7

Underground Flows

After returning from Atauro to Dili, we hired a car and set off for Baucau along the windy, narrow coastal road. In one section, the road hugs the steep cliffs so tightly that any small driving error risks the vehicle plunging several hundred metres into the tranquil blue waters below. The Portuguese-era road was under reconstruction in places and the dust-filled, 100 km journey took us five hours.

Baucau is my husband's hometown. The country's second 'city', it has a population of around 20,000 people and comprises a Portuguese-era old town and an Indonesian-era new town and bureaucratic centre. The picturesque old town is built into the edge of a limestone escarpment and the new town sits above that. Towering over the coast at about 600 metres above sea level, the old town consists of four villages interspersed with terraced rice fields, groves of breadfruit and coconut trees and the verdant foliage of the ficus and areca palms surrounding lush tropical springs. These springs are fed by diffuse underground flows of water percolating through the landscape from the drier plateau hinterland above.

Many parts of the old town contain caves, craggy limestone outcrops and springs. Quin's family home is right in the centre of the old town, very close to the town's main water supply, the spring of Wai Lia. I first heard stories of the nearby Wai Lia spring from my father-in-law. As I dug deeper, more stories emerged, and they have captivated me ever since. My father-in-law (or Apa, as I called him) told me that when the Indonesian soldiers retreated from the town in 1999, the Wai Lia spring

had suddenly sprung back to life. It had been near dry for many years, and yet, as the Indonesians withdrew, it once more gushed forth, feeding the town's depleted water supply and channelling irrigation waters to the terraced rice fields below. Apa explained that these waters were rejoicing, joining with the people in celebrating this unlikely Timorese victory. The ancestral forces of this spring had, he told me, long given spiritual assistance and power to local people in their resistance activities. I was intrigued. I wanted to find out more. And so started a very long journey to do so. Water, as I learned, is a constant shapeshifter and connector. As is evident in the story of the spring's resurgence following the retreat of the Indonesian military, it is understood to have agency, sentience and personality. Springs move across the landscape with people—sometimes even taking the form of people.

The further I delved into these various oral histories of the spring, the more I realised that the stories I was being told of Wai Lia changed across time and space. Drawing them together revealed sometimes bewildering insights into human connections to this limestone environment and its watery flows. Yet, despite their conflicting accounts of history and associations, at their core they were about the determination of Baucau people to honour and respond to their dynamic relations with this place and its human and non-human inhabitants.

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Each year I take a group of university-level geography students on a study tour of Timor-Leste. When we visit Baucau, I organise for the various *bee na'in* (water custodians) of Wai Lia to gather together with us and recount their version of the spring's story and discuss its implications for ongoing water management in the town. The students are told that Wai Lia spring has its source in a cave called Wai Lia Bere far up on the Baucau plateau. This is the same story that I heard when I first began this research in 2006.

Map 3: Wai Lia Bere's asserted underground flows and spring connections.

Source: Chandra Jayasuriya.

All versions of the story begin by recounting how, one day, there were two brothers up on the plateau tending their buffalo. The brothers were hungry, so they decided to dig, cook and eat some yams. They became thirsty, and then they remembered the day when their dogs went missing nearby and came back to them all wet. They wanted to find out where the dogs got this water, so they made a plan. They cooked some more yams to give to the dogs, but before they gave them the yams they made a bamboo collar—tied with string—for the neck of one of the dogs. Inside the hollow piece of bamboo, they placed ash from the fire and made a small hole. Then they gave them the yams to eat. The dogs soon became thirsty and headed off to look for water. In about one hour they returned, their bodies soaking wet. The brothers followed the ash that had trickled from the bamboo collar until they came to a big cave with water inside. They went down into the cave and drew water, which they carried back out of the cave to drink.

Photo 29: Buffalo and herder on the Baucau plateau.

While the particular details of the subsequent part of the story will vary according to the relationship of the teller's house to these specific underground waters and springs, the water custodians gathered in Baucau that day told the story to the students in the following way. After this, the brothers were still thirsty, so the younger one went down again to fetch water. Inside the cave there were two places from which to draw water. The younger brother could hear the water flowing very loudly from a large opening. He went in to have a look at what was making such a loud noise and suddenly he fell into the water. He was submerged for seven days and seven nights, during which time he encountered two eels, one white and one black. Both eels offered to help him find his way out. He chose to go with the white eel and eventually he emerged in the still water of another cave: Wai Lia in Baucau. If he had instead chosen the black eel, he would have followed the water's underground path to the sea and would never have re-emerged in this world again. During his long journey, he had eaten his clothes as food because the white eel had warned him that if he ate the fruits in the underwater gardens he would never re-emerge. Arriving, naked, in the spring waters of Wai Lia, he decided to stay there and wait beneath the surface.

