3 Of Heat, Politics and Gardening

One afternoon, I was sitting underneath a tree on the beach in the middle of Dixon Reef village, watching the children play in the shadow. It was an exceptionally humid afternoon; people had done their garden work in the first light of day in order to stay at home in the afternoon, taking care of housework, minor reparation work and preparing their evening meals, but also taking a rest from the exhaustingly hot day. I had felt the heat rising for days to the point where it was impossible to stay indoors, even though most Dixon houses at that time were made of bamboo and the rooves made of leaves and perfectly equipped for tropical temperatures. At these moments, I tried to find a breeze at the seafront, like the others, seeking some rest. Hanging out there also gave me the chance to catch up with people. Unsurprisingly they were talking about the weather: because people were complaining about the sun and the endless days without rain, I had started to mark the weather over the previous days in my diary. We had reached ten days without any clouds, and my notes showed that we had already endured a month without any relief. "San i strong" (the sun is hot) had already become part of our greetings, with a quick protective hand movement to the head. This was in the first few months of 2017, when people were going through what they would call an exceptional time. Usually, I was told that it should have been the season of 'Lewutau' (in Novol/Nasarian, meaning everything is green), when everything grows because of daily rains, and the ground would be soaked and roads and paths transformed into rivers (as I then experienced in 2019). However, in 2017 it did not rain much. That day at the beach, Marie-France, one of the mamas, pointed me towards their perceived changes: "Before, we could walk in the sun and as younger people we played volleyball in the sun, no problem. But now you don't want to be in the sun anymore because she is too strong." She laid down on the bench next to me to feel the breeze, which felt more like looking into an oven, but at least one could feel some air on the face. She sighed as she lay down and covered her

face with her arm. "It's really hot", she murmured alternately in Novol and in Bislama.

I heard this sentence many times, women running to fetch umbrella or push me underneath a tree when they felt that I was too exposed to sunlight. What they referred to were their bodily experiences to change. One of the neighbours joined us in the shade and agreed with Marie-France: "Before, they sun was our friend, now it's getting hotter and we won't know what it will bring in the future." However, in the same way as residents in Siviri village, they emphasised that the sun also brought another harvest of mangos. Although the adults watched the trees in irritation, they still did not mind being able to harvest mangoes "all year round". This was also a change they attributed to matters of climate change. After all, having mangoes all the time cannot be all good, because there is a season for everything, and now this season should have started to change. "Nothing is the way it used to be", the men in particular grumbled. One evening after a hot day, one of the men expressed that he felt the change in his body:

> I used to feel that everything was fine with my body. We are fit for doing the work. But now I stay in the sun for a short while and already I don't feel able to work. As soon as the sun is gone, you go into the garden and you work, work, work. But when the sun is too strong, you say to yourself, no, you can only lie down, maybe you can get back to it in the afternoon.

Others, however, shook their heads and rather pointed to people who had become lazy – identifying this as the reason why they work less in the garden rather than changing weather patterns. Some explained that working in the garden on a daily basis was simply no longer the top priority and the week was dominated by all the tasks that had to be done in the village. This laziness and lack of activity was explained as being caused by and at the same time *being* climate change itself. In my host family, it was discussed how people created climate change in being less active than before, which also brought changes to their community life. Younger Dixoners agreed with their elders that they, as the younger generation, were far too occupied by new technologies such as mobile phones and the Internet, using their money and time to communicate only in their rooms or hanging out at the beach at night to talk to friends and go online. When I asked what this has to do with climate change, one of the boys answered: "This new technology makes us move less, and climate change

makes everything new come to us and then things change." In his opinion, this had an effect on all aspects of life.

The day following this short rest at the beach was a garden day and I went to work with one family, a young married couple and their child. I asked about the dry period and how they managed their gardening during this time. Again, I heard complaints about how difficult it had been to plant yam tubers over the past months, that the young leaves would be burnt by the constant sun. "This is because of what they call El Niño in the workshops." "And what is El Niño for you?" I wanted to know. "It is this time where there is only sun, this is what they [in the workshops] call part of climate change." The couple explained further that they had lost some yam at that time and that their bananas had not grown as expected, but that this year they would grow again. They had never seen a growing season like it. After expressing these concerns, they concluded: "But you have to try", underlining their own responsibility for making crops grow, showing that failure cannot be blamed on an environmental change causing them to have problems, but that rather their own approaches to these challenges was the critical factor. In the evenings after the sun set and we were back in the village, during my usual rounds passing by the kitchen-houses, Dixoners had their dinner or sat down for a chat, very often with a shell of kava. We again exchanged thoughts I had experienced during the sunny, and therefore exhausting, garden day. I was concerned with the questions – what can one do when there is this drought and what did they do? Since everyone was in relaxation mode, they just laughed and told me that they had switched on to other cultivars and other planting sites. "Malele bananas did not grow well, but others were fine." When some malele banana plants[1] do not bear fruits, they moved their banana gardens to the riverside. They assured me that to continue and diversify cultivation would be the only option.

During this time, villagers had been dealing with what they had heard in adaptation projects over the past couple of years, being part of climate discussions. I approached them as experts in their own terms, having interacted with governmental and international experts to create a climate change site, as explained in the previous chapter. In a similar vein, but working with the Makushi in Guyana, James Whitaker considers diverse climate change encounters with NGOs, eco-tourists and consultants, looking at the ontological framing of climate change among villagers underlining pluralism: "expressions indicate the heterogeneity of local ontological concepts (Whitaker 2018)

1 Kind of banana (Musa spp.) which is very common in Vanuatu (cf. Calandra 2017, 461).

as well as the influence of outsiders" (Whitaker 2020, 848). "Ontological heterogeneity" in connection with climate change between and also inside different groups have been noted by Whitaker (2020, 855), as well as other authors (Burman 2017; Rosengren 2018). Here, ontological differences become visible through interactions, especially when talking about global issues such as climate change (Rosengren 2018). This chapter deals with the question about how climate change urban narratives will meet everyday village lives. I then look at the solutions worked out by the villagers in these encounters: namely a concept that ni-Vanuatu living in the Dixon Reef area called klaemet jenj. I take this not only as a Bislama translation of climate change but also as a new concept (Pascht 2019). As Arno Pascht explains, considering these new concepts brings out new climate change nuances, localising global discourses and practices (ibid.). I will refer to relevant recent approaches in anthropology and geography to the study of Pacific Islanders' encounters and practices.

