were shorter, and it was cold to shower at nighttime.

As exemplified above, frustration over wind was present in conversations during daily activities related to food. However, it also influences general comfort. One morning in April several women were sitting outside a house cleaning *voivoi* (pandanus leaves). *Voivoi* is used to make mats, fans, baskets and decor for the house and it is an important source of income for the private households as well as for the village. It takes three months for the leaves of the pandanus trees to grow large, at which time they are harvested, a tough job as the leaves have thorns on the sides, and they are taken in bundles to households where women use knives to remove the thorns before cooking them. This is a time consuming job, and women often ask family members and friends to help, making tea and pastries as a thank you for the women to eat while they work, according to the 'Fijian way of life' (see chapter 3). This April morning my mom went down to start before me, and when I came down an hour later, I was met by women sitting wearing beanies and warm sweaters, looking cold and uncomfortable. It was a windy day, and the rain came in shifting intervals blowing directly at us. Because the job of cleaning *voivoi* is such a large and messy one, it needs to be done outside, and when sitting down the coolness of the ground dug into the bones, making the cold wind even more

unpleasant. A few of the village's oldest women were there, and they shook their heads resigned saying that before the weather did not act like this. The rain was not the problem; it was the rapid changes during one day. The weather could be sunny and calm, and in an instant it could be windy and rainy. Comments like these became more and more evident the further into the dry season we progressed, and the changing winds continued. While some complained about it, others said it was normal with this weather the first months of the change. It would get dryer in a few months, and the weather we had now was to be expected at this time. While complaints would be expressed in certain instances, changes would other times be explained as God's work, and sometimes it was just pointed out, by sharing thoughts, rather than trying to find an explanation to it, as in the example below.

It was Sunday night, the church services were over, dinner was eaten, and my Fijian mom and I were walking to Lamiti, because she had to charge her phone. During my stay Malawai's generator was out of service, but the generator in Lamiti was still working and being turned on at night for a few hours. For only 50 cents one could ask someone to charge your phone, and that was our mission for the night. Normally we would do it at school during the week, but my mom wanted to talk to her daughter in Suva, who was having her university exam the day after, so we needed power now. The night was beautiful. The tide was on its way out and there was only a light wind. The moon was absent, but in return the starry sky was shining above us. I repeatedly bumped by toes in rocks scattered on the beach because I was looking up instead of ahead of me, enthusiastically talking about the sky, and asking my mom if she did not think it was amazing. She did not share my over enthusiastic tone, only saying, "Yes. It means that it will be a sunny day tomorrow". I did not know this, so I took a mental note to remember it, before again asking if she did not find the sky pretty. Yes, she thought so too, but clearly thinking I was overreacting a little. We kept on going, and when we reached Lamiti we charged the phone while sitting down watching "Thor", the movie they were showing in the house, till a crack on the disc made them change the DVD. We sat there until the phone was fully charged before walking home; the sky being as pretty as ever.

The next morning I woke up to pouring rain. I jumped out of bed to ask my mom about it, but she was not there. It was not until later that day I again remembered, and asked a young man cutting the grass around our house. I told him about the starry sky yesterday and how it was raining today. He said my mom was right, the starry sky was an indicator of sunny weather the next day, but sometimes the knowledge of their elders was not correct anymore. Another thing he had noticed was how during hurricane season there was barely any

hurricanes. He did not state what he thought about this deviation from the elders' knowledge, neither did he try to explain it. He just told me this as a reflection, sharing his own observations, before he went back to cutting the grass.

