

DISASTERS IN POPULAR CULTURES

Giovanni Gugg - Elisabetta Dall'Ò - Domenica Borriello
Editors

Preface by Joël Candau



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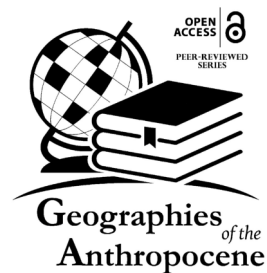
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CONTENTS

<i>Preface</i>	8
----------------	---

<i>Introduction</i>	12
---------------------	----

Section I

Magnitude

1. L'isola nata in mezzo al mare. Mitopoiesi, disastri e microcosmi
Ugo Vuoso 22
2. The Papua New Guinea Liquefied Natural Gas Project and the moral decay of the universe
Michael Main 40
3. Pozzuoli, 2 marzo 1970: lo sgombero del rione Terra nella memoria dei puteolani
Maria Laura Longo 58

Section II

Eruptions

4. Il vulcano meraviglioso. Antropologia del racconto fantastico vesuviano
Giovanni Gugg 77
5. Les Volcans des Virunga à l'Est de la République Démocratique du Congo, une perception populaire: un mythe ou une réalité ?
Patrick Habakaramo, Gracia Mutalegwa, Justin Kahuranyi, Katcho Karume 102
6. *Ka wahine 'ai honua*, la donna che divora la terra: un'analisi eco-antropologica del mito di Pele
Emanuela Borgnino 118
7. The Veil of Saint Agatha in Popular Narratives of Etna Risk
Salvatore Cannizzaro, Gian Luigi Corinto 136

Section III

Conspiracies

8. Les théories du complot : entre croyances, légendes et menaces sociales
Christine Bonardi 160
9. Une esthétique de l'impensable. Miettes pour une anthropologie généralisée du conte vraisemblable
Charlie Galibert 176

Section IV

Impacts

10. I draghi delle Alpi. Cambiamenti climatici, Antropocene e immaginari di ghiaccio
Elisabetta Dall'Ò 197
11. Drought in folklores of India: Mapping the change and continuity in traditional knowledge through orality
Amit Kumar Srivastava 223
12. Unnatural Disasters and the Anthropocene: lessons learnt from anthropological and historical perspectives in Latin America
Virginia García-Acosta 237

The Authors 249

2. The Papua New Guinea Liquefied Natural Gas project and the moral decay of the universe

Michael Main¹

Abstract

Ten years ago one of the world's largest resource extraction projects, the Papua New Guinea Liquefied Natural Gas (PNG LNG) project, began construction in the highlands of PNG. This project was established in a social setting of great cultural complexity, and a geological setting of great instability. The Huli landowners of the gas resource viewed the project as the realisation of a prophecy that promised an era of great wealth and abundance. This expectation is linked with the cultural memory of a 17th century volcanic eruption and the resulting fallout of volcanic ash that greatly increased the fertility of the land. Subsequent efforts to bring upon another fertility event through ritual were linked to correct moral behaviour and the observance of moral codes. In February 2018 a magnitude 7.5 earthquake struck the PNG highlands near the gas resource. The project was already understood as a development failure, and this failure was now revealed in stark relief in light of the devastating effects of the earthquake. The development disaster of the PNG LNG project is understood to be related to the immoral behaviour of both the state and the resource developer, ExxonMobil.

Keywords: PNG LNG, Development, Earthquake, Huli, Hela Province

1. Introduction

Sometime during the mid to late seventeenth century, a volcano located on an island in the Bismarck archipelago, close to the mainland of Papua New Guinea (PNG), erupted with a force greater than that of the famous Krakatau eruption of 1883 (Blong *et al.*, 2018). The eruption of the Long

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Island volcano resulted in a cloud of volcanic ash (tephra) that spread west, depositing a thin layer named Tibito tephra² several hundred kilometres into the PNG highlands. Although not recorded in any written record, the event was preserved in the stories and oral histories of well over 100 different cultural and language groups who lived within the fallout area (Blong, 1982). The event was commonly referred to, in various ways, as a “time of darkness” that befell the landscape and had varying yet dramatic effects on the lives of the people (Blong, 1982). This chapter focusses on the “time of darkness” event as recalled by the Huli speaking population of what is now Hela Province (see Figure 1), and the subsequent impact on Huli eschatology that has had profound implications for the ways in which the Huli population has encompassed modernity and, more recently, the Papua New Guinea Liquefied Natural Gas (PNG LNG) project.