3.1 Differing Explantions

Many studies have intended to show how Pacific Islanders make sense of the new information they receive about climate change (Pascht 2019; Rudiak-Gould 2013), and how they live their lives according to the changes perceived and experienced (Bønnelykke Robertson 2018; Kempf and Hermann 2014; Warrick 2011). There is a wide range of perspectives in terms of how people in Oceania act upon or interact with change. 'Responses' are framed in 'mixed repertoires' of knowledge; meaning that argumentations could be influenced by Christian belief systems, traditional knowledge, economic interests or natural science (Rubow 2013). Cecile Rubow pronounces different approaches of Cook Islanders to 'repertoires' in 'enacting' cyclones, some connected to climate change, some not. For them, she stresses, this is not a contradiction – different explanations for what climate change contains are all seen as valid. Responses are often interpreted as framed according to one cultural framing, using one 'ideology' to explain destructive forces (Rudiak-Gould 2013). These examples underline that for people living in Oceania, assumptions about climate change differ. Responses may be context bound but several of them coexist simultaneously (cf. Calandra 2020). Furthermore, these ethnographic studies show that there are Pacific people (such as those on Kiribati) who completely reject climate change as a concept and focus on what they know. They do not acknowledge any drastic changes discussed on political levels, because for

them uncertainty is already an 'existential condition' (Bønnelykke Robertson 2018). Moreover, there are younger people who fully embrace changing scapes of information as well as the acquisition of new information (Hetzel 2016).

All of these studies indicate that climate change worlds are diverse, and that people are negotiating them in their own terms. They also show that what might seem contradictory on paper does not feel contradictory for people on the ground. The authors have discerned a wide range of responses to discourses and practices connected to climate change in Oceania: rejection, adoption, co-existence of different kinds of responses and reception. Furthermore, all of the studies show that these different ways of dealing with climate change exist in response to a change in the environment, which possibly is also framed according to natural science discourse regarding the environment. Peter Rudiak-Gould frames this as reception of climate change knowledge of his research partners in the Marshall Islands. The author underlines that the Marshallese reception of climate change knowledge lies not exclusively within the 'environmental frame' of a natural science approach (Rudiak-Gould 2016). When people discuss climate change-related issues, they not only speak of environmental changes but also refer to a broader set of changes in their lives:

> Marshall Islanders do not usually speak about the existential threat of climate change within the environmental frame. It is spoken of as a crisis of tradition not a crisis of nature; the cause is understood to be the local adoption of foreign, untraditional, pollution artifacts. (Rudiak-Gould 2016, 265)

As he emphasises, Marshallese people include several aspects of life into their definition of what they call climate change. In this they see the causes for it in their lifestyle being influenced by external goods and thus form the argument that this leads them to further problems, both environmental and social (Rudiak-Gould 2013). This goes hand in hand with what Hulme suggests: that matters of climate change itself call for a rethinking of the categories used in global discussions around "global kinds of knowledge" (Hulme 2010, 559).

Turning to the sites of encounters, over the last few years, studies out of geography analysed adaptation projects in Vanuatu. These studies look at how ni-Vanuatu in rural communities deal with the content and useful implementations, and how they act regarding climate change-related issues and challenges already happening. The authors observe that most ni-Vanuatu in rural areas do not respond to questions in line with scientific explanations of climate change, which has further impact on the prescribed success of the

project (Buggy and McNamara 2016; Clissold and McNamara 2020; McNamara and Prasad 2013; McNaught, Warrick and Cooper 2014; Warrick 2011). As these studies show, ni-Vanuatu are apparently not primarily concerned with scientific prognoses about climate change, nor do they talk about their experiences as solely directed in the framework of its definition (Clissold and McNamara 2020; Granderson 2018). During conversations with local community members on two islands of Vanuatu, Mota Lava and Tongoa, research partners of geographer Ainka Granderson addressed matters regarding all aspects and challenges of life. Granderson writes:

> Climate-related issues did not figure prominently. Limited access to water and sanitation, land disputes, youth delinquency (e.g. teenage pregnancy, marijuana use, disrespect of elders and traditions) and food insecurity were the major issues identified in villagers' assessments. (Granderson 2018, 485)

Other studies have additionally shown that concerns of people lie in interactions within the community itself. Members of communities indicate different kinds of changes and different causes for changes, both of which lie in contrast to framings following natural or environmental causes (Granderson 2018; Mondragón 2014; Warrick 2011). Granderson concludes that people see changes but do not "interpret climate-related impacts and risks as purely hydro-meteorological phenomena, and global climate change was only one of the many explanations for changes" (Granderson 2018, 492). However, her research partners did also talk about changes, which the scientific community would define as environmental, such as the experiences of "temperature extremes, greater variability in rainfall, and rising tides and sea levels" (ibid., 485). Granderson identifies these definitions of climate change as contradictory to the categorisation of natural science (ibid., 492). Similarly, geographer Olivia Warrick criticises the fact that international discourses on climate change use a "Western frame of reference, where nature and culture/society are separate entities and science and politics are disconnected" (Warrick 2011, 332). However, in my view these studies fail to acknowledge that people could actually communicate in terms of natural science. They use different explanations and therefore also acknowledge environmental explanations. Conversations can go in either direction, referring to diverse explanations and causes for the challenges that people experience. Hannah Fair concludes in her research that people in Vanuatu have different approaches to climate change, which can be differentiated into 'scientific' and 'not scientific' classifications.

"They highlight the potential for more-than-scientific yet not anti-scientific responses to climate change that are locally meaningful and morally compelling." (Fair 2018, 1) She calls this an approach of 'tufala save', a Bislama term which she translates into English with the term 'double knowledge', which can open potential channels for communicating climate change-related issues (Fair 2018, 2).