### **A Unique Knowledge**

As stated in chapter 1 and shown above, *draki* has a wide range of meanings. It is context dependent, dependent on activities, people's knowledge, as well as being an important aspect of the village economy and sociality. The villagers' comforting words of always being safe due to food in the bush, and materials to build houses are of great importance in influencing their thoughts about change and stability. Although they live, as Ingold (1993) states, in the world, giving them the unique knowledge, it does not mean they are not participating in the global world. As shown in chapter 3, the subsistence economy is also part of the global market making it a semi-subsistent one. Here fish, root crops, fruits, mats, oils, and other commodity are either sent to family in the city in return for flour, sugar, radios, solar lights, rubber boots, and knives, amongst others, or sold for money to buy commodity goods. The local economy meets the global economy. This is also true for knowledge about weather, and weather changes, which again affect thoughts and feelings about *draki*. Sometimes I could forget this, as I did one night the village was gathered in the Community Hall for a *solu*. It was the end of March and there had been heavy rainfall for weeks, today having been the worst of all. Now though, there was this special light and feeling one only finds after a heavy rainstorm; cool and fresh air, the sky being a mix of grey and blue with a beautiful light. I was in conversation with the young woman sitting next to me, telling her it was nice with a break from the rain. She agreed saying there would be better weather next week, the rain was over for now. I became super excited, asking "How do you know that?!", hoping to get an answer filled with traditional weather forecasting. Her answer was delightful: "I heard it on the radio".

As most people in the world, the Gau islanders have a close connection to the world outside of the island. They listen to the radio for music and weather forecasts. Although they have extensive training in watching and observing changes and signs in the physical world around them, many rely on, and use, the radio for weather prospects. This is especially true for the younger generations, and they are noticing that knowledge learned from older generations not always is correct, as the young man commenting upon the starry sky bringing

rain the next day instead of sun. This is also noticeable other places in the Pacific. Edvard Hviding (1996b: 374) explains how he, in a conversation with a schoolteacher in the Solomon Islands in 1989, was told how the ‘people of the old’ had told them how things were. When the winds would come, and how many moons it would take before the next wind came. The ‘people of the old’ gave them information which they should follow, saying all things have their time. And people believed them, because they could see it with their own eyes. Now though, the schoolteacher stated, the weather did not seem straight anymore. “I still would like to trust what the people of the old taught us, but one day I came to think that maybe they fooled us back then?” (Hviding 1996b: 374).

In Malawai the changes were often explained by religion, but as stated in chapter 1, scientific explanations would also be used to explain the changes. My Fijian dad told me he knew the ocean was raising, because he noticed it on the seawall; “When Joeli first told me the ocean was growing, I did not believe him. But now I believe it, because now I can see it”, pointing to the places where the water level used to be during a high tide, and where it is now.

In 2002 a trial initiative was started in the five villages in the Vanuaso district, Malawai being one of these. This project was called Mositi Vanuaso evoking a common commitment to protect and manage the resources in the district, again being linked to people’s welfare and livelihood (Veitayaki and Murai 2010: 88). In 2005, Lomani Gau was formed, springing out from a workshop in relation to Mositi Vanuaso held on Gau, funded by Japan International Cooperation Agency (JICA), adopting the initiative of a trial project (Veitayaki 2012: 7).

### *Lomani Gau*

The Lomani Gau project, as well as the Mositi Vanuaso, was initiated by Dr. Joeli Veitayaki, but is an evolving collaborative effort, and takes place in all of the 16 villages of Gau. Its aim is to involve the people of the island in sustainable development, by engaging the island’s inhabitants in management of their own environmental resources. The project seeks for Gau to be a place where these natural resources are used based on appropriate management plans especially developed for their own villages and island (Veitayaki and Murai 2010: 85-86).

The project is an attempt at the local level at preparing for climate change, to ensure the local environments to be in its best shape to withstand the expected changes (Veitayaki

2012: 2). Veitayaki (2012: 3) states how, in the context of climate change, island communities will be the first and worst victims of coastal flooding, erosion, salt water intrusion, and increased storm damages. This, as well as a growing population wanting a more Western lifestyle, resulting in coastal pollution and increased use of natural resources, threatens people's livelihoods. All of these factors make Gau increasingly vulnerable to the impacts of climate change. In Fiji, damages from flooding, and tropical cyclones have resulted in damages for millions of FJD (Veitayaki 2012: 4). Resources which are not available are needed to rebuild people's lives, resulting in dependency on the Government. After a natural disaster this dependency and the high costs of rehabilitation, disrupt both planned Government spending and erode local communities' resilience. In 2004 there was established a National Disaster Relief and Rehabilitation Fund, with its own budget, being of major importance.