The story of the white eel always fascinates Russell, the physical geographer who co-teaches the field class with me. 'Of course he went with the white eel,' he tells the students later. Russell explains that eels and other creatures turn translucent when they have been underground for a long period of time, so it makes sense that the younger brother chose to follow the white eel. White eels would know about the underground flows and pathways, while the darker eels would have more recently arrived from waters above ground. Indeed, eels are one of science's most enigmatic species and, while knowledge of their life cycle, travels to freshwater, and spawning and death in the sea is now well known, proof of individual eel movements is much more elusive.

Indeed, science and empirical understandings of the 'natural' world can often only take comparisons with indigenous knowledge so far. A symbolic reading of this story of the white eel flips this analysis entirely. Across Timor, white is synonymous with the sun (the world of the light and the living), while yellow and black are associated with its opposite (the world of darkness and the ancestors). In the Wai Lia eel story, it is in the darkness that true light is to be found.

In the third and final part of this story, the water custodians in Baucau speak of two sisters coming to the spring (the details of the house the sisters belong to will vary according to the storyteller's own house). The older sister entered the cave and drew water. The man from the plateau was crouching beneath the surface and saw the woman drawing water, but he did not move. Then the younger sister came in to draw water. She looked down into the water and beneath it she made out the form of a naked man. He explained: 'I am from the savannah. I was tending buffalo there when I was thirsty and went down into a cave to draw water. Then I somehow ended up here.' 'But what do you want?' asked the women. 'Could you go and ask your brothers to bring me some clothes to wear?' asked the man. So, the women went to ask their older brothers to take the man a *tais* (woven cloth) to wear. They did this, and he got dressed in the water.

Gifting *tais* is, of course, an important part of local marriage exchange. When the man came out of the water, the two sisters and their older brother who had brought the *tais* were still there. It was decided that the younger sister would now marry this man. So, they got married and lived together at the woman's home and they had a child together. Then the woman said, 'It is time for us to go to try to find your place, so I can see where you come from. Do you still have family there, I wonder?' They set

off to look for the man's family, telling his story along the way and asking people if they knew of his brother and whether he was still alive. Eventually, they found some of the possessions he had left behind hanging in a tree: his carry basket, cotton-spinning stick, spear and digging stick. He got them down and they kept walking.

By this stage of the story, the couple have crossed the ecotone or transitional zone between two environments: the lush spring groves of the escarpment edge and the much more barren savannah beyond. The ecology of these zones is also reflected in the livelihood differences between the peoples that inhabit them: the people of the coastal springs are irrigated rice growers with large fruit and palm stands, while those on the plateau concentrate on swidden gardens and livestock herding. The distance between the two water sources is only around 25 km, but this was, and is, a substantial cultural journey. The couple kept asking the people they met about the man's brother, and finally one man responded: 'Yes, it is me! I am your older brother. I thought you were lost forever.' The two hugged each other and cried together. The older brother explained that, because the younger brother had returned, they would now make an origin house here by the Wai Lia Bere cave. The house was needed so that offerings could be made to the water below and the story would not be forgotten:

When the time comes for us to make offerings to give thanks to the water, the people from the villages in Baucau that receive water from Wai Lia must also come together to kill goats, buffalo, pigs and chickens, and then also bring some of them here for us to make our offerings.

'You must also make an origin house at Wai Lia,' said the older brother. This was so the people could also make the same offerings at Wai Lia spring in Baucau.

After this, the brothers made an origin houses in each place, so they could remember this story and give thanks to the water. Each year the local population would carry out ceremonies so that the two water sources would never be dry. This meant that they could make fields, plant rice and have plenty to eat.

Photo 30: *Kabu bee* and rice farmers maintaining the irrigated water channels.

It is this relationship of obligation and reciprocity cemented across the ecotone that lies at the heart of all the various versions of the Wai Lia story. In all versions there is also an important cautionary tale. Eventually, the people from the four villages sharing the water from Wai Lia forgot to make their sacrifices. The water stopped flowing, and many animals, crops and trees began to die. The people from Baucau went to the custodians of the water on the plateau and asked: ‘Why is our water dry?’ The custodians of the water explained the reason: ‘You have not been making the sacrifices and you need to start doing this again.’ So, the people in Baucau renewed the required sacrifices and, after this, their rice grew again.