As I have already referenced, Carlos Mondragón describes how climate change information is integrated into the lives of residents and how people accept scientific discourses in towns and in rural areas. He shows, for the inhabitants of the Torres Islands, in northern Vanuatu, that climate change discourses arose in the area in the early 2000s. Previously, fluctuations in sea levels were considered as normal occurrences and people reacted with flexible housing on different areas of the island. He gives the example of an earthquake in 1997 which caused the sinking of part of an island and accordingly the flooding and destruction of coconut plantations. People interpreted this initially not as a dramatic event but as normal fluctuation. However, after various awareness workshops, the inhabitants of these islands have increasingly linked the flooding and the destruction of coconut plantations to rising sea levels and 'global warming' (Mondragón 2018). He writes: "Subsequently, some islanders began to associate the 'sinking' of their islands with sea level rise." (ibid., 20) This example from another region of Vanuatu shows that external parties try to make sense of local phenomenon and local people have largely accepted their interpretations. Mondragón states that in 2009, there was another earthquake that raised the islands by 200mm, so that the sea level sank again to the level of 1998. Coastal areas dried out, new vegetation returned, partly also as a result of new plantings of mangroves by the inhabitants (ibid., 18). This shows that people in different locations in Vanuatu may apply concepts connected to discourses about climate change based on natural science when talking about different kinds of changes.

However, according to the examples just given, ni-Vanuatus' statements regarding what we call climate change are obviously neither based solely on scientific explanations, nor are they without recognition of such scientific explanations. This means that climate change may be framed plurally. The authors named above give different interpretations – either they state that people integrate or gradually adopt those concepts or that people differentiate between different kinds of knowledge. After participating in adaptation workshops, my interlocutors, both in the Dixon Reef area and in Siviri, used terms connected with climate change discourses – e.g. environment changes,

sea level rise, greenhouse effect, ozone layer etc. This may be interpreted as a change in their fundamental assumptions, as Mondragón assumed for the Torres Islands or as 'tufala save' as in Fair's interpretation. However, other studies rather underline that something new is created that draws on diverse sources. Local people's methods of dealing with challenges in cultivation in the village of Efate support the assumption that "[p]eople in Siviri not only know the term klaemet jenj, but they identify quite a wide range of recent developments with it. Klaemet jenj is not an abstract concept for them, but a lived reality" (Pascht 2019, 240). In Vanuatu, the climate change workshops wrap their climate change knowledge around the topic of cultivation and food, which political actors in town also considered as necessary to keep horticulturalists independent in growing their own food. This brings in different knowledges about what climate change can be.

3.2 Between Town and Village

Port Vila, the capital of Vanuatu, on the island of Efate, is the meeting point for international visitors, information about various topics, and thus equally for climate change information and policy efforts. As Port Vila represents a melting pot of people from all regions, ni-Vanuatu in town see themselves as mediators for the islands of Vanuatu, alongside NGOs and government programmes. Discourses and practices around climate change build bridges between town, peri-urban areas and rural areas on the main island of Efate and the other islands of Vanuatu. In this urban context, ni-Vanuatu born after 1980 are perceived as having a special expert role, having access to first hand news, and they see it as their task to pass on climate change information to their relatives on the islands (Hetzel and Pascht 2017). Statistics from 2009 show that Shefa province, where Port Vila is located, has the highest influx of people from other parts of Vanuatu (Johnson and Lenge 2012, 10). People move to the capital in search of education, jobs and the promise of a more varied and interesting life than in the village. Arriving in growing unplanned city settlements, many ni-Vanuatu become disappointed when life does not work out as expected, and

young people are seen as a generation without jobs and with no connection to kastom[2] (Mitchell 2004).

Although economic improvement does not necessarily come with this new life, ni-Vanuatu in town nevertheless gain direct access to political discourse and information, including access to international information on climate change (Hetzel and Pascht 2017). When I spent time in Port Vila in 2015, it formed a space of information in the form of awareness workshops, information events and protests. People participated in self-organised climate protests, a local group of young people held boot camps for students and young adults to learn about climate action, and some of them followed the Pacific-wide movement to protest in neighbouring states like Australia – all in all, a growing movement at that time with ni-Vanuatu women and men in their 20s at the centre of it. This growing preoccupation with the future of the country has spread to other young people, and their interest has been matched with numerous opportunities to train as climate change educators or to integrate environmental issues into their education. Younger ni-Vanuatu living in town at that time were highly interested in talking about climate change, since they saw it as one of the most pressing issues of that time (ibid.). One motivation to collect as much information as possible for young ni-Vanuatu was to support their families. They also expressed concerns about their relatives relying on, in their eyes, uni-dimensional practices regarding weather observation for forecast and environment. Not knowing about the bigger picture of current changes made them concerned about leaving community members behind in their actions responding to climate change. The local group of the Pacific-wide activist movement, the Vanuatu Climate Warriors, decided after some years of national and international protest to concentrate on working in the country and pass on knowledge and information which could help ni-Vanuatu to understand what climate change really means for their lives – this they did by talking about climate change on their terms (Hetzel 2016). At that time a young woman being raised close to town explained:

> I think it's not best to follow nature, because now nature is dying and because of that climate change, or that thing […] we have to follow all that information […] people are giving out. Because if we follow nature, I don't know, we

2 In Vanuatu, kastom can have two different, but interconnected, meanings: on the one hand, it refers to ways of living in rural areas and on the other it forms part of a national 'collective identity' (Regenvanu 2005, 40).

> will be confused. Because climate change causes nature to die and if we put our trust and focus on our nature then we will be (…) confused. [3]

Scientific knowledge was seen here as key to a successful response to global warming and progress. Climate change for young ni-Vanuatu in urban areas meant the disturbance of weather and the changing environment and they assumed that adaptation to this was only possible through knowledge from outside. NGO representatives took the view that climate change would increase extreme weather events and concluded that ni-Vanuatu could not rely on their 'traditional' practices of 'predicting the weather' (also often referred to in the literature as 'traditional ecological knowledge' (McCarter and Gavin 2014a; 2014b). One of the Vanuatu Climate Warriors in Port Vila called these practices 'the forecast on nature', a nature that is no longer predictable, because of climate change. Although this is a quite drastic explanation, other ni-Vanuatu in town would have agreed with it as a general concept. The consensus was that climate change causes the environment in the country to change, and understanding and responding to this can only be conducted through scientific knowledge. Other narratives focus on religious explanations.