The project's goal is to engage the local people in the global initiative's part of international treaties and agreements for promoting sustainable development (Veitayaki 2012: 5). The approach on Gau is a cheaper alternative showing immediate results using already existing institutions, compared to the resource management system led by the Government. It emphasizes participation, learning, and engagement at the local level, presenting new ways of earning an income, and highly important, it involves the local inhabitants in the planning (Veitayaki 2012: 6-7). Veitayaki (2002 in 2012: 4) states how Fijians have extensive experience living on small islands, and how their access to traditional knowledge can be a part of the response and adaptation strategies in addressing climate change. Lomani Gau is applicable to life in the village because it uses the villagers' traditional knowledge and practices. It incorporates the scientific knowledge with the local knowledge creating a new, unique, and complete knowledge highly appropriate for the local level. Agriculture and fishing are encouraged, these being the fundamental skills of all villagers. Furthermore, they are encouraged to sell coconut products such as copra and virgin oil, watermelon, taro, yams and fish to the main market in Suva (Veitayaki 2012: 8). As well as these already existing activities, newer initiatives such as cattle and seaweed farming are supported, and some places on the island pine forests are being planted, a future source for local building materials. Houses made out of wood are a good replacement for the concrete dwellings as they are more resistant to the harsh treatment from the ocean. From my own conversations with villagers in Malawai, as well as people from other villages on the island, it became clear that Lomani Gau

was important to the islanders. One main thing they often promoted was the vast sources their island provides, and how rich they are.

All families have pigs, and they are taken great care of. They are fed with leftovers, talked to and looked after on a daily basis. This is natural considering the pigs' value in the traditional economy being "head of all land food" (Sahlins 1976: 37), and, therefore, is used in traditional ceremonies. Although pig fences are put up, few of the pigs actually reside in these; instead they wander free in the outskirts of the village and dogs are used as guards to scare them off when they stray within the borders and around the houses. However, the pigs tend to find a way to go wherever they want. One morning I was conversing with a lady, upset because the pigs had destroyed the garden around her house in their search for food; it looked like an excavator had dug up the ground. She was very frustrated telling me how everyone knows they should have their pigs in a fence. "Joeli has shown us how rich we are. We can be very rich if we just do the things he tells us. Like, we should have our pigs in a pig fence because they destroy our gardens, and eat small sea creatures when they are walking on the beach, and their poo is not good for the reef. But the pigs run free, so we don't always do as we should. But if we did we would be very rich".

In her frustration over the inability of placing the pigs within pig fences she emphasizes the importance of the work "Joeli does", and how she knows they are rich because he has made them aware of this fact, and she also complains about all of them being lazy at times. Despite complaining over being lazy, and not doing what they were advised, I often observed the islanders doing much of the work suggested by the Lomani Gau project, preparing for the impacts of climate change. On one of the women's meetings, taking place on the first Monday of the month, the women decided they had to plant more mangrove trees, so every time there was a low tide in the morning they would plant some after having sent their children to school. Mangrove trees are easy to plant, when a branch breaks off and is flushed into shore they can be put into the ocean floor, and large parts of the shoreline around Malawai are now protected by mangrove trees. As well as protection these trees creates a rich source to fish life. When the tide is high, women would often fish along the beach, as shown in chapter 3, and sometimes one could be lucky and see bigger fish. My Fijian dad experienced this one regular morning after having followed my little sister to school. When he walked back to Malawai something caught his eye in the mangroves – it was a stingray swimming slowly in a circle in-between the mangrove stems. He ran to the village, fetched a hand spear, and caught the fish. The stingrays often resided in the mangroves, as did other

larger fish, making fishing around them fruitful. Such attraction of marine food is important seeing that the population growth of the island is tearing on the marine life. In addition to planting mangrove trees, each village on Gau has a *tabu* area, which is an area where fishing is restricted, attending to both the population of marine animals and the coral reefs.

