3

Lunar Motions of Growth and Regeneration

So far, then, this ethnographic exploration has revealed that a dynamic of a never-ending motion of separation and merging characterizes people's conceptualization of tidal and diurnal transformations. This kind of knowing, embedded in routines of experiencing and referring to environmental qualities and events, is important in revealing a layer of considerable cultural continuity with regard to fundamental perspectives on the world and its workings. Such perspectives in their turn are important for deciding how to cope with the world, what is desirable, beautiful and valuable (see Chapter 4), how to interact appropriately with one another (see Chapter 5) and how to respond when things go wrong (see Chapter 6).

In this chapter, I turn to perceptions of qualitative nuances related to a kind of environmental dynamic understood to directly affect the conditions for achieving well-being – that is, the cycle of lunation, understood to affect profoundly conditions of growth and regeneration. Before moving on, then, to an analysis in the next two chapters of what people appreciated and deemed appropriate in their dealings with one another, I shall use an exploration of the relationship between lunation and cultivation as a stepping-stone. Thus, I turn to an exploration of lunar dynamics, conceived in terms that imply they bring about the growth and regeneration of all 'living kinds' (Bloch 1993) by a motion of mutual attraction and repulsion between entities that both compete with and complement one another.

Such Is the Moon

'Why are the dead on Kotu buried with their heads towards the West?', I asked. 'The life of men is like the sun,' said Kafa'ongo, a man from Tongatapu

who visited Kotu in 1992. Kafa'ongo worked in one of the Ministries in Nuku'alofa. He held several talking-chief titles and enjoyed a reputation of being knowledgeable in matters of the 'Tongan way' (*anga fakatonga*):

> The early morning corresponds with childhood, when people are 'still small' (*kei si'i*). At noon, man is still 'good looking' (*kei talavou*), while in the evening he becomes 'old' (*motu'a*) and 'weak' (*vaivai*). The 'place of the sunset' (*tō'anga la'ā*) and the 'place where man sets' (*tō'anga tangata*) are the same. The 'manner of the body of the dead' (*anga 'a e sino 'o e mate*) should be the same as the 'manner of the sun' (*anga 'a e la'ā*).

When I discussed the same topic with a Kotu woman in her late sixties, she said: 'It is said that on the Last Day Jesus shall come from the "place of the sunrise" (*hopo'anga la'ā*). The dead are buried on their backs with their heads towards the 'place of the sunset' so that they may rise to face Jesus when they wake on the Last Day.' 'Amanaki Havea, the president of the Free Wesleyan Church of Tonga, offered the following:

> In the 'times of darkness' (*taimi fakapo'uli*) people were not buried in an orderly manner in cemeteries as they are today but 'disorderly all over the place'[1] (*noa'ia pē*). But I have heard that people used to be buried on their backs with their heads towards the east, so that they could rise to face the place where the sun sets and find their way to Pulotu, which was believed to be in the west. Because Christ is said to come from the opposite direction on the Final Day, people were turned around to face him, instead.

Although versions varied the reasons had in common that bodily burial posture should correspond with phenomena profoundly affecting people's existence. Finally, in a discussion of Kafa'ongo's analogy between the motion of the sun across the sky and the process of ageing, Koloa provided his own interpretation:

> It is a nice 'comparison' (*fakatatau*). But this is my thinking; the fisherman, if he looks to the sun to learn something, he will get nothing. If he would learn something about his fishing he must look to the moon. It is the same with the farmer; he gets nothing from the sun but everything from the moon. If you want to know about weeding or clearing new land, planting and harvesting, these are all matters that should be done 'according to the moon' (*fakamāhina*). It is the same with the 'sickness of women' (*mahaki fakafefine/fakamāhina*, i.e. menstruation), matters of pregnancy and birth; much can be gained from the moon.

I asked Koloa what may be learnt about the sickness of women and birth from the moon. He answered:

> These are things that I have only heard and do not grasp very well. You must ask the women about these things. The thing is, many useful things may be known from looking to the moon, but the sun is almost the same from day-to-day and gives us nothing. This is perhaps why, according to my way of thinking, it is fitting for the posture of the body in the grave to be towards the place where the 'new moon' (*māhina fo'ou*) 'rises' (*hopo*) in the West after having been 'dead' (*mate 'a e māhina*). I have heard that people believed that Pulotu was in the West. If so, then maybe this would help people to come to life in Pulotu after death, just like after the 'old moon' (*māhina motu'a*) has died 'the new moon' (*māhina fo'ou*) comes to life in the West.

I was somewhat confused by all this. Particularly, I was puzzled by his claim that the new moon rises in the west, so I was not able to be of much help when Koloa asked me how this can be, but intrigued I decided to investigate further the extent to which this perception of lunar dynamics was shared and what other notions it could be related to.

Growth and the Motions of the Moon

The changing states of the moon create conditions that strongly influenced productive activities and other routines of everyday living on Kotu. Particularly, the states of the moon were perceived to influence garden fertility and growth. The correlations between the state of the moon and local knowledge about conditions of natural vitality may be approached in two somewhat different manners. Firstly, lunar dynamics may be explored as an autonomous flow of sequenced phenomena. Just as tidal and diurnal dynamics could be explored by examining the referential wholes that their descriptive terminology constitutes, the conceptualization of lunar dynamics may be explored in a similar manner – that is, as sequenced, natural phenomena related to one another by a dialectical process between extreme states; those of 'dead moon' (*mate 'a e māhina*) and 'full moon' (*māhina katoa*). Secondly, the emphasis may be put on how lunar dynamics modify other sequences of natural phenomena. The changing states of the moon create conditions of illumination that modify the conditions produced by the diurnal oscillation between night and day. Nights are not equally dark but vary between extremes of no lunar illumination at all, around 'dead moon' (*mate 'a e māhina*), and a full moon alternating with the sun to provide illumination throughout the diurnal cycle, conditions of illumination that were referred to as *fē'aho'aki* ('reciprocal/mutual day').

On Kotu, variations in lunar conditions influenced levels of night-time activity and night-time use of space. Around full moon, groups of laughing children played far into the night. Outdoor kava parties with no other illumination than that of the full moon were common. Pairs or groups of

unmarried women could be encountered strolling along the beach, and small groups of young men would quite often decide to sleep on the beach. During the other phases of the moon, the night-time spaces temporarily made larger by the full moon would again shrink, leaving the arena to men engaged in night-time activities of fishing and others willing to risk close encounters with persons up to no good or spirit beings of 'the other kind' (*fa'ahikehe*).