The conversation about climate change also entered churches and religious meetings in Vanuatu. In contrast to inhabitants of other countries, especially atoll countries, who see events depicted in biblical stories about disaster (e.g. the Noah story) as the cause of climate change or whose religious convictions result in climate change denial, ni-Vanuatu use religious discourse to encourage people to face disasters that are coming (Fair 2018, 9; cf. Timon, Kaunda and Hewitt 2019). Although not denying a scientific explanation, they would take their religious belief and make a "spectrum" (Fair 2018, 8) of both explanations for anthropogenic climate change. Similar to the scenario I described above among the young people in town, they would see the importance of spreading the word about climate change, enabling people to prepare themselves (ibid.). Concern that people in village communities might not be prepared was mixed with aspects of a development discourse of backwardness. Scientists and political actors in Vanuatu directly link challenges to life on the islands and information about climate change as directly linked with communities' life and agriculture. Urban discourse sees the future as marked by challenges. Climate change is viewed as a component of the environment

3 This was before Cyclone Pam affected the islands in March 2015 and the discourse around climate change impacts among the urban population intensified.

that can no longer be relied upon. Communities in rural areas thus become actors within these discussions by participating in climate change projects.

Young ni-Vanuatu joined a practice that tried to find solutions for people in rural areas. It was important for them to accumulate new knowledge in order to pass it on. This new knowledge they found in scientific approaches and explanations (Hetzel 2016). During my time in Vanuatu in 2015, climate change formed a topic of interest, which people were eager to talk about. Bringing conversations and actions forward, they formulated this as 'climate change awareness' and explaining scientific causes.

Efforts to disseminate scientific information on climate change in the country was a policy focus of the government in the early 2010s. In 2015, I talked to employees of the SPC/GIZ[4] (The Pacific Community/ Deutsche Gesellschaft für internationale Zusammenarbeit) and found that their extensive programme of disseminating scientific information on causes and effects of climate change aimed to bring 'awareness' to ni-Vanuatu not only in the urban area of Port Vila, but on all 'islands', as opposed to town. The coordinator of the project in the country at that time made clear that every person in Vanuatu had heard about climate change. The initiative 'mi save long klaemet jenis'[5] (I know about climate change), a cooperation of governmental and non-government actors, addressed ni-Vanuatu across the country. People wore T-shirts with the slogan in the villages, proof that they had participated. Shortly before I first came to Vanuatu, the government ran a programme of 'climate change quizzes', in which people all over the country were sent text messages with short questions related to scientific explanations in connection to climate change, and prizes were handed out to those who answered them correctly. However, one of the main measures was building up resilience among the villagers by running long-term projects, which not only included education about the effects of greenhouse gases and phenomena such as El Niño or La Niña, but also methods of adaptation for food security.

Recently, some official voices have also asked for a more inclusive and longer-term approach, based on cooperation between experts and communities on the islands, something that was actually followed up by the NGO

4 "The expanded SPC/GIZ 'Coping with climate change in the Pacific Island Region (CC-CPIR)' programme aims to strengthen the capacities of Pacific member countries and regional organisations to cope with the impacts of climate change" (SPC 2010).

5 Writing of the Bislama term for climate change might differ, according to influences of English, French and local languages.

in Dixon Reef and the neighbouring villages. In an interview I conducted with one state employee, an expert in climate change adaptation, he told me that he had insisted that the programme should not overwhelm community members with more adaptation methods but that it should try to help them with scientific explanations about the effects of climate change and allow them to deal with it in their own way. He is one of the more critical voices who are not convinced that horticulture methods have to be improved by outside knowledge, but believes in people knowing what to do, when the time is right. However, and this in turn fits with the national political and urban discourse, he was convinced that one must continue to talk to people about what climate change can bring to the lives of village communities in the future and also in the present. Although the programmes may differ, national alliances of NGOs and governmental organisations continue to follow their wishes of building up resilience in rural areas. Political measures and initiatives are in no way coming to an end at this point. At the beginning of 2021, when European countries were busy dealing with the Covid-19 pandemic, in Vanuatu, a new climate change resilience programme was started. The initiative aims to inform all the people about climate change and possible mitigation and adaptation methods for agriculture, mostly concerned with what is called 'community resilience' (see Chapter 1).

Coming to the village, people in Dixon Reef explained: "We have klaemet jenj here now." The phrase has become part of the villagers' lifeworld and my interlocutors would refer to weather, plants and people when talking about climate change. Taking this Bislama expression on board also showed that people defined it in their own ways. People agreed on changes in their gardens, coastal erosion and coral bleaching. With this in mind, they agreed with arguments they heard in workshops that climate change is now a part of life. Unlike examples from some other Pacific countries where people were sceptical about the concept of climate change or denied its existence, or even said they had not heard of it (Bønnelykke Robertson 2018; Hofmann 2014), climate change in Vanuatu was marked as known and never denied. However, ni-Vanuatu also took on, and this corresponds with remarks made by scholars discussed above, the notion that changes in community life, such as concentrating more on businesses than on horticulture, also formed part of the changes of modern life. Therefore, projects in Vanuatu, as far as the western part of Malekula is concerned, have been not only about helping people to 'understand' what climate change is, but also included efforts to adapt their lives. People did not once reject the content of climate awareness events and reported that

they found information gathered through workshops useful. The coordinator of the climate change project running in the village of Dixon Reef since 2012, a ni-Vanuatu woman who had grown up on Santo Island where she also had her house on her own property, explained to Arno Pascht and myself what climate change was for her and how she tried to convey this in the numerous workshops. Her explanations followed an argument, as described above, that the consequences of environmental changes would radically change the lives of the villagers. For her, climate change would not cause problems for people, but would heighten the intensity of storms and other weather phenomena. In her workshops, she aimed at participants recognising the consequences for horticulture and adapting garden practices to the conditions. This included explanations of weather conditions, such as El Niño and La Niña, the generation of greenhouse gases by industries, but also fire for shifting cultivation, or driving factors such as deforestation. When I attended the workshops, her reasoning ranged between personal responsibility and adaptation to the problems caused by others. Within this argumentation, the potential of one's own actions was nevertheless also made clear. After one of the workshops, she illustrated this as follows:

> All the time they [villagers] complain that there is no rain, at most 15 minutes a day and then it stops again. I told everyone not to destroy the forests. When there is enough forest, the weather is normal and then there is rain. The same is true for the bush. At the same time, no chemical fertiliser should be used, but compost and grey water for watering. All this helps.