Through Lomani Gau the islanders are informed of the vast resources in their surroundings, and made aware of the importance of their knowledge. It is always stated that the protection of the natural resources can be done by the islanders, by using knowledge they already have; the project explains in an applicable way why conservation of resources, as well as preparation for changes, are necessary. By doing this the villagers' already existing knowledge is linked with a new knowledge.

### *The Bricoleur*

This project is unique in that its coordinator is not only a global person who travels the world, and participates in international discussions concerning the environment and the changing climate, he is also from Malawai. Roy Ellen (1993: 126) states how numerous people, many of them on the receiving end of Western development expertise, possess practical knowledge which is ignored in the development industries' macro-political goals. Ingold (1993) also states this when describing global versus local perspectives, where the global perspective is made out as the real and total, and the local as illusory and incomplete. Lomani Gau however, has a strong focus on indigenous knowledge, wanting to develop the lifestyles as well as protecting and attending to the environment in which people live, making it sustainable for current and future generations. This close understanding of what the island and its peoples already have is an important factor in the work, and also in people's response to the project.

One of the projects of Lomani Gau was to get the villagers to plant trees. I was talking to an older lady while observing her cook the cow intestines during a funeral in Nacavanadi, a whole new experience for me, and she asked me if I knew who Joeli was. I told her I did, and she continued saying that he was helping the villagers. For example, he had asked them to plant 3000 trees. And if they could show that all the trees were planted, and growing well the project gave them one dollar for each tree. "Joeli will give us one dollar for every tree we plant", she told me. In Malawai people also referred to the tree project as something Joeli told them to do, as well as his advice to not cut down trees in the village because these protect the houses and people from the salt spray coming from the ocean. Seeing that Joeli is from

Malawai, it makes him an important person in the village, as well as making the dialogue between the scientific knowledge and the local knowledge a success. In this respect one can use the term ‘bricoleur’, introduced by Claude Levi-Strauss (1966), to describe Joeli. The ‘bricoleur’ is an expert at performing a large number of different tasks, but, unlike an engineer, does not make a task secondary due to lack of raw materials and tools to carry out a project. The bricoleur’s rule is to make do with whatever is at hand (Levi-Strauss 1966: 17). For example, the tree project, as well as the project of seaweed farming not only provides the villagers with an income, the two also help absorb carbon dioxide from the atmosphere protecting the farmland and the sea. “The icing of this cake is that these are locally planned solutions implemented by local communities for a global problem that humanity is still grappling to meaningfully address.” (Veitayaki 2012: 10). Lomani Gau has successfully started at a local level instead of on a global, gaining success both due to the scientific applicability to the local level, and because the cheap alternative shows instant results by already using existing institutions (Veitayaki 2012: 6). The ‘bricoleur’, according to Levi-Strauss (1966: 19) has a restriction when it comes to the possible combinations due to the particular history of each piece, “[t]he bricoleur may not ever complete his purpose but he always pits something of himself into it.” (Levi-Strauss 1966: 21). However, it is important to remember that Joeli also is a scientist, but it is his knowledge of the local life that makes his scientific approach to sustainable development a success. He is a ‘bricoleur’ in the way that he sees possibilities to create a bridge between two sciences, putting much time and energy into it. At the same time, however, he is promoting the importance of taking care of the world that we live in, and preparing for the changes happening, and inevitable to come, which will affect village life in the future. A ‘bricoleur’ shows that there are several solutions to the same problem (Levi-Strauss 1966: 24).