In another conversation, Koloa went on to describe lunar changes and to elaborate on the significance of the qualitative nuances of the moon for different sorts of activities.

> There is a night when the rise of the 'old moon sickle' (*lausi'i motu'a*) in the east coincides with the time of dawn known as 'twilight has shattered' (*kuo mafoa 'a e ata*). This time of the 'weak moon' (*māhina vai*), in the reckoning of the nights of the moon (*lau pō*), is called *fungaata* ('the upper part of twilight') and also *māhina lekeleka* ('tiny moon'). For a short time, the weak moon may be seen, but when the sun rises the moon disappears in the dazzling light of morning. The next morning, the narrow, old moon sickle sometimes 'appears weakly' (*'asi vaivai*) very close to the sunrise. Then it disappears altogether in the growing light of the sun.[2] About the following night it is said, 'the moon is dead' (*mate 'a e māhina*). That is the last night of the moon. The 'new moon' starts from this first night, which is named *faka'uluaki* ('the first one') and also *fua tu'u 'a e māhina* ('the moon prepares to stand'). But this night is also known as *pō fa'ahikehe* ('night of the other kind/spirits') because during this night the moon 'is known by those of the other kind' (*'iloa 'e he fa'ahikehe*). Next comes the night named *fakaua* ('the second one') or *pō toutai*, because on this night the moon may sometimes be 'known by the sailors/fishermen' (*'iloa 'e he kautoutai*) who are at the beach of the weather coast or at sea in the evening. On 'the third one' (*fakatolu*), the narrow 'new moon sickle' (*lausi'i fo'ou*) may be seen by all people to stand low on the western horizon in the 'dimness of the darkening evening' (*ataata efiafi po'uli*). It is called *pō 'o e tu'u 'a e māhina* ('night of the standing moon') or *pō 'a e maama* ('night of the world') because this night the moon 'is known by man' (*'iloa 'e he tangata*). It is said about the 'third one' (*fakatolu*) that it is a good day for 'trolling' (*fakatele*).
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> In the 'planting season' (*tō ta'u*; from May/June to November), the farmer may start planting from this time. The following nights of the moon are counted by numbers. The 'fifth one' (*fakanima*) is said to be good for trolling and also for planting the 'early yam' (*tokamu'a*) in the beginning of the planting season. On the 'eighth one' (*fakavalu*), the moon is 'divided in two' (*vaeua mālie*), and it is called *tu'u efiafi* ('standing in the early evening') because this is when 'the moon stands straight up in the early evening'[3] (*'oku tu'u tonu efiafi 'a e māhina*). The 'ninth one' (*fakahiva*) is also 'suitable for' (*aonga*) trolling and planting, but in my thinking the best time

for planting the yam is when 'four or three days remain' (*toe ʻaho e fā pē ko e tolu*) until full moon. When two days remain until full moon, the moon sets a short time before the beginning of (the morning) twilight, and this night of the moon is named *fakatauata* ('leading to twilight'). It is still time to plant, but the time before this is better suited. There should be no planting after the 'full moon', or at 'reciprocal/mutual day' (*fēʻahoʻaki*) when the moon sets in the early morning, or after this when there is a 'first moonrise' (*ʻuluaki hopo*) on the eastern horizon. Before this, all plants 'live well' (*moʻui lelei*) and are 'hard to kill' (*matengataʻa ʻa e ʻakau*), but afterwards all plants 'die easily' (*matengofua ʻa e ʻakau*). This may be known if you try to clear a garden or weed before the moon has become full. If you want to put fire to a tree it will not burn. Afterwards, trees burn much more easily. Clearing and weeding become easier. The time after 'full moon' is better suited for that kind of work.

There are some nights 'in this part of the moon' (*vahe ko ia ʻo e māhina*) that are well suited for 'fishing with hook and bait' (*taumataʻu*) for *koango* [ertain Emperors, *Lethrinidae*, such as Thumbprint- Grass- and Pink-eared Emperor; Randall, Allen and Steene 1990: 200] in the lagoon. From the third to the sixth night after 'full moon', the moon rises soon after the sun has set. These nights may be referred to as *fakamāhina hopo* ('corresponding with moonrise') because one should look for the *koango* in the 'fields of seaweed' (*ʻi he limu*) just as the moon rises. After this come the nights that are 'partly dark' (*konga poʻuli*), referred to as the *kaupoʻuli* ('the dark ones') because the night becomes truly dark before the moon rises. These nights are better suited for 'night diving' (*ama uku*) because the fish stay put in easy places. Before this, in the nights when 'the moon lights very much' (*fuʻu maaama lahi ʻa e māhina*), the fish move about or stay in the shade of difficult places. It is said that the period when the 'moon stands in the evening' (*tuʻu efiafi*) is better suited for trolling than after full moon, but there is one day towards 'dead moon' that is suited for trolling. But the day is 'not dependable' (*taʻepau*) and must be sought by 'trial and error' (*ʻahiʻahi*). Finally, the 'old moon sickle' (*lausiʻi motuʻa*) appears in the 'shattering of the twilight' (*mafoa ʻa e ata*) in the eastern sky 'to die' (*mate*) on the final day of the month.

In truth, a lot of useful things may be taken from the moon and nothing from the sun. The only way that the sun changes is that it rises and sets in different places when 'days are long' (*ʻaho loloa*) in the 'warm season' (*taimi mafana*) and when 'days are short' (*ʻaho nonou*) in the 'cool season' (*taimi momoko*). The moon is much more useful because it is different when days are long and short and also changes from night to night.