Scientific explanations for climate change are linked here to local conditions and especially to agriculture. 'Adaptation' is one focus of initiatives, and continues to be one of the main political agendas. In Dixon Reef, the NGO which has been working with the people for the longest and most continuous period of time has tried to create a direct application link for gardening, learning the effects of global changes in their daily cultivation work while also apprehending what to do under new circumstances. While rising sea levels was not a problem with which people identified in Malekula, rising temperatures, on the other hand, was. As in Mondragón's example for the Torres Strait Islands, the emphasis of the project in Dixon Reef was mainly on adaptation, i.e. the introduction of new methods of agriculture as a way of solving the problem. At the same time, as the above statement by the project manager shows, local actions also had to contribute to reducing the impact of climatic changes. Accordingly,

the workshops have focused on scientific explanations of climate change reasons and impacts, and then included strategies for taking action. Nevertheless, not everyone was happy with the contents of the workshops, especially with the methods to apply, but nevertheless they welcomed the guests and wanted them to share their experience of what they knew. They enjoyed attending workshops because they could learn about what was going on elsewhere in the country and beyond.

3.3 Making with Climate Change

When I asked people in the Dixon Reef area where they had first heard about 'climate change', most named the workshop of the NGO as their primary source. Next to the climate awareness and adaptation of cultivation workshop, people in Dixon mentioned school, radio and conversations with friends and family members passing through the village. As the topic entered the village from urban areas, it was discussed in the Dixon reef area in terms of being a problem emanating from the big industrial countries, which they must nevertheless treat in their immediate locality. In this sense, argumentation of damage to the environment and change in the community was considered simultaneously as a local and a global issue. Answers to my questions hinted to a conceptualisation of it as an all-encompassing theme of their current lives. In this they formed two important lessons to address current changes. The first was a novel stance on *envaeromen* (environment) combining terms of Melanesian respect for people and the surroundings, by also including climate change narratives into this. And second, during this they extended the gardening practices as something that deals with cultivating crops alone to a community matter of living together with human and more-than-human actors.

3.3.1 "Respektem envaeromen"

"It is because of what is happening in the big countries." At one of the interview meetings I had with a Marielle, a young woman, living with her mother in Dixon Reef, she explained to me that people in Vanuatu knew well that what was happening – the sun being hotter, higher frequency of storms, the ocean being unpredictable – this happened because of industrial infrastructures. "I think all this smoke is going up, plus the hole in the ozone layer is acting on

that and there is El Niño that is too strong. Yes, I think that is the case." People often connected the phenomenon to places they had heard of but did not know themselves, as well as to processes outside their control. One of the older men summarised what he had learnt and experienced over the past years and then expressed great concern in this regard:

> Many tell us that it [climate change] is something that we just know will reach us. Then we say to ourselves, ok, other countries won't have problems with it, but we here in Vanuatu, it will reach us. We get everything that all the big countries have done.

This highlights the issue that although the causes of climate change lie with the large industrialised nations, ni-Vanuatu themselves must prepare to be directly affected. Although problems do not (only) originate in the Pacific region for my interlocutors, they must be addressed everywhere. What will happen is further unknown, but the fact that changes are coming seemed to be a certainty. It also resembles what Rudiak-Gould calls "industrial blame": considering the industrialised countries in the northern hemisphere as guilty with their lifestyle and machinery causing too many emissions, which then leads to consequences, including global warming, all over the world (Rudiak-Gould 2014, 366). Interview partners never denied that something is happening in large industrial countries (most locally Australia) which causes life to change for them. They even consider living in town in Vanuatu to be unhealthy, because of the traffic, soils that are covered by tarred roads and energy wastage through electric lights and other technologies, recognising that these elements have played a small part in the rising heat in Vanuatu. The women were always happy to see me in the village, because then I was no longer at the mercy of the dangers of the unhealthy city and could recover. "It's better you stay here and, the town is hot", my host mother in Siviri would shrug her head about paved roads and unhealthy food in the supermarkets. My companions in Siviri in particular pitied me when I had to make official trips to Port Vila and expressed their concerns about this lost environment. Town is considered to be an unsafe place, not only for physical health, also because of influences of a consumer lifestyle. However, in order to refrain from romanticising village life, it should be noted that other comfortable technologies of the town, such as television, electric lights and brick houses were very much welcomed and people admired those who made their life as urban brokers. For people in Dixon Reef, however, the new themes, new materials and changing weather were linked to connections to ur-

ban or international travellers entering the community from outside. People in the village of Siviri raised the same points. One of the younger men, waiting for his next trip to work on one of the bigger farms in Australia, pointed out that islanders would have to put up with this: "What can we do about what people are doing elsewhere?"

This only makes up one part of the argument. The other part is comparable with Rudiak-Gould's argument complementing the blame of Western countries: taking one's own actions into account. In his ethnographic example, Marshallese dealing with the topic of climate change do not see unilineal blame directed at industrial nations as the end of the story. They also reflect on their own life practices, in line with what the author calls "universal blame", where every person on the planet can be held responsible for what is happening to it (Rudiak-Gould 2014, 367). Similarly, official voices have called on ni-Vanuatu in urban residential areas to see how they contribute to CO_2 emissions through burning plastic and driving cars (Hetzel 2016). In Siviri, many of my interlocutors had access to a vehicle or at least used the bus on a regular basis. They took seriously the idea of cutting down the usage of cars since they also wanted to take responsibility for their actions. Although Dixoners do not use cars within their village, they argue in the same way, in the sense that they focus on their own agency. Here again, one of the younger females made a solid point:

> Yes, only we humans together, we have to try our best. Exactly that, we must not burn more plastic and try not to destroy everything around us. We must not cut down trees. When you plant your garden, don't burn it, just plant your food. […] Everyone can do something about climate change.

In Ralph Regenvanu's speech in front of the Climate Vulnerable Forum, we can see a reflection of this dichotomous argument: ni-Vanuatu see themselves as having a responsibility to contribute with their own doing, but only together, with the participation of all others, can current issues be addressed. They express this as an equally important distribution of responsibilities, in the sense that becoming aware of changes, starting to talking about them, also has to create further action. This also includes the notion that, although influence can vary in strength, collective action has the most impact.