The broader Wai Lia complex in Baucau town is made up of seven interrelated springs that feed the irrigation channels running many kilometres to the rice fields in the east and west of the town. The proper sharing of these irrigation waters is the responsibility of customary water managers known as *kabu bee*. The four villages receiving these waters are in a sibling relationship and are expected to carry out the ceremonies to properly manage the springs. These sacrificial processes—known in Tetum as *fo han* (feeding)—involve small-scale annual sacrifices to ensure that the irrigation waters travel down the constructed water channels to the

fields below. They also consist of larger collective seven-yearly ceremonies involving all the water-sharing villages, including those from the plateau, over a period of seven days. In both ceremonies, ritual specialists will call and commune with the sacred eels that inhabit the springs. After each of these events, a portion of the rice harvest will be taken by the *kabu bee* to gift to the custodians of the source waters on the drylands of the plateau. The exchange is something of an agreement: you look after and stay in your place and we will do the same for ours.

Following these watery trails and exchanges across the region since 2006, I slowly came to realise that the Wai Lia stories and those attached to other springs dotted across the wider region are emblematic of the ways in which relationships between people and place in Baucau are configured. Baucau's regional culture is a water culture: one in which caves, springs and their water flows make, connect and bind together (and hold apart) water-sharing communities.

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In 2018, the origin houses with custodial responsibilities for the Wai Lia spring were somewhat despondent following the recent deaths of two senior elders. One was Major Ko'o Raku, the Makasae-speaking ritual specialist and *lia na'in* (custodian of the words) for Bahu origin village in Baucau. Major Ko'o Raku, a highly revered and sometimes fierce local authority, had first told me his version of the full Wai Lia story in 2008. The other elder who had passed away was a local statesman Joao Baptista, the head of the sub-village of Ana-Ulu and *lia na'in* of the Boilekumu origin house that had custodial responsibilities for the spring complex.

Since the 1960s, Wai Lia had been the town's main water supply and, since independence, the spring had continued to be controlled by the state. As a result, the spring custodians relied on the government's good grace to maintain access to the site and their ceremonial responsibilities. Three years earlier, they had collected money from the citizenry of the various villages to carry out a large-scale community water-sharing ceremony at Wai Lia. This ceremony hadn't been performed for many years, and the complex negotiations to enable it were taking time. The loss of the main ritual leader and senior custodian had further complicated arrangements. Mari Kai Wai Mata Bu, the custodian whose ancestor had travelled

underground from the plateau and emerged in Wai Lia, described the problem as a relative imbalance of power. ‘We are only the small people. We must wait for the government,’ he said.

Mari Kai didn’t volunteer further explanation for the delay and major sticking point—it was understood that the government was expected to contribute substantial resources to the ceremony. As a major user and beneficiary of the spring, government would be expected to contribute the ‘big sacrificial blood’—the buffalo—to enable the waters to flow. Whether the state is willing to assume these long-term ritual responsibilities to the ancestors remains something of an open question.

We were joined in our discussion by Fernando, the son of the recently deceased senior custodian and something of an introvert. Speaking hesitantly at first, he seemed to defer to Mari Kai Wai Mata Bu. But, as he spoke his confidence increased, and I could hear the voice of his father, Joao. Fernando was clearly growing in his authority and capacity to speak. He was beginning to own the story and take on the customary leadership role of his father.

Photo 31: Wai Lia spring pool and government pump station.

I was especially pleased this year that we had continued to allocate time in our itinerary for this encounter. Because of the way it is designed, the field class needs to cover a lot of geographic territory (over very bad roads) in a short space of time. The visit to Baucau is really a lunch stop on a much longer journey. Yet, each year, the water custodians are especially keen to talk with the students and host a visit to the spring. After we speak with them in the restaurant, the entire class follows them through the main part of town on a walk around and through the Wai Lia spring site. The walk ends with the group convening by the main water pool inside the government's water supply station. The sight of the water custodians gathered at this site with a large group of eager young foreigners in tow sends a potent and tangible reminder to the state of their caretaker responsibilities—both to the spring complex and the range of human and non-human beings who continue to nurture their varied custodial roles within it.

On this occasion, Fernando finished by telling us about the increasingly poor state of the irrigated rice fields that used to cascade down from Wai Lia's lush groves to the coastal plains below. He said that many of these rice fields, including those of his own family, were now abandoned due to lack of water. The government was redirecting the agricultural flow away from the irrigation channels and into the piped water supply for the burgeoning post-independence town.