Koloa's mode of contrasting the practical significance of solar and lunar differences is all but identical with Eliade's in his cross-cultural examination of the moon and its mystique:

> The sun is always the same, always itself, never in any sense 'becoming'. The moon, on the other hand, is a body which waxes, wanes and disappears, a body whose existence is subject to the universal law of becoming, of birth and death. For three nights the starry sky is without a moon, but this 'death' is followed by a rebirth: the 'new moon' … This perpetual return to its beginnings, and this ever recurring cycle make the moon *the* heavenly body above all concerned with the rhythms of life. It is not surprising, then, that it governs all those spheres of nature that fall under the law of recurring cycles. Water, rain, plant life, fertility … (Eliade 1958: 154)

Two points of transition stand out in Koloa's description of lunation: firstly, the shift from a 'weak and dying moon', engulfed in the east by the morning sun, to a rejuvenated moon reappearing in the west in the evening dusk some days later. Secondly, the shift from a waxing moon that made growing things easy ('hard to kill' (*matengata'a*)) to a full and waning moon that made things hard to grow ('easy to kill' (*matengofua*)). Koloa had also hinted that there may be a similar correspondence between lunar states and the 'sickness of women' (*mahaki fakafefine*), pregnancy and birth, but he told me to ask his wife Meletoa about these matters. According to her, variations of lunar states were first and foremost a useful timekeeper of menstruation, pregnancy and birth:

> If a woman gets the moon sickness (*mahaki fakamāhina*[4]) at dead moon, she may know that she will get sick again at next dead moon. It is the same with the moon standing in the evening, full moon and 'waning half moon' (*kalipa*). It is the same thing with birth. If a woman gets the moon sickness at full moon and then she does not become sick again on the next full moon, she may know that she is pregnant. She then goes to the 'midwife' (*mā'uli*) to learn when she will give birth. The midwife will ask her: 'When was your last moon sickness?' If she answers that it was at full moon in February, the midwife will count nine moons ahead and say, 'Te ke fā'ele koe he kātoa 'a e māhina he novema'. ('You shall give birth at full moon in November'.) But if she answers that it was at *matofi 'a e māhina* (a named moon-night a night or two before the fourth quarter), the midwife will say, 'You shall give birth at *matofi 'a e māhina* in November.'

Meletoa agreed that it was indeed helpful to look to the moon to keep tracks of events within these female fields of experience. She stated that she did not believe that there were lunar states that were more suitable than others with regard to human fertility.

> You ask me if it is more easy to become pregnant during the first part of the month, but it is not the same with people and plants. Becoming with child is different from woman to woman. For some it is very hard, and others become pregnant very easily.

> Sometimes a woman may live with a man for many years and never become pregnant, and then she lives with another and becomes pregnant very quickly. It is the same with the time of death. The life of man is not like that of plants that are 'hard to kill' (*matengata'a*) before full moon. Men die according to the manner of their illness, or death may come suddenly whether it is before or after the full moon.

For women coping with menstruation, pregnancy and birth, the significance of lunar dynamics was not that they were perceived to correspond with varying conditions of human fertility and growth. Rather, they were used to order and predict routine events in women's daily life and important events in their lives. Koloa, on the other hand, clearly approached this from the point of view of one coping with planting, weeding, cultivating and cropping in his garden, and evidently felt that also female fertility and the 'planting' and growth of the child may be expected to correspond with lunar dynamics.

The Moon also Rises

The claims that the new moon 'rises' (*hopo*) in the west and that a qualitative shift occurred when the full moon suddenly started to rise in the east were striking, if somewhat puzzling, features of elicited moon-lore. In order to understand these claims, it is necessary to approach the moon and its motions as components in the everyday environment. What circumstantial knowledge and routines of observation existed to make such claims and notions of lunar motions possible? Certainly no one on Kotu had witnessed a new moon rising in the west, in the sense of observing its ascent from beyond the western horizon.

Most city dwellers of an electrified era are unfamiliar with lunar dynamics. Also the moon changes in somewhat different ways at different latitudes. Thus, it is necessary to present a description of how the moon actually changes over the lunar cycle at the latitude of Tonga in order to make sense of local knowledge about the moon. On the first day when the moon starts to reflect the sun's light to earth, the only thing that may be observed is the narrow crescent moon. The new moon crescent appears low in the western sky in the aftermath of sunset before it drops below the western horizon. Over the next days, the moon's magnitude increases. The apparent distance between the sun and the moon in the sky increases, and the time lag between sunset and moonset increases. As the distance between the sun and moon increases, it first becomes possible, and then quite easy, to catch sight of the moon in the daytime sky. At some point, the magnitude of the moon, distance between sun and moon, and time lag between sunset and moonset make it hard *not* to see how the waxing moon (like all heavenly

bodies) moves from east to west (as the earth rotates) across the sky during the day.

The notion that the moonrise suddenly shifted from west to east indicates that other knowledge and, I would argue, specific routines of observation existed to make the daytime appearance of the moon insignificant or irrelevant. Discussions with other informants on Kotu illustrated characteristic notions about lunar motions that may indicate a correlation between conceptions of the moon and general agricultural competence.

Sitting on the steps of the communal water tank one evening as a waxing half moon (*māhina tu'u efiafi*) grew brighter in the failing light, I asked my companions, mostly men in their late thirties and forties, where this moon had risen. After some hesitation, one man offered his opinion that it had risen out of the west. He went on to explain that it would continue to do so until 'full moon'. Then it would start rising from the east. Another wanted to moderate this understanding of lunar motion. He claimed that, initially rising out of the west, it actually starts to rise out of the east a few days before full moon. He believed that it travels a great part of its westward journey across the sky before it becomes dark enough for the moon to attract attention to itself. Yet another held that the moon rises in the west until it 'stands in the evening' (i.e. waxing half moon). Then it shifts over to rise in the east and completes half the passage across the sky before evening. A couple of days later, one of Koloa's sons, a man in his forties who had been present in the moon discussion but had offered no opinion himself, asked me if I agreed with any of the men. He himself was uncertain but questioned the notion that a waxing moon rises in the west and then suddenly shifts to rise in the east. He felt that this was a belief of old people and thought that it was perhaps the common belief in the old days. He suspected that a close inspection of the actual motion would reveal that the moon always rises in the east. His belief was that the moon lags increasingly behind the sun and crosses a decreasing portion of the sky before sunset. Finally, Koloa's 18-year-old grandson, who had just dropped out of secondary school and had not been present in any of the moon discussions, quite simply stated: 'The moon always rises in the east, but the new moon is about to set in the west when it becomes dark enough to notice it.'