This incorporation of shared ownership is in the case on ni-Vanuatu ability to act expressed above all in the practices around 'respektem envaeromen' (respect the environment). Officials of the agriculture department wanted to convince farmers to stop using fire for their horticulture and to refrain

from the practice of slash and burn, also because clearing large trees and burning down organic material contributes to increasing emissions. In general, officials emphasised human activity as causing and contributing to climate change-related problems. Regarding the materialisation of climate change, I had many conversations with Augustina in Dixon Reef. During one conversation she mentioned:

> Yes, this strong sun is causing us problems, destroying our crops and flooding. We see the problems in the gardens and in the sea. The sea is rising and coming further and further into the country.

Human activities were what is supposed to 'spoelem envaeromen' (destroy/ruin the environment), whereas in order to work against this, one has to 'respektem envaeromen' (respect the environment). The 'New Bislama Dictionary' (Crowley 1995), does not list an equivalent for the English word 'environment'. In Novol and Nasarian, the indigenous languages spoken by people in Dixon Reef, there is also no vernacular translation for 'environment'. What people refer to, albeit with hesitation, which comes close to what they call 'environmen' in Bislama, can be translated as 'everything that is alive'. In their explanations this included plants, humans, animals, the hills and the sea. This circumscription of environment by my interlocutors can be compared to what Mondragón described as "humanized landscape". With this expression, he wants to emphasise on the one hand that people are the ones who shape their surroundings, in relation to it and on the other hand to differentiate Oceania environments from a natural given. He explains: "Such humanized landscapes give rise to forms of flexibility that are not always evident because they transcend narrow understandings of what constitutes indigenous adaptive capacities." (Mondragón 2015, 4)

For ni-Vanuatu, living with the environment also means working with plants and people, and thus also making their environment. In Dixon Reef, this included at times communicating with the bubu (ancestors) at tabu (taboo) places, where the 'spirits' of the bubu are located. Those places were everywhere around the village and further up the mountains. However, these places were contrasted with the general environment people had to care for in their daily lives. Tabu places were exceptional places in the environment, where only members of the nasara had access and often they were completely forbidden for women (Hess 2009, 129–31). Environment, however, was accessible to all women and men equally, and the responsibility of all. Here, the

'humanized landscape' became for Dixoners the environment in the context of climate change.[6] The chief of Dixon Reef explained to me his understanding of the word 'envaeromen' as: "Everything around us is environment. The trees, all the crops in the garden, the houses and you and me." Others agreed with that explanation, and included their daily activities. Building a house was interacting with 'envaeromen', while cutting down a tree was framed as 'spoelem envaeromen' – that is, the destruction of that which surrounds human beings. Humans interfere with part of the environment, but it needs to be kept alive in order for to maintain their own life. For my interlocutors, it became clear that they, as humans, also 'spoelem envaeromen'. On the other hand, destroying something in the environment is considered to be destructive behaviour of the worst kind. One example of 'spoelem envaeromen' Dixoners referred to was their experience with deforestation. Especially the men liked to tell the following story of the moment when they realised that their environment could be destroyed through money coming through big companies.

A few years earlier, a logging company began its work in the next bay to the south, where people usually made copra on their plantation and the slopes were still full of trees. The logging company promised to create opportunities for wage labour for the people. Since copra production is not always easy to plan and cash income depends on there being enough coconuts as well as on prices at the world market, people are happy to find new ways of increasing their cash income. On Malekula island, many villagers rely on making copra, to pay school fees for their children – one of the main responsibilities mentioned by parents. When I heard about the story of the logging company providing employment opportunities, I was first surprised that people spoke so negatively about it because after being supportive at the beginning, they soon became sceptical. One day, when I came down with a family from their hilltop gardens, Willisem and Denise, crossing this area every time they want to reach their impressive garden site on their own land, pointed at the path we had just followed. I could clearly see that this path had been much wider some time ago, larger trees stood at some distance and only low bushes grew in the immediate vicinity. On closer inspection, I could still see how the tyres of heavy machines had left their permanent marks in the ground. The couple shook their heads: "This is not good, look how they ruined everything." They did not like it and

6 The making of environment becomes the topic of Chapter 5. There I also refer to Arno Pascht and Eveline Dürr, who see environment as a relational process of making and becoming (Pascht and Dürr 2017, 9).

they referred to these activities as 'spoelem envaeromen'. "I say this because of all the trees. Our environment here, so all the trees, they bring the rain. If we then cut them down, there will be too much sun."

The men stopped working for the company for a number of reasons, partly because of poor working conditions but also because they were opposed to the felling of trees. "If everyone doesn't respect the environment and everything that exists, if all the trees fall and burn, it won't be good in the future. If El Niño, if it comes again, everything can be much worse." explained one of them. Of course, there were always some in the community who cut down trees in order to clear space, but most tried to not touch the large trees. Talking about climate change, men and women in Dixon Reef would make the connection between human activity and (also religious) narratives about life. Communities' actions are responsible for changes that can happen. My interlocutors also used terms that were distributed over different sources connected to climate change information. An intact 'environment' can help ensure that external causes like climate change do not affect anything else. 'Respek' for the environment was considered to be extremely important.

Lamont Lindstrom writes about the use of the Bislama term 'respek' among ni-Vanuatu today. This term was appropriated from the English word 'respect' into the Vanuatu Bislama. It became part of ni-Vanuatu language use in the 1990s through the interaction of ni-Vanuatu with pop culture. It mostly describes various forms of good interpersonal interaction (Lindstrom 2017). "They [ni-Vanuatu] bemoan respect's absence and they evoke disrespect to explain conflict and disappointment." (Lindstrom 2017, 3) Olivia Warrick (2011) learned in her research how ni-Vanuatu also connect 'respek' to matters of climate change: the community members on Mota Lava explained the topic of climate change as a loss of 'respek'. They explained that one expression of climate change is that of younger people losing respect for their elders and following a lifestyle which is dominated by consumer goods. In this case, 'respek' comes together with climate change in terms of social interactions among kin relations and community members. Dixoners use this to explain the proper way to interact between humans and the more-than-human world. They do also make this connection to climate change but combine it with another word they draw from new discourses: 'envaeromen'. While in workshops the word 'envaeromen' is used to describe on the one hand, the materialisation of climate change and on the other, the human impact to cause it – this brought a new nuance to the word 'respek'. In discussions about climate change, the term also referred to humans having to interact with everything including

the environment in a way that ensures that interactions cause no harm. For many, this includes human interaction as well as their interaction with the non-human world. In this way, the behaviour in question is situated within a broader discussion about climate change, which considers the treatment of all living things. The effects and impacts of human actions are also considered together, both in terms of human coexistence with what they consider as environment as an animated landscape. I will elaborate further on this topic in the next section of this chapter. Here, climate change is an aspect that describes destructive human behaviour and how this behaviour may or may not be respectful.