Through Lomani Gau the inhabitants of Gau get a unique knowledge of the weather. After the tsunami warning little commotion was made. It was not that the villagers did not take it seriously, but they had experienced a real tsunami before, therefore knowing what signs to look for in the environment, as well as being aware of warnings sometimes coming without it being a real danger for life in Malawai. What they are more concerned about are the changes affecting their daily lives. Having a vast knowledge from the elders they know that a repetitive deviation from normal weather is to be taken into serious consideration. In addition, Lomani Gau communicates the knowledge of climate change, a knowledge that often has a stronger focus in urban areas, in a way that makes sense at the local level. The villagers are



given the opportunity to use own technology and knowledge to adapt, and prepare, with the help of the scientific knowledge.



# 5

## *Draki* and beyond

The focus of this thesis has been to explore the Fijian concept of weather, *draki*, through the analysis of different knowledge systems, looking at how weather knowledge is an intake to essential parts of daily life, creating a unique understanding of *draki* which is not only the meteorological meaning of the term, but also influenced by religion, one's work, and observations. The meaning of *draki* varies from different contexts, as well as the way it is obtained. In the introduction I stated that there is a close connection with the environment in Malawai, and how Ingold (1992) argues that this mutualism of environment and people creates a special knowledge. This knowledge is mainly is gained through practical work and movement in a given environment. The way in which weather knowledge is gained, used, and managed in everyday life, as well as the impact weather have on village organization are topics elaborated on in the thesis. How does this knowledge change with the changes of weather, and the meeting with scientific knowledge?

Rayner (2003: 281) states that weather has become extremely popular in the Western world, especially the United States. Here there is a monthly magazine focusing on weather, as well as the Weather Channel, also shown by Marita Sturken (2001). In this context, the weather focus is on extreme events like floods, hurricanes, and tornadoes. Through watching the weather on television, and reading about it in magazines is has been domesticated, Rayner argues. In this thesis I have given an ethnographic examination of a lifestyle that differs from the western one in many ways, a way of life where weather is a highly important topic of interest, and where the big drama is located in the smaller weather events. My aim has been to give a thorough understanding how thoughts about weather, the way it is learnt, and managed

are connected to the actual movement in the environment, creating a basis for thoughts and feelings about weather as a phenomenon, and its consistency and inconsistency.

Since the days of the elders there has been a vast knowledge of weather; when to plant, harvest, where to fish, what to fish, and when to look out for more extreme weather. The elders knew what would indicate a clear next day or bad weather. This knowledge is still present in Malawai, and I have elaborated on how it is connected to the cycles in the surrounding world. Tidal water, seasons for fruit, rainfall, and the lunar cycle are all present in the organizational part of the daily life in the village, deciding when work needs to be done, and when one can relax. As I learnt by living in the village, much of this knowledge is silent, being activated by activity in the landscape. Walking to the garden can be the source to a whole new understanding of the kinship structure. When passing different gardens one is told to whom it belongs, who the owner is related to, where his family members' gardens are, and maybe a little story of how a garden owner, before he passed away, always generously shared fruits, and garden produce with visitors in the village. The knowledge is not only connected to places, but also to time. I looked to Hau'ofa's (2008) writings on time, where he explains the conception of time to be circular in vast parts of Oceania, Fiji included. This affects knowledge accordingly; knowledge of when weather phenomena are supposed to appear, fruits to ripen, and fish to be in season, is known according to the sequence in which they occur. Specific time is not as heavily stressed.

The 'silent knowledge' is learnt through active engagement in life, observing, playing with peers, trying, and failing. As shown, this became evident to me through difficulties getting clear answers when asking question about the weather out of context. When knowledge is learnt non-verbally it is difficult to explain it using words, I therefore had to go through the same learning process the villagers go through to gain information. Only by doing this did I manage to ask questions that made sense to a given context. One main focus has therefore been on the physical placement of the body in the environment. Through this one acquires a knowledge that is deep and rooted within, a silent, embodied knowledge that is not possible to learn just by conversations. Though Fiji only has a two season climate, wet and dry, there are several smaller cycles and seasons, differing in length, within these two. These cycles are present both in relation to the physical aspect of the surrounding environment, and the social life. The two influence each other, and together constituting the cycles affecting daily life. By looking at this it becomes clear that weather is not only a premise for food for the family, but also the village economy which again is closely linked to the social life.