Data indicate a quite strong correlation between age and notions of lunar motions; older people tended to disregard observable daytime states of the waxing moon altogether. Middle-aged people included such daytime states earlier in the lunar cycle, while some of the younger ones seemed to include the hardly observable daytime states of the moon throughout the entire lunar cycle. I would suggest that this makes good sense in terms of correlations between age and competence/knowledge about the cultivation of garden crops. Typically, young boys start out as universal assistants, perceived

as capable of undertaking chores under close supervision and detailed monitoring. Young men are understood to be 'still incompetent' (*kei vale*) for a long time but are expected to turn to the sea as fisherman to become 'competent/knowledgeable' (*poto*) before turning to farming. Looking back on his life, Koloa described his own career as one in which he was 'disposed towards the sea' (*anga ki tahi*) when he was young (*kei talavou*). When he was in his late forties, he began to feel the cold of the sea and gradually became disenchanted with staying in the water; then he became 'disposed towards land' (*anga ki 'uta*) and turned to gardening. Other people on Kotu confirmed that this was indeed the typical turn of affairs.

Since the early 1970s, many young and middle-aged men cultivate kava on Tōfua island, 40 kilometres west of Kotu, where Kotu farmers have access to land. Growing kava on Tōfua is considered strenuous work; older farmers prefer to stay on Kotu throughout the year. The increased significance of kava as a cash crop has changed the strategy of cultivation, with older farmers feeling that the kava – as well as the high status variety of yams known as 'chiefly yams' or 'chief's yams' (*kahokaho/'ufi 'eiki*) and other tubers, such as 'giant taro' (*kape*; *Alocasia macrorrhiza*; Churchward 1959: 252) and 'Tongan taro' (*talotonga*) – grown by young and middle-aged farmers on Tōfua had come to be planted *noa 'ia pē* ('without order'), or haphazardly. Koloa described the changes like this:

> Towards the end of the 'harvesting season' (*utu ta'u*) in March is a suitable time to go to the garden and cut off the leaves of the *kahokaho* yams that are to be used as seed yams. When the leaves have been cut off, the yam must be left in the ground for two or three weeks and then dug up and brought home to become nice and dry. It is good to 'cut it up to be planted' (*tofi ke tō*) close to the 'moon standing in the evening' (*tu'u efiafi e māhina*) at the beginning of the 'planting season' (*tō ta'u*; commencing with the 'new moon' in May/June). This is seldom done nowadays, but the yam cuttings should be planted in accordance with the part of the yam they come from. This makes the growth of the yams in the garden more beautiful and more orderly. When planted *noa'ia pē* ('aimlessly/non-orderly'), the yams grow *noa'ia pē*, some shoots appearing here and some over there, but the garden is not so beautiful. It is the same with the time of the planting. It has changed. Nowadays many plant the *kape* ('giant taro') on Tōfua not with the 'planting of the late/large crop' (*tō tokamui/ta'u lahi*) in August/September to the 'end/turning of the year' (*ngata'anga 'o e ta'u*) in November. Instead, they often do it before the 'planting season' in February and March. This makes the leaves of the crop big and strong, but the 'tubers' (*foha*; lit. child/son) become long and narrow. If it is planted later 'with the planting season' (*he ta'u*), the tubers taste the same but look much better. They become 'rounder' (*fōpotopoto ange*) and 'more full-bodied' (*sino ange*). It is the same with kava. It is planted *noa'ia pē* today because the farmer looks only for the speed of growth and thinks little of the

beauty and strength of a full-bodied 'limb of kava root' (*kata'i kava*). Kava planted before the 'planting season' in March, in the 'time of rain' (*taimi uha*), will grow fast, but it will be weak, and the limbs of the kava will be 'long and slim' (*hako loa*). Such a kava may be cut down and sold in two or three years. Kava planted 'with the crop' (*he ta'u*), when there is little rain, will grow more slowly but will be 'stronger' (*mālohi ange*), more full-bodied and more beautiful.

It may seem, then, that the increasing significance of kava as a cash crop is involved in committing younger and middle-aged farmers to planting 'aimlessly, haphazardly and disorderly' (*noa*) from the perspective of the most experienced subsistence farmers. The main point, however, is that horticultural expertise involved knowledge about key events in the lunar cycle. Thus, commitment to the experiential field of subsistence farming involves paying attention to changes in the moon perceived to be of relevance for growing things rather than observing how it actually moves across the sky.

Hawaiian Nights of the Moon

As far as I am aware, apart from the manuscript held by the Tongan Tradition Committee (Hafoka n.d) there has been no material produced in Tonga (nor elsewhere in Western Polynesia) that may contribute insights into the relationship between conceptions of growth, gardening practices and codification of lunar dynamics. Such material has, however, been produced for Eastern Polynesia in *Kepelino's Traditions of Hawaii* (Beckwick 1932), by Kepelino Keauokalani, 'a descendant of the priestly race of Paao, a man well acquainted with priestly lore' (ibid.: 4), born on the island of Hawaii in about 1830. Some of Kepelino's descriptions of Hawaiian moon nights may seem to indicate a similar notion of a new moon 'rising' in the west: 'On the evening when *the new moon rose* until the next day was a good time for planting … On *Ku-kahi*, the third night of the moon, the moon is to be seen in the western sky … *Ku lua rises* on the fourth day of the month …' (ibid.: 98, my emphases). Furthermore, in the Tongan reckoning of the nights of the moon, the time of optimal growth referred to as *Fua'aho* and *Punifanga*, when four nights remain until full moon, was also described as the most suitable time for planting in Hawaii: '*Ole-pau* is the tenth night of the moon. On this night farmers who are on the lookout for good crops plant their fields. It is a productive day, say the cultivators … No other days of the group are like this one. Cultivators do not think anything of the other days, but this is important to them.' (ibid.: 106).

On closer examination, however, these similarities may seem somewhat facile. It is not clear whether the notion that the new moon *rose* in Hawaii has been produced by the translation of the original Hawaiian text into

English. Both the translations 'rises on … night of the moon' and 'is the … of the moon' refer to the Hawaiian formulation: '*ka mahina i kau ai*' (ibid.: 103), which appears to be a statement that the moon 'has come' rather than one implying from whence it has come. Also, the description of the days that correspond to suitable nights of the Hawaiian moon for planting imply that there is no shift into a time when the moon has stopped waxing when planting should no longer be undertaken. On the contrary, seven of the days of the waxing moon are described as days *avoided* by cultivators, while only one of the days of the waning moon should be avoided. Thus, apart from the two first days of the new moon, only the four last days of the waxing moon are described by Kepelino as suitable for planting. What Koloa's and Kepelino's conceptualizations of a relationship between growth and lunar dynamics had in common, then, seems to be that plant fertility turns and peaks at certain points in the lunar cycle. Apart from both referring to a peak of garden fertility four days before full moon, their conceptualizations of the relationship between gardening and lunar dynamics seem to be inversions of one another: Kepelino's most suitable days for planting seemed to be Koloa's least suitable days for planting, and vice versa.