3.3.2 Climate Change, Communal Life and the Gardens

In discussions about climate change, my interlocutors often mentioned changes in community life – in our conversation, many of them pointed me towards the recent shifting dynamics in their living together – in doing so, also practising self-reflection. Both older and younger people in the Dixon Reef area saw changes of lifestyle reflected in the increased and daily use of technical means of communication over the years. Younger ni-Vanuatu in particular are attracted by new technologies. One young man from Dixon Reef criticised his own generation for using the mobile phone, for calls, texting or using Facebook on the assumption that this would lead to their interacting less personally face-to-face. Furthermore, picking up the phone made them less motivated to travel, meeting relatives in other parts of Malekula because interaction was swiftly done from their own beaches. This brought up discussions in the family homes, where the parental generation expressed their concerns that younger people had become less interested in living together as a community, contributing to self-organised village life with running kindergarten or school, organising festivities or village gatherings, further learning the solidarities and respect in their agricultural work, because they retreat into their houses, absorbed by their phones.

Another aspect of changing community life that villagers in the Dixon Reef area increasingly mentioned was that individual families turned back to their kinship groups and focused less on the village community. This included complaints that nowadays community members are more concerned about their own benefits and keeping everything in the extended family – in contrast to thinking along lineage lines. If time was used so that individuals could afford material goods, less time remained for community work. Therefore, it was of-

ten said that work in the village, at the kindergarten or at school was considered too time-consuming (see Chapter 6). Individualism was to be considered a danger to community life and people complained that this contributes to climate change. When I talked to Thomas and Platine one afternoon, by making references to their own family life with their three children, the couple helped each other to frame their view on current changes. Thomas summed this up as follows explaining these connections by using the Bislama concept of klaemet jenj:

> I think klaemet jenj only follows all the traditions of our lives! It is indeed the case that we are losing all the ways of life and additionally kastom that we used to adhere to. Today we just do things differently. If we work only for money, then we eat rice. Ok, look, nowadays you go to the garden and then when you come back from the bush, we no longer eat what we grow there? Do you see what I mean? That's a big change! In the past, we used to work, when it was time to make copra [at the plantation], we would eat rice afterwards. For a festival, we ate rice. […] We don't focus on our work anymore. So, it's not like it used to be. klaemet jenj is how we live our lives.

This statement combines causes with effects. Klaemet jenj, as Thomas put it, is and follows the way people live their daily lives. For both Thomas and Platine, the biggest loss for Dixoners was the way of life their parents were living decades ago, especially gardening and the consumption of the crops grown, which was often described as the ideal. This influences not only what happens in the village but it affects to the same extent community life and garden life. Klaemet jenj refers to living together in the community, and this is characterised by gardening. This includes not doing as much gardening as in the past, not eating the yield from the garden and thus not following the ideal of communal life (Chapter 6).

People living in the Dixon Reef area discussed the importance of gardening as producing their own 'aelan kaikai' (island food, cultivated crops) and criticised a growing reliance on highly processed foods, including rice, canned meat and canned fish. When Arno Pascht and I arrived in the village at the end of 2016, eating fresh and healthy food was one of the main concerns when talking about gardening. Since the adaptation programme running in the village had a focus on food security, the project leader was eager to have people eating their own cultivated crops, grown next to their kitchen houses. These home gardens were an approach designed to ensure a vitamin-rich nutritious diet.

However, in times of crisis, during the drought of El Niño, people resorted to a diet supported by imported rice, easily stored and ready to cook, supplemented by a few leaves, corn or pumpkin.[7] This approach by villagers led to discussion between the NGO and representatives from the community, which included topics around gardening, aspects of adaptation and, relevant at this point, aspects of good food. Even before this point, there had been numerous lessons on the classification of different types of food, a campaign that addressed the whole country: "Tri kaen kakae is a division of foodstuffs in Vanuatu, where foods are placed into three categories, kakae blong bildimap bodi or foods to maintain strength, kakae blong blokem sik or foods to maintain health, and kakae blong givim paoa or foods that provide energy." (Wentworth 2020, 81)[8] Ni-Vanuatu indicated that rice and tinned meat were one of the main problems causing illness. However, in many parts of Vanuatu, rice had become a staple food for huge parts of the population. Consumption of refined rice and other imported products (such as tinned meat and instant noodles) is now a serious health risk and an issue widely discussed in the country. Wentworth describes islanders as considering rice as something that helps during a short-term crisis, such as after Cyclone Pam, but not providing a long-term solution. Discussion about eating 'healthily' has already been integrated into NGO programmes and ni-Vanuatu discussed the risks of eating too much rice (Pollock 2017; Wentworth 2020, 81–2). Other movements such as the local Slow Food Festival, organised locally and held on a different island each year, also focus on local food. Here too, the importance of cultivation is seen as a transmission of knowledge of food preparation, and also as a basis for healthy eating (Willie 2019).

In Dixon Reef, people insisted that they would prefer 'aelan kakae' (island food) and that the consumption of rice was considered also to change life in general, beyond purely nutritional aspects. Klaemet jenj reflected this transformation in nutrition and the associated fast lifestyle based on consumption and less on cultivation. An elderly woman in Dixon Reef, who was considered to be an expert in cultivation, and who was therefore called 'Mama Agriculture' by the other villagers, warned against excessive consumption, suggesting that one had to be cautious of the use of rice, but can, however, eat it temporally.

7 There is a growing body of literature on how disaster food relief has affected peoples' taste and approaches to food security (cf. Ahlgren, Yamada and Wong 2014; Connell 2015; Iese et al. 2021).