Dove (2014: 3) underlines that, at the local level, climate change has a reality. In Malawai the close interaction with the environment creates a perfect stage to observe micro observations used to interpret stability and change. By using knowledge gained by living in the village by walking, working, and living in the weather, people observe, and become aware of occurring changes. It is a local climate change forecast. I often heard comments as: “It is too hot, it should not be so hot this time of the year” or “Things are changing, it is not as it is supposed to be”. Though these often are explained through the act of God, there is a clear awareness of Western scientific explanations as well, due to the Lomani Gau project. The project makes the villagers conscious of climate changes by using a locally relevant language. The fact that the ocean is rising is told by showing the physical changes on the seawall, by pointing to the mark where the high tide stopped before, and where the high tide mark is now. Through conversations with the islanders the project of planting mangroves along the village coast line was created. The villagers were informed of the benefits of mangrove trees concerning erosion, and protection against sea spray and waves both for buildings and people. Crate and Nuttall (2009: 397) states how the reality of climate change is that it creates a challenge where researchers should collaborate, forging strong partnerships across disciplines and with other stakeholders. That is, they promote collaboration between the social sciences and the natural sciences. Through Lomani Gau, such a partnership between two parties was the everyday reality in Malawai. This creates a unique knowledge, and ways to think and respond to different types and manifestations of weather.

Barth (1995: 66) argues that by focusing on knowledge, how people use knowledge to interpret and act in the world, such as feelings, thoughts, and embodied skills; it creates more openness between the anthropological knowledge and other cultural knowledge. This results in a better understanding of other people’s insights to life where the anthropologist is more intimately engaged in the field situation.

In Malawai the two knowledge systems are not separated from each other, and is therefore an excellent example of where local meets global, helping the inhabitants better prepare for the changes already happening, as well as those inevitable to come. In addition, an ethnographic study of weather and its impact on people’s lives, in the world in which they live, will make apparent not only knowledge and management, but the general well-being of persons, and, according to Barth (1995: 66), creates a better understanding of other people’s insights into life. As I have shown in this chapter, and throughout the entire thesis, a long term, field-based anthropological study can help elaborate complex vernacular concepts, such

as *draki*. Through an understanding of *draki*, knowledge of how to live in weather that always changes is made available. This is an important knowledge, as the Lomani Gau project excellently points out. This knowledge, however, is not always accessible through conversations, and being present is therefore necessary.

In terms of the current climate change research, there is a strong focus on people living in the changes, and the ways in which they are affected by rising ocean and changing winds. Doing a locally grounded, ethnographic study where people's everyday life is the main focus, a better understanding of how people interpret climatic phenomena through their daily engagement with weather. Such a methodological approach, I dare to state, will give an in-depth understanding of climate change at the local level, and can therefore be of great contribution to the research regarding climate change.

# Bibliography

## **Barnett J and Adger W N**

2003 “Climate Dangers and Atoll Countries”. In *Climatic Change* 61: 321-337.

## **Barth Fredrik**

1995 “Other Knowledge and Other Ways of Knowing”. In *Journal of Anthropological Research* 51 (1): 65-68.

## **Bradley C**

2002 “Travelling with Fred George: the changing ways of Yup’ik star navigation in Akiachak, western Alaska”. In *The earth is faster now: indigenous observations of Arctic environmental change*. I. Krupnik and D. Jolly (eds.) Fairbanks, Alaska: Arctic Research Consortium of the United States, 240-265.

## **Crate Susan A**

2011 “Climate and Culture: Anthropology in the Era of Contemporary Climate Change”. In *Annual Review of Anthropology* 40: 175-194.