The main point, however, is that the moon 'rising' in the west was given relevance specifically within the context of subsistence farming. The moon was paid particular attention at dusk and in the twilight of dawn to gain some knowledge about the state of the world in order to know how to act rather than to gain exact knowledge about astronomy.

Motions of Merging and Separation in the Sky

Individuals voiced different opinions in our discussions about where the waxing moon rises. Routines of taking note of the qualitative nuances of the state of the moon, however, seemed to consist of paying particular attention to events of the western evening sky in the early part of the lunar cycle, where the sun and moon may be described as moving away from one another. Thus, the sun and moon may be said to move apart spatially in terms of the apparent distance between them in the sky and temporally in terms of the time lag between the events of sunset and moonset. In the late part of the lunar cycle, on the other hand, the most dramatic events occur in the eastern morning sky, where the sun and moon may be described as having come together. The sun and moon may be seen as drawing closer to one another day by day in terms of the apparent distance between them in the sky and in terms of time lag between the event of moonrise and sunrise. For three or four nights around full moon, significant events occur in both the east and the west as the moonrise in the east coincides with sunset in

the west. The sun and the moon are as far apart as they can get in terms of apparent distance in the sky and in terms of time lag between moonrise and sunrise.[5] This state of extreme separateness at the same time brings the diurnal shifting between a daytime state of brilliant light and a night-time state of utter darkness to a halt. Instead, the full moon alternates with the sun to create the condition of *fē'aho'aki* ('reciprocal/mutual day') and provide illumination throughout the diurnal cycle. Finally, for the three or four nights around 'dead moon' (*mate 'a e māhina*), between the last observation of the 'old moon sickle' (*lausi'i motu'a*) in the east and the first observation of the 'new moon sickle' (*lausi'i fo'ou*) in the west, no significant observable event occurs, neither in the east nor in the west. On the basis of the trends of the last days of the old moon and the first days that the new moon can be seen, however, people would be quite justified in assuming that the sun and moon have 'come together'. This state of merging at the same time makes the diurnal oscillation between darkness and light reassert itself fully. No lunar intervention offsets the motion by which all things merge in the evening and become separated in the morning.

I have argued above that the manner of referring to a shift between a merged state (of 'high tide' and 'stable night'; *tau*) and the beginning of separation (towards states of low tide through *mahu'i* or 'detachment' and day through *mafoa* or 'shattering') implies that the beginning of this transition was perceived to occur in a place or manner inaccessible to man. That some shift has taken place may only be grasped vaguely by the interpretation of uncertain indicators. Likewise, the manner of referring to the transition between 'dead moon', when the sun and moon appear to be in the same place, and 'new moon' (*māhina fo'ou*), when the sun and moon appear to have moved apart, involved references to events 'known by beings of the other side' (*'iloa 'e he fa'ahikehe*) but not yet known with certainty by man (*'iloa 'e he tangata*). As may be clear by now, I am arguing that the dynamics of the lunar cycle were conceptualized in terms of a perpetual motion of coming together and coming apart paralleling the conceptualization of tidal and diurnal dynamics explored in the two previous chapters. In the monthly motion separating and merging the sun and the moon, conditions of growth or garden fertility were perceived to become favourable when the new moon could be seen to have separated from the sun (*Fakatolu*; *'iloa 'e he tangata*). The conditions of growth were described as becoming increasingly favourable for as long as the moon and sun kept moving apart. At full moon, the sun and moon are as far apart as they can get. And immediately the capacity for growth and multiplication known to expresses itself in plants becoming 'hard to kill' (*matengata'a*) was believed to stop short and become inverted, making plants 'easy to kill' (*matengofua*). Growth, vitality and multiplication, then, correspond with the motion separating that which

has become merged and that shall re-merge. Thus, the state of maximum separateness around full moon was not perceived to produce conditions of maximum garden fertility but conditions particularly ill-suited for putting seed yams into the ground.

Hina and Sinilau: Tales of Attraction and Repulsion

Exploring people's fields of experience constituted by their daily engagements with their environment, I have chosen to take seriously and focus strongly on the subtle qualitative nuances that characterize significant processes within these fields. I have argued that descriptions of the qualitative nuances of the tidal, diurnal and lunar cycles imply that these basic rhythms of everyday living were conceptualized in parallel manners. As descriptions of shifts and changes in the surrounding world, they all appeared to take the form of a dialectical process moving between the diametrically opposed states of separateness and oneness. Rather than depicting the world as a single and stable reality, they envisioned the surrounding world as a multiple and dynamic reality caught up in a perpetual motion of merging and separation. In exploring notions about changing conditions over the lunar cycle, we have seen how the motion of merging and separation between the two principal natural sources of illumination were strongly related to notions about garden fertility and growth.

The dialectics of merging and separation, then, appear to run through several fields of routine experience. As an ongoing story experienced by people engaging their surroundings, the flow of events and the ways of conceptualizing tidal, diurnal and lunar dynamics appear to make up a tale of attraction between complementary elements constituting one whole by coming together or by one engulfing the other. But it is also constitutes a tale of repulsion or struggle as two united elements coming apart or by one tearing away from the encompassment of the other. In the conceptualization of nightfall, merging seemed to occur by night seeping out of the ground, so to speak, to encompass the daytime world. In the morning, on the other hand, separation occurred by daylight forcing darkness and the beings belonging to it back into the ground. Likewise, in the conceptualization of lunar dynamics, the sun and the moon appeared to come together at the end of the cycle, the dazzling sun overtaking the waning moon on the eastern horizon. And they appeared to separate again as the new moon 'rose' in the west, tearing itself away to stand apart from the sun. In such a tale, the sun and moon are both like lovers, drawn to each other and complementing one another, and like adversaries, fighting for the upper hand and engaging one another in pursuit and flight. To my knowledge, the dynamic relationship between high tide and low tide or