I heard a similar account from a local teacher who told me, sadly, that her family's rice fields were also abandoned. She, however, squarely attributed the blame to the decline of the town's customary water management practices. 'They haven't been doing the appropriate ceremonies at the spring,' she said. Her reasoning was that the custodians (*bee na'in*) and the customary managers of the water (the *kabu bee*) had not taken the required tributes to the water's source on the plateau. 'That's the reason the water's not flowing. It's not flowing to either the spring or to the rice fields.'

Wherever the blame lay, the various accounts all agreed that the government needed to come together with the appropriate spring custodians, ritual leaders, customary water managers and village heads to work out a resolution. While they had long been keen for the government to step up its brokering role, the spring custodians also made it clear that they needed some time to recover from the loss of their elders, and to renew and, where necessary, realign their own relationships.

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Another water-related problem in Baucau was the current state of village politics. Across all four villages and associated sub-villages comprising the old town, many senior leaders had recently died or been replaced in village elections. In many cases, they had been replaced by a much younger generation of educated men (more rarely, women). Some of these men are the sons or grandsons of earlier generations of village leaders. While the village-level of administration is subject to democratic elections, the successful candidates will often be the descendants of previous leaders. Unlike their forebears, these men usually have the literacy to navigate the modern bureaucracy. However, they do not necessarily have the knowledge of how to activate customary governance processes. Many do not even know their own constituencies well.

One day I was visiting my friend and long-term research collaborator Jose da Costa at his home just below Baucau's old town in an area known colloquially as *abut laran* (literally: inside the roots). Jose is both a *kabubee* (keeper of the water) and local healer of all kinds of human ailments. We sat on his hillside veranda among the shade of breadfruit trees and gazed out across the tops of coconut palms to the coastline below. Our conversation was punctuated that day by two things: the normal and incessant crowing of Jose's many fighting cockerels, and a certain sadness that I thought I could detect slipping into the demeanour of a man whose life practices are under threat. Jose, his wife and I sat together and slowly sipped the cool drinks he had sent one of his grandchildren to purchase in honour of our visit. 'The new generation don't know the stories, the histories and how we are all bound together,' they lamented. Connected to those stories are agricultural practices that underpin both local livelihoods and continuously build community. As the water supply for the irrigation channels continued to diminish year by year, the rice fields lay increasingly vacant below the old town. Both of them were also feeling an absence in the practical bonds that held together their community. Another longstanding concern for Jose and other water custodians and customary leaders from the wider Baucau area was government plans to support the construction of a local cement factory and mine. Since 2014, sections of so-called barren lands (comprising Cape Bondura to the west and nearby areas of the plateau inland from Baucau) had been earmarked for limestone mining. While the local village heads and political leaders of the Baucau new town and plateau area were reported to have given their support for the stage one mine and factory site development, at the time the origin clans with acknowledged ritual authority over Cape Bondura had not been properly engaged nor consulted.

The proposal, developed in late 2013 and brokered by national level politicians and bureaucrats, included plans to mine the local limestone for the next 100 years with the promise of hundreds of local jobs and economic development. While many in the broader community welcomed the initiative, others were apprehensive. Some voiced concerns that the removal of rock from coastal areas would result in the sea rising up to swallow all the agricultural land. Others were worried about movement of the *talibere* (python), a spirit being connected to Cape Bondura and understood to enable the flow of underground waters. Some from the plateau area feared that the quarrying would also disturb spirit beings associated with their water sources and cause the karstic waters to dry up.

It was in this context that a local community group from Cape Bondura called Kapeliwa was established in 2014 'to protect and preserve the Waima'a [speaking] communities' rights to their culture, development and traditional land rights'.¹ But, despite their initial demands, the group's campaign for greater consultation and information about the cement mine proposal, publicised through a 'global voices' network of NGOs, did not progress. Indigenous activism of the kind connected to a pan-indigenous global movement is not something that people in Baucau are familiar with. Their struggles are much more localised and introspective.

Many other people in the wider Baucau area welcomed the economic boom heralded by the proposed development. Indeed, many saw prosperity as their due, a rightful independence dividend paid out by the government in the form of special economic zones like ZEESM in Oecusse and the planned south coast oil and gas production corridor. Those with the means to do so had purchased haulage trucks from Indonesia in anticipation of a concrete-driven sub-contracting boom. The slogan 'Your Dream, We Build It' was splashed across the banner of the Timor-Leste Cement Company's website. However, despite the public campaign falling silent, others continued to whisper private concerns that the rightful owners or ritual custodians of the land had not yet given their permission for the development.

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1 Sara Moreira. 'East Timorese Protect Land Rights Against Australian Cement Plant Deal'. *Global Voices*, 21 April 2014, accessed 28 February 2016, globalvoices.org/2014/04/21/east-timor-land-rights-australia-cement-plant-deal/.