## **Crate Susan A and Nuttall Mark**

2009 *Anthropology and Climate Change: From Encounters to Actions*. Walnut Creek, CA: Left Coast Press, Inc.

## **Dove Michel R**

2014 “Introduction: The Anthropology of Climate Change”. In *The Anthropology of Climate Change: An Historical Reader*, First Edition. Michael R. Dove (ed.) West Sussex: WILEY Blackwell, 1-36.

## **Ellen Roy**

1993 “Rhetoric, practice and incentive in the face of the changing times: A case study in Nuaulu attitudes to conservation and deforestation”. In

*Environmentalism: The View from Anthropology*. Kay Milton (ed.) London: Routledge, 126-143.

### **Frenkel S**

1992 “Geography, empire, and environmental determinism”. In *Geographical Review* 82: 143-153.

### **Harris M**

1968 *Rise of anthropological theory: A history of theories of culture*. New York: Harper and Row.

### **Hau’ofa Epeli**

2008 “Pasts to Remember”. In *We are the Ocean: Selected Works*. Honolulu: University of Hawai’i Press, 60-79.

### **Hippocrates**

2014 “Airs, Waters, Places”. In *The Anthropology of Climate Change: An Historical Reader*, First Edition. Michael R. Dove (ed.) West Sussex: WILEY Blackwell, 41-46.

### **Hulme Mike**

2009 *Why We Disagree About Climate Change: Understanding Controversy, Inaction and Opportunity*. Cambridge: Cambridge University Press.

### **Hviding Edvard**

1996a “Nature, culture, magic, science”. In *Nature and Society: Anthropological perspectives*. Philippe Descola and Gísli Pálsson (eds.) London/New York: Routledge, 165-184.

1996b *Guardians of Marovo Lagoon: Practice, Place, and Politics in Maritime Melanesia*. Honolulu: University of Hawai’i Press.

2003 “Both Sides of the Beach: Knowledges of Nature in Oceania”. In *Nature across cultures: Views of Nature and the Environment in Non-Western*



*Cultures*. Selin, Helaine (eds.) Dordrecht/London: Kluwer Academic Publishers, 245-275.

### **Ingold Tim**

- 1992 “Culture and the perception of the environment”. In *Bush Base, Forest Farm: Culture, Environment and Development*. Elizabeth Croll and David Parkin (eds.) London: Routledge, 39-56.
- 1993 “Globes and Spheres: The Topology of Environmentalism”. In *Environmentalism: The View from Anthropology*. Kay Milton (ed.) London: Routledge, 209-218.
- 2007 “Earth, sky, wind, and weather”. In *Journal of the Royal Anthropological Institute* 13, 19-38.

### **Leach E R**

- 1976 *Culture and Communication*. Cambridge: Cambridge University Press.

### **Levi-Strauss Claude**

- 1966 “The Science of the Concrete”. In *The Savage Mind*. Chicago: Chicago University Press, 1-33.

### **Malinowski Bronislaw**

- 1922 *Argonauts of the Western Pacific*. Long Grove, IL: Waveland Press.
- 1926 “Myth in primitive psychology”. In *Magic, Science and Religion and Other Essays*. New York, Anchor Books, 93-148.

### **Mauss Marcel**

- 1935 “Techniques of the body”. In *Journal de psychologie normale et pathologique* 32: 271-293.

### **Moore Henrietta**

- 2004 “Global Anxieties”. In *Anthropological Theory* 4 (1), 71-88.

### **Müller Hanne**

1996 “Veier inn i den ‘tause kunnskapen’”. In *Norsk antropologisk tidsskrift* 7 (3): 225-232.

**Nelson R K**

1983 *Make prayers to the raven: a Koyukon view of the northern forest*. Chicago: University Press.

**Netting R M**

1996 “Ecological anthropology”. In *Annual Review of Anthropology*. D. Levinson and M. Ember (eds.) New York: Henry Holt, 267-271.