night and day has not been explicitly elaborated in collected Tongan myths or tales. Neither has the relationship between the lunar states of 'dead moon' (*mate 'a e māhina*), 'new moon/known by man' (*fakatolu/'iloa 'e he tangata*), 'moon standing in the evening' (*tu'u 'efiafi*) and 'reciprocal/mutual day' (*fē'aho'aki*) as sun and moon come together in the east, as the new moon tears away in the west, as they move apart in the western sky and as they become separated by all the sky to stand on opposed horizons. On the other hand, the dynamic relationship between adversaries and lovers, repulsion and attraction, increase and decrease of beauty and strength are very common themes in numerous mythical narratives collected from Tonga and elsewhere in Polynesia. In some cases, the resonance between the structure of mythical narration and the dynamics of lunation are quite striking. The mythical cycle of Hina and Sinilau, who in contemporary popular culture and numerous T-shirt decorations figure as 'Lovers of Ancient Tonga', consists precisely of tales elaborating on attraction and repulsion, with growth and loss of love or compassion, beauty and strength as the main characters move together and come apart. Many of these tales of attraction start out with a young man and woman of extraordinary status, beauty and fame learning about one another and admiring one another from a distance.[6] Often one is Tongan and the other Samoan. Typically, one is drawn to the other but upon reaching the goal, beauty, strength or love soon starts to dwindle because of homesickness, treachery or maltreatment. In some of the myths, the weakened party regains their former splendour by fleeing from a pursuing lover. In others, strength and beauty is regained only through death and revitalization by immersion in the 'Water of Life' (*Vaiola*), controlled by the deity Hikule'o. The many tales about Hina and Sinilau vary considerably – mostly with regard to where in a cycle of transformation the story commences and ends.

In the myth 'Hina and Nukuakakala', collected by Collocott in the early twentieth century, Hina is drawn to the magnificence of Sinilau:

> There was a virgin named Hina,[7] and she and the handsome man Sinilau heard reports of one another, and as time went on and they continually heard one another's praises Hina could rest no longer, because of her thought upon Sinilau. So one day she … leapt into the sea, and swam, and came to the land of Sinilau. (Collocott 1928: 359)

In another tale, Hina is brought from Samoa to Tonga by the chief Vaitokelau, who has heard about her beauty:

> One day Vaitokelau went to the pool, and addressing the rock, said, 'Oh, that you could bring Hinasioata from Samoa to be my wife.' He spoke at random, but the rock heard, and went to Samoa, and going ashore at night stood outside the door of Hina's

> house … Hina slept on the rock … In the middle of the night the stone moved, went down to the sea, and set off on its return to Tonga. (ibid.: 28)

In yet another Hina myth, collected by Gifford, Hina is the beautiful daughter of the Tongan King Tu'i Ha'atakalaua and Sinilau a Samoan chief:

> Hina was the daughter of the Tu'i Ha'atakalaua. She lived with her father in Tongatabu. News of Hina's marvellous beauty had spread far and wide, even to distant Samoa. Sinilau, who resided in Samoa, heard of the wondrous beauty of Hina and resolved to journey to Tonga to see her loveliness for himself. So launching his double sailing canoe (*kalia*) he and his brother sailed for Tonga. (Gifford 1924b: 187)

When Hina and her lover come together, the original attraction typically turns to repulsion as conflicts of interest produce misunderstandings and treachery weakens one of them. Thus, the Hina of the first myth who swam from her own land to come close to Sinilau was maltreated by the one who had attracted her:

> Straightaway Sinilau bade two men, 'Go to the sea and bring the woman here' … And Sinilau was filled with love [literally, was dead with love] for the maiden, and bade all his land go and gather food … But when the morning came the food was finished, for Sinilau's wives had taken it and thrown it into the sea. And they told Sinilau, 'Lo, this woman is both spirit and human, She has eaten the food, and it is finished.' Then Sinilau bade his wives gather together … ; and they took her and cast her into the pig yard, and fed her with left-over scraps of food. Then the maiden wept and remembered her land and parents, that she had come to dwell in such desolation and hardship. (Collocott 1928: 36)

Similarly, the Hina who was brought from Samoa to Tonga on the floating rock is turned away from Vaitokelau when his wives '… who were both spirit and human … called their husband to them, and bewitched him, and he became foolish, so that the unfortunate Hina dwelt neglected in her compound' (ibid.: 29). The Sinilau, who had come all the way from Samoa because of Hina, fared no better:

> He sidled up to her, but she turned and kicked him. Still Sinilau edged closer and she again kicked him and spat on him … Immediately he left, climbing through the window. Hina saw for the first time that her lover was Sinilau. Infatuated with his handsome figure she at once climbed through the window and followed him … but Sinilau thoroughly incensed over his rough treatment at her hands, cried out: 'You remain [Good bye]. I came across the ocean and I climbed eight fences and I

> extinguished one hundred watch fires, all for you. I entered your mosquito-proof room and I sidled up to you, but you spat upon me and kicked me. (Gifford 1924b: 188)

In some of the Hina myths, the two lovers come together gradually as they go through stages or overcome obstacles. Thus, in the myth of the Samoan Sinilau and the Tongan Hina, the lovers finally come together in the inmost room of a compound surrounded by eight fences:

> They proceeded to the place where Hina resided. They found it brilliantly illuminated, surrounded by eight fences or enclosures … As they stood outside the walls, Sinilau said to his brother: 'Stay here. I will seek the girl and look upon her beauty, but, if I do not return by the second cock's crow, you will know that I am dead … Sinilau climbed the fences and finally entered the house in which the girl was … In his endeavours to approach the girl Hina, Sinilau extinguished all the one hundred watch fires. Then he went into the girl's room and tried to extinguish her lamp and after repeated efforts succeeded in doing so. (Gifford 1924b: 187)

Similarly, in the narrative about the Samoan Hina brought to the Tongan chief Vaitokelau on the floating rock, a trial involving the passing of eight fences is undertaken:

> Once there was a handsome young chief named Vaitokelau who had a large compound, surrounded by eight fences, in the midst of which was his chiefly house. He also had a bathing pool in which stood a rock. The spaces surrounded by the fences, the house, and the pool were all being kept for a beautiful girl in Samoa, named Hinasioata (Hina mirror) … The girl was called Mirror (Sioata) because her skin was so fair and glistening that reflections could be seen in it … Vaitokelau asked her to come with him to his home … When they reached the outer palisade Vaitokelau called to the wardress Suamanu … Let Atu-first-resting-place be opened that Drift-from-sea may sleep. But Hina replied 'Any woman who has erred will sleep in Atu-first-resting place' … So they went through gate after gate. To the invitation to stay in the third enclosure she replied that a woman not right would stay there; at the fourth, that a woman without fame, at the fifth a woman who has done wrong (*hia*); at the sixth, a woman without prudence (*ta'eloto*); at the seventh, a woman who is wearied (giving in *fiu*) would remain in the various enclosures; until at the eighth she replied that a woman who has reached her goal (*kuo a'u*[8]) would sleep there. (Collocott 1928: 29)