8 The spelling of food as kakai, kaikai, kakae or similar is regionally different in Vanuatu.

She continued her thoughts: "Rice is the food of the 'white man' and it helped us a lot in the past and after Cyclone Pam, but now we return to our gardens." Since people immensely criticised the daily consumption of rice, while emphasising that they ate a lot of it, I followed up on this aspect. I noted the daily rice consumption of villagers. At the beginning of my research in 2016, which coincided with the time when my interlocutors were still dealing with the consequences of the El Niño drought, refined food and especially rice was eaten in every kitchen, mainly replacing root crops like yam, taro and cassava (20 out of 20 people asked ate rice as the main course). In 2019, almost two years after the El Niño drought, people in Dixon Reef still supplemented their diet with rice; however, meals contained mainly root crops (only one to three people out of 20 ate rice as a main course). At that point, my interlocutors praised the good quality of their food, the different flavours of yam and the excellent taro. The ambivalent attitude to these 'healthy' foods still prevailed, however, as rice was easy and quick to cook after long days at work.

This discourse included that the notion that people complained that they tend to take less care of their gardens compared to the past. When talking about klaemet jenj, people would refer to their garden crops and to the way they have changed, as this woman does:

> What I think, in my opinion, and I only compare today with the time before, all the crops carried well. In the time of the elders, you went to the garden and then you could dig out good taro, very good cassava, really big ones. But today, how everyone explains today, it's not like before again. Now everything changes.

Humans are considered as responsible for not following up their garden practice, or are seen as too lazy to work hard enough to generate the same yield as before. Life has changed and this can be seen in the humans' behaviour, in the environment and in the ways in which humans behave towards the environment. Just as the garden was important to people at the political level for food security, it was also important to people in Dixon Reef, but in a more multilayered way.

Political actors saw the gardens as a way to secure food today and in the future. Climate change programmes included efforts to achieve good nutrition and in general have been trying to communicate the value of home-grown food in recent years. For women and men in Dixon Reef, everyday gardening was also a matter of community life (see Chapter 6). Cultivation of food crops

is seen as one of the key elements, both for a good life and with regard to the challenges posed by climate change, or to put this differently, gardening *is* expression and production of community life, and if it does not work, there is climate change. Thereby the villagers are connecting mekem garen, their practice of gardening, with climate change. The way to move forward for people in Dixon Reef also lies in the community. To the extent that humans are responsible for everything around them and their community life, they can act on climate change.

On another humid sunny day at the end of February 2017, I placed myself again in the shade at the seafront, and started talking to one of the men in order to discuss some difficult topics. We were talking for some time and my interlocutor's patience was almost at an end – I was pestering him too much with my requests for more detail. He gave me a dismissive look in response to one of my more provocative questions about whether klaemet jenj would make everything in life unpredictable and then said:

> Look, for us, there is a time for everything. There is a time to plant the garden and clear a place for it, there is a time for that as well as for the sea. Sometimes you see the sea changing, it swells and brings all the driftwood to the beach. And it's the same with klaemet jenj, everything changes.

Change is something that people in Dixon Reef experience on a daily basis. It is not surprising for them that climate change is happening, because it represents just another change in their lives. Nevertheless, they do not dismiss klaemet jenj but rather consider it as something that has to be addressed, as does every other change in life.

So far, I have explained that women and men of different ages considered klaemet jenj to be part of their 'envaeromen', their surroundings, their gardens and human interaction and behaviour, and to have effects on living together in the community. All aspects are considered with equal importance; however, human agency was always at the centre. People are responsible for changes happening, as well as being responsible for addressing it. Whether or not this was able to be solved remained equally unclear for all those I have asked.

3.4 Conclusion

This chapter has expanded on the ramifications of climate change practices and discussions in Oceania. Heterogeneous climate change knowledges included diverse responses to it. What I was depicting in this chapter from what I have learned from my interlocutors in Vanuatu, was that explanations for changes initially seem contradictory, but their new conceptualisation of climate change did not present anthropogenic influences, environmental impacts and impacts on human life as a causal sequence, but rather side by side as both causes and effects they have met over the past years. Scholars conducting research in Vanuatu described how ni-Vanuatu mentioned problematic issues and changes in their lives which did not fit with a scientific definition of the environmental sphere. According to them, ni-Vanuatu used different categories of 'knowledges' to make sense of climate narratives (Fair 2018; Granderson 2018). Following Rudiak-Gould and expanding his request to think 'beyond the environmental' (Rudiak-Gould 2016), I considered defining climate change and dealing with topics connected to it to lie beyond this environmental sphere. This also means that those 'responses' are not a mere reacting in multifaceted ways, but my interlocutors decided in their practice how to address the changes according to diverse overlapping categories. I looked at what my interlocutors explained to me by not dismissing it as something that does not fit in with explanations of natural science, but as their own specific and novel conception of climate change, which I call, following Pascht, klaemet jenj (Pascht 2019). Urban explanations in Port Vila on climate change concentrated on the destructive forces that will cause environmental problems which result in threats to Vanuatu's agriculture. People in Port Vila and experts from NGOs therefore aimed for country-wide climate awareness and integrated new methods of adaptation to these environmental problems. Those repertoires of climate change in urban areas have been mainly concerned with connecting people in rural areas to new discourses. Through workshops, they have been addressed in order to change their agricultural practices and find methods of adaptation. I showed that people in Dixon Reef talked about the worldwide problem of global warming, as well as expressing their opinion on the shared distribution between Western industrialised countries and their own activities. The responsibility they took in addressing 'respektem envaeromen', expanding their Melanesian communal norms for living together. This anthropocentric approach of my interlocutors brought their 'humanized

landscape' (Mondragón 2014) into discussions about degrading environments. Responsibilities lie in human action, both on the islands and abroad.

The garden then builds a bridge and shows that 'envaeromen' and community are part of what people refer to as klaemet jenj. Disregard for gardening also has an impact on community life. Klaemet jenj is the transformation in the 'envaeromen', change in community life and is one of the types of change that people consider themselves to be increasingly aware of. Apparently, while these changes seem to be causing concern among the people of Dixon Reef, it is also animating them to talk about possible responses. When describing how people in Dixon Reef deal with issues of climate change, it may be appropriate to distinguish between two different kinds of knowledge or 'tufala save'. In contrast, they create their climate change world and deliver a novel definition of climate change – namely klaemet jenj – which is holistic and comprises discourses and practices. 'Worlding practices' of climate change led to this klaemet jenj world, influenced by both reception and observation.