**Oliver Douglas L**

1989 *The Pacific Islands*. Honolulu: University of Hawai’i Press.

**Orlove Ben**

2003 “How People Name Seasons”. In *Weather, Climate, Culture*. Sarah Strauss and Benjamin S Orlove (eds.) Oxford: Berg, 121-140.

**Paolisso Michael**

2003 “Chesapeake Bay Watermen, Weather, and Blue Crabs: Cultural Models and Fishery Policies”. In *Weather, Climate, Culture*. Sarah Strauss and Benjamin S. Orlove (eds.) Oxford: Berg, 61-81.

**Peterson Nicole and Broad Kenneth**

2009 “Climate and Weather Discourse in Anthropology: From Determinism to Uncertain Futures”. In *Anthropology and Climate Change: From Encounters to Actions*. S. Crate and M. Nuttall (eds.) Walnut Creek, CA: Left Coast Press

**Sahlins Marshall D**

1962 *Moala: Culture and Nature on a Fijian Island*. Ann Arbor: The University of Michigan Press.

1976 *Culture and Practical Reason*. Chicago: The University of Chicago Press.

**Scieffelin Bambi B**

- 2002 "Marking Time: The Dichotomizing Discourse of Multiple Temporalities". In *Current Anthropology* 43(S): 5-7.

**Sider David and Brunschön Carl Wolfram**

- 2007 *Theophrastus of Ereseus: On Weather Signs*. Leiden: Brill.

**Strathern Marilyn**

- 1992 *After Nature: English Kinship in the Late Twentieth Century*. Cambridge: Cambridge University Press.

**Strauss Sarah and Orlove Benjamin S**

- 2003 "Up in the Air: The Anthropology of Weather and Climate". In *Weather, Climate, Culture*. Oxford: Berg, 3-14.

**Sturken Marita**

- 2001 "Desiring the Weather: El Nino, the Media, and California Identity. In *Public Culture* 13 (2): 161-189.

**Rayner Steve**

- 2003 "Domesticating Nature: Commentary on the Anthropological Study of Weather and Climate Discourse". In *Weather, Climate, Culture*. Sarah Strauss and Benjamin S. Orlove (eds.) Oxford: Berg, 277-290.

**Rudiak-Gould Peter**

- 2013 *Climate Change and Tradition in a Small Island State: The Rising Tide*. Abingdon: Routledge.

**Theophrastus**

- 2014 "Concerning Weather Signs". In *The Anthropology of Climate Change: An Historical Reader*, First Edition. Michael R. Dove (ed.) West Sussex: WILEY Blackwell, 83-86.

**Thompson Laura**

- 1949 "The Relations of Men, Animals, and Plants in an Island Community (Fiji)". In *American Anthropologist* 51: 253-267.

## **Toren Christina**

1990 *Making Sense of Hierarchy: Cognition as Social Process in Fiji*.  
London/Atlantic Highlands: The Athlone Press Ltd.

1999 *Mind, Materiality and History: Explorations in Fijian Ethnography*. London:  
Routledge.

## **Veitayaki Joeli and Takeshi Murai**

2010 “Pursuing Sustainable Development on Gau Island, Fiji”. In *Sharing Innovative Experiences: examples of Successful Experiences in Coastal Community Development*. United Nations Development Programme. New York, 85-97.

2012 “Vakarau ni se Siga Toka (prepare while there is still time): Lomani Gau’s Response to Climate Change”. In *Public Lecture on Thursday 13th September 2012 at 6.00pm at the USP Emalus Campus Conference Room*.

## **OTHER SOURCES**

### **Lonely Planet**

*Map of Fiji*. Available at < <http://www.lonelyplanet.com/maps/pacific/fiji/>>  
[Downloaded: 23.06.14].

### **Meteorologisk Institutt**

*Meteorologi*. Available at < <http://www.met.no/Meteorologi/>> [Downloaded:  
05.02.14].