The qualities describing the eight fences or enclosures of the spaces reserved for the Samoan Hina by the Tongan Vaitokelau as she approaches her 'goal' or 'completion' intriguingly recapture the qualitative nuances

of a moon approaching one of the turning points of lunation. Thus, eight differentiated states of the moon bring it from the night that it is 'known by the spirits' (*'iloa 'e he fa'ahikehe*) to the night when the half 'moon stands in the evening' (*tu'u efiafi 'a e māhina*). Also, eight differentiated states would bring it from that of 'standing in the evening' to 'first moonrise', as well as from 'first moonrise' to the state of the 'weak moon'.

Likewise, the manner in which the Samoan Sinilau approaches Hina (by extinguishing the hundred watch fires of the eight enclosures of her brilliantly illuminated dwelling place) and then after several attempts succeeds in putting out the lamp of Hina herself recaptures with extraordinary accuracy the manner in which the sun reduces the magnitude and brilliance of the waning moon by 'approaching it' in the eastern morning sky. Eight states of diminishing illumination and very few states of 'weak moon' comprise the phase of waning from the night known as 'first moonrise', which occurs shortly after full moon, to the morning that the sun appears to extinguish the moon altogether on the eastern horizon. Thus, the countdown towards the culmination of the encounter between Hina and her lover so characteristic of these tales of attraction would seem to make sense in terms of turning points of lunation and the practice of counting the nights of the moon.

In the exploration of the tidal, diurnal and lunar dynamics, I have argued that the states of 'low tide' (*mamaha 'a e tahi*), 'day' (*'aho*) and 'full moon, reciprocal/mutual day' (*māhina katoa/fē'aho'aki*) were conceptualized in a parallel manner. Thus, they all appeared to share the quality of being a phase in an encompassing dialectical motion. The vocabularies of tides, the diurnal cycle and lunation all indicate that separation between sea and land, ground and sky, moon and sun was conceived as a temporary state. Thus, the diametrically opposed elements were referred to as ever merging into the inverted states of 'sea united with land' (*tau 'a e tahi*), 'day united with night' (*tau 'a e 'aho mo e pō*) and 'dead moon' (*mate 'a e māhina*) as the sun has overtaken and united with the moon in the eastern morning sky.

Engaging Tales of Attraction

The flow of events of the Hina and Sinilau tales of mutual attraction resonate strongly with the flow of events of lunation. So much so that the myths appear almost didactic. In some of the myths, it is as if Hina's adventures were modelled on the process of lunation as an elaboration of lunar transformations and apparent differences of sun-moon relationships throughout the lunar cycle. An approach to tales about gods and culture heroes as allegories of actual phenomena and processes in the environment of myth-making people would by no means be a novelty in the history of

the study of myths. On the contrary, the notion that the fantastic elements of myths could have deeper meanings as allegories of natural phenomena and human qualities was fundamental in interpretive theories of myths and legends that developed with the growth of philosophy in Ancient Greece. Indeed, this was the dominant perspective on myths until the development of functionalist and structuralist approaches in the twentieth century. For Max Müller, for example, who was the author of *Comparative Mythology* (Müller 1856) and who was one of the founders of the discipline of comparative religion, Indo-European mythology consisted of allegorical stories about processes and features of nature such as the sky, the sun and moon, the stars, the dawn and so on. To his mind, these phenomena constituted original allegorical referents that in the course of time were lost as they (as a result of a 'disease of language') became detached from the phenomena and processes to which they originally referred. With the sociological turn of functionalism and the cognitive turn of structuralism, this approach to the interpretation of myths quickly appeared outdated, and in more recent interpretations of cultural meaning it mostly figures as a quaint and unsophisticated relic of a primitive perspective on myths and legends. Nina Witoszek's *Norwegian Mythology of Nature* (Witoszek 1998), where she attempts to interpret Norwegian fairy tales as 'ecological narratives', may illustrate just how outdated and unsophisticated this allegorical approach appears to contemporary students of culture: 'When I call [it] a thoroughly ecological story, it is not meant in Müller's (quaint) sense, with reference to the celestial sphere and stars …' (ibid.: 85). Witoszek clearly does not want to be identified with Müller's interpretation in which:

> the cannibalistic father who often appears in fairytales … is a coded sign for the sky which in a cyclical and alternating manner swallows the clouds and releases them. And children abandoned by their parents are really stars sent to illuminate the nighttime sky. (Ibid.: 85)

And indeed, Müller's perspective, in which an imagined original state of affairs represents the key for the definite meaning of coded signs, does appear quite unsatisfactory. Not least because it fails to account for why people whose cultural creativity caused them to take inspiration from phenomena that surround them to make up entertaining and meaningful stories should keep on repeating these 'coded' stories about natural phenomena or historical events long after having lost the key to their meaning. Still, very many myths from all times and from all over the world do have elements and narrative structures that with ease may be identified with phenomena of nature. This does indicate that the allegorical perspective may have pinpointed one very characteristic quality of myths that should

perhaps not be rejected nor ridiculed; namely, the quality of *resonance* between what goes on in a tale worth inventing, remembering, retelling and listening to and what goes on in the lifeworld of those who invent it and enjoy listening to it. In other words, an allegorical perspective characterized by a quest for code-like denotation in the form of identifying *the* phenomenon for which the mythical stuff stands appears too simplistic. But as Von Herder emphasized a long time ago, it still might be quite useful to approach mythical narratives in terms of the components that surround myth-makers, storytellers and their audiences:

> In everything [on board ship] there is experience to illuminate the original era of myth … Then, Jupiter's lightning was terrifying – as indeed it is on the Ocean … There are thousand new and more natural explanations of mythology … if one reads, say Orpheus, Homer, Pindar … on board ship. (Von Herder, see Encyclopedia Britannica, 1999)