On New Year's Day in January 2017, an event occurred that rattled many nerves. At the coastal site demarcated for the cement factory's construction, in an area made accessible by a road newly prepared for the mine, a visitor disappeared while swimming. For several days there was no trace of the swimmer and rumours circulated that he had been taken by the *avo* (a word with the dual meaning of grandparent and estuarine crocodile). The authorities instigated a search, but it was not until a representative of the land custodial group went down to the seashore to carry out a ritual invocation to the ancestors of the sea that the body was recovered. Once the custodian requested that the body of the unfortunate swimmer be returned to the shore, the dismembered corpse washed up on the beach within a day.

The death shocked the community who shared gruesome images of the deceased on their phones, and much discussion ensued about the increasing incidence of crocodile attacks. In the past, these attacks had been considered to be very rare. Without publicly saying so, the community wondered why the *avo* were apparently turning against their people. For some, the answer was worryingly clear: these *avo*, powerful beings of the sea and local cosmology, were angry at the development plans for the cement mine and this death was their warning. Unchecked by customary processes, an angered *lulik* could wreak devastation on all.

In 2018, I heard conflicting anecdotes about progress of the cement mine. The new road was now in active use and new houses had been built along the road leading up to the cape. However, it seemed that the company's storage containers had been removed from the site. Nevertheless, a woman who had opened a coastal fish restaurant by the side of the new road told me in no uncertain terms that the factory was going ahead as planned. And still I heard from others that the land custodians were refusing to give permission for the development. My sister-in-law, who was active in the newly formed local tourism association, also expressed concerns about the mine. Extremely optimistically I thought, she considered that the area opened by the new road might be better used for development of a luxury resort.

One day, I met up with an old friend, Amau, who had been involved in setting up training centres connected to national development initiatives. He was disappointed at the lack of progress on the mine. Along with many Timorese, he shared the government's vision for the establishment of

flourishing regional economies, wherein increasingly skilled workers were enabled to take up jobs and contribute to the improved living conditions set out in the country's national strategic development plan for 2011–30.

But my friend was conflicted. From the perspective of one who also had customary ritual obligations for one of the springs that may be affected by the mine, he was circumspect and had concerns about the project. Referencing previous work together on the spring water research, he said: 'Everything we went and saw could be gone.' I was surprised by his sudden and frank admission, but I realised that this is the dilemma for many local people. People across the region hold aspirations for development, but they must balance them with deep concerns about the environmental and cultural costs. According to the sketchy mining development plans Amau had seen, the caves, water sources, trees and vegetation would disappear. 'What will the company replace it with?' he asked. 'What will happen to the underground water flows?' As the government had not publicly released the expert impact assessment reports enquiring into the effects of the proposal, people had only verbal guarantees from the company and the government that the development would be okay. But even those who supported the development in principle worried about the possible consequences.

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Towards the end of our time in Baucau, we visited old friends in the villages closer to Cape Bondura. Discussions inevitably turned to the mine development. The daughter of one local leader told us that she and her father supported the mine. 'We want development,' she said, adding that, while she couldn't wait for the development to proceed, her father's younger brother was opposed to the mine. A young local leader from another village, who had assumed the mantle from his father, told us that the people from his area, and the other custodial clans of the lands of Cape Bondura itself, had not been involved in the formal decision-making. 'We have been left outside it,' he said. Those who wanted it to go ahead were the more recent newcomers to the area with lesser claims to the land. In the event that the mine proceeded, the custodial clans had agreed among themselves that they would not take jobs with the company. 'Let them [the others] go ahead. We will see what happens,' he said. He explained that those making the decisions were from newcomer groups who originated from areas of Baucau's old town five generations ago.

The custodians of the Cape welcomed them and said they could use the land, but it was understood they had only use rights. But now they are acting as if they are the owners of the land.

The young man added that the village head from the cape (a vocal mine development supporter) had become very ill and was now housebound. The cause of this illness was left hanging in the air.

I asked this young leader about something I had been puzzling over for a while. Why had the recognised custodian clans of the cape been silent on this issue in the Timorese media? ‘They can’t say much either way,’ said my friend. He explained quietly how this was a complicated problem of relationships and rights and how the elders who speak for that area had yet to speak. ‘They have yet to say yes or no. No one has even properly asked them.’ Because of their initial exclusion from negotiations and the absence of what they saw as proper customary processes, the elders had given the responsibility to publicly respond to the development over to *lulik*. ‘So now, the living can’t speak, they can’t get involved. It’s up to *lulik*.’

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