Thus, I hold that Tongan everyday modes of conceptualizing, experiencing and engaging with the environmental dynamics of tidal, diurnal and lunar cycles constitute an enduring basis for thinking about the world as well as for good storytelling and listening. The analogous relationship between the narrative structure and the way in which the process of lunation plays itself out and was conceptualized is not, I would argue, one that makes the tales of attraction simple allegories of what actually occurs in nature or society. Thus, Hina and Sinilau *do not* represent the moon and the sun nor are the narratives *about* qualitative shifts and changes of the lunar cycle. I do argue, however, that qualitative nuances with which people were familiar in many fields of everyday experience, including the dynamics of the relationship between sun and moon, constituted a kind of common sense underlying people's aesthetic appreciation. Such common sense may be tapped by myth-makers, storytellers and their audiences, who create, retell or appreciate a good tale. On this perspective, then, enduring everyday modes of conceptualizing, experiencing and engaging with environmental dynamics may continue to inform shared understandings and aesthetic sensibilities long after myths and tales embedded in the same dynamics have been forgotten. The myths and tales about Hina and Sinilau were no longer part of a living oral tradition in Tonga going into the twenty-first century. Thus, I never heard these tales during my fieldworks in Tonga. Tongans have been devout Christians for more than 150 years. This has had an undeniable impact on oral traditions in general and on the significance of pre-Christian myths and tales in particular. On the other hand, lunar dynamics, the 'counting of nights' (*lau pō*) and ideas about the significance of these qualitative nuances still constituted a part

of the practical realities of everyday village living during my fieldworks on Kotu. The continuing practical significance of the moon was probably related to the fact that Kotu had not yet been electrified. By and large, fishing and farming were still subsistence activities, and the agricultural and marine regimes of resource use appeared to be based on techniques that had been around for quite a while. Modernization has not only affected different parts of Tonga differently but evidently also different fields of activities and ideas. This does not affect the theoretical significance of the discovery of resonance between the narrative structure of these myths and conceptualizations of lunar dynamics. It does, however, imply that some fields of activities and ideas change more slowly than others and that the exploration of such fields of experience offers rich potential for approaching enduring aspects of culture.

Engaging Aesthetics

In the last chapter, we have seen how dynamics discovered through an exploration of modes of conceptualizing and engaging the immediate surroundings within fields of everyday experience may constitute a useful context for appreciating the narrative logic of Tongan mythology. I am not suggesting that this is the only or ultimate meaning of these myths. Clearly, the symbolic forms of myths are multivalent and have several layers of meaning. The Hina myths address significant themes pertaining to the human condition and social life, such as: attraction between men and women; the strength of desire, jealousy, treachery, strife and struggle between men and women, co-wives or between ranked affines or sides of the family; and self-sacrifice, love and devotion to kin and homeland.

My reinterpretation of tales of attraction in the light of the moon of Tonga is part of a particular procedure of discovery that emphasizes the importance of paying attention to what goes on in everyday life and in particular to people's practical and routine involvements with the components of their environment. Thus, day-to-day dynamics of merging and separation discovered through an exploration of modes of conceiving and engaging the immediate surroundings have produced insights of relevance for understanding what may make a cultural expression, like a myth or tale, appreciated. And indeed, I hold that ethnography related to everyday practical engagements with the immediate environment offers untapped potential for discovering enduring and shared understandings about the world, why things happen and how to cope with it. In what follows, I shall go on to use the seemingly enduring understandings about the world that are implied by people's perceptions of environmental dynamics as a basis for analysing the dynamics of ceremonial aesthetics and everyday sociality

and morality, both of which in their turn are essential for understanding why people responded as they did to the threats and environmental transformations taking place around them in the first decades of the twenty-first century. By exploring the many nuances that people read upon the surface of their surroundings on Kotu, we have seen that the rhythm of everyday life involved conceptions of surroundings constantly on the move between diametrically opposed states of the world. Over the next chapters, I shall turn to an exploration of how people coped with one another in a manner adapted to the dynamics of this 'given' world in order to create a society fit to live in.

Notes

1. Exactly how 'disorderly' is hard to know, but certainly the practice of burying people in one communal burial ground is relatively new. On the small island of Kotu, there are several old 'burial places' (*faʻitoka*) in the 'forest' (*vao*) and also plots in the *ʻuta* garden area.
2. Havili Hafoka, the author of the manuscript of the Palace Office in Nukuʻalofa cited above, refers to this penultimate day of the 'month' as *māhina lekeleka mate* or 'tiny and dying moon'.
3. The altitude of the waxing half moon in the evening actually varies between a minimum of 40 degrees in March and April and a maximum of almost 85 degrees in October and November. Although the waxing half moon always *tuʻu efiafi* ('stands in the evening'), it does not always *tuʻu tonu efiafi* ('stand straight up in the evening'). Thus, in the period referred to as *tō taʻu* ('planting season') in the old Tongan calendar of yam cultivation, from May to November, its altitude increases steadily by each lunation, while in the period from November to April within the *utu taʻu* ('harvesting season') its altitude decreases steadily.
4. Several terms were used to refer to menstruation: *mahaki fakafefine*, lit. 'female sickness'; *mahaki fakamāhina*, lit. 'moon sickness' or 'monthly sickness'; and *fakakelekele*, lit. 'making dirt/soil'.
5. At least at the 'turning points' (*ngataʻanga*) at which 'planting season' (*tō taʻu*), according to Hafoka's manuscript about Tongan modes of reckoning the passage of time (Hafoka n.d), turns into 'harvesting season' (*utu taʻu*) and 'harvesting season' turns into 'planting season'. These 'turning points' are sufficiently close to the solstices for the sunrise/sunset and moonrise/moonset to occur about as far apart as possible.
6. Some myths, however, start out from the other extreme of Hina and Sinilau being closely related, as for example full brother and sister originating from the same womb.
7. Hina figures prominently in Tongan myths and tales, very often in narratives of attraction to Sinilau but also other lovers, as well as attachment to her

family and homeland. Hina was associated with the beauty of the full moon *Māhina* and was sometimes referred to as *Hinasioata* ('Shining Hina') 'because her skin was so fair and glistening that reflections could be seen in it' (Collocott 1928: 27). In Tonga, it is said that Hina can be seen on the face of the full moon sitting under a tree making 'barkcloth' (*ngatu*).

8. *kuo a'u* means 'to have arrived' and also 'to have culminated' or 'peaked'.