1.1 Research Methodology

Data for this chapter was collected during fieldwork undertaken in Hela Province throughout 2016. Fieldwork was conducted as part of my PhD candidature at the Australian National University. Data was collected using a combination of participant observation and direct interviews while I was living in the village of Komo in the southern part of Hela Province. In 2009 I spent one month in the Komo area working as a consultant collecting cultural heritage information for the then proposed PNG LNG project, and some of my data is therefore able to compare the impact of the PNG LNG project with the social conditions that existed prior to the project’s construction. My theoretical approach was influenced by previous researchers who had described the intense material desires expressed in Huli culture, and a Huli historicity that is focussed on material accumulation and change. I wanted to better understand Huli relationships with nature and material change, especially in the context of the influence of ExxonMobil and the PNG LNG project.

² Tibito tephra was named by Russell Blong (1982, p. 11) as it was first identified exposed on one side of Tibito Creek, in the Wahgi Valley of PNG’s Western Highlands Province.

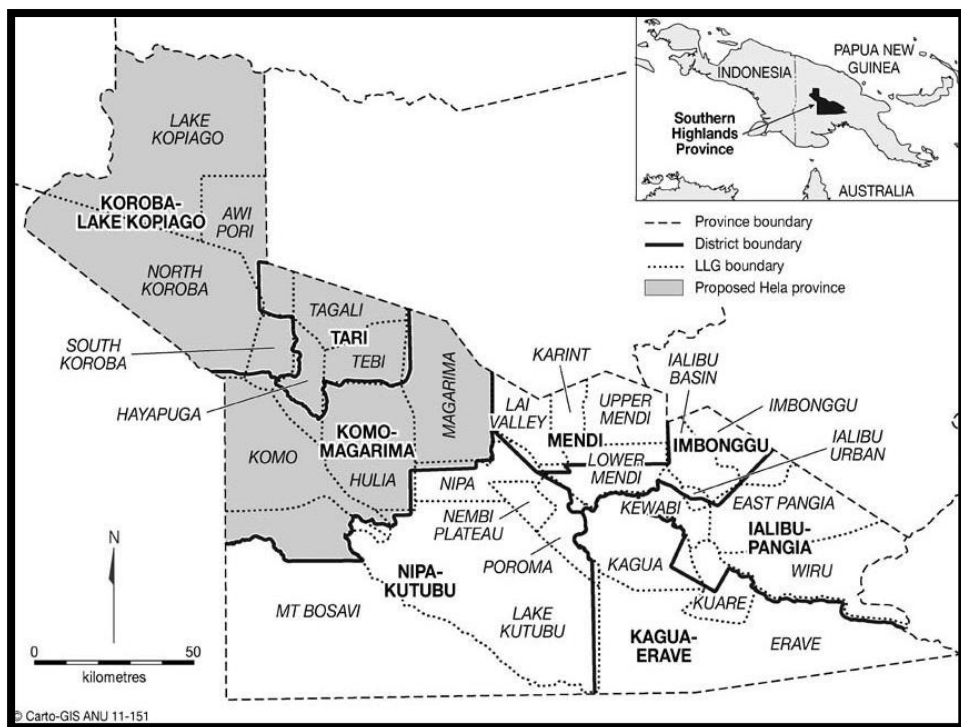


Figure 1 - Hela Province (Carto-GIS Australian National University).

2. Ethnographic Setting

The Huli speaking population of the Papua New Guinean highlands are part of a vast highland population that remained unknown to the outside world until they were encountered by a series of Australian exploratory patrols made during the 1930s. The population that became identified as Huli were distinguished by the practice of Huli men wearing wigs made from their own hair, which they decorated with a bright array of flowers (see Figure 2). Huli were first described by Jack Hides after he unexpectedly came across their population during his famous Strickland-Purari patrol of 1935: “I was astounded at their appearance. They were all short of stature, they were clean and light skinned, and they had girlish mops of brown hair adorned with flowers” (Hides, 1973, p.81). The image of the Huli Wigman was later to become one of the most iconic representations of the diverse cultural heritage of Papua New Guinea.

The advent of the second world war meant that Huli remained largely left alone until the Australian colonial administration established a permanent government station at Tari in 1952. From that time the rapid introduction of new materialities, missionary influence, colonial rule of law, western education and health care induced radical changes in Huli life that continue to unfold to this day. It was not until the first ethnographer of Huli, Robert Glasse, began to publish his research in the late 1950s that the extraordinary depth and complexity of Huli social organisation, cosmology, mythology, ritual, and a profound commitment to orally recorded history began to be revealed. At the same time Glasse also became aware of a recent geological history that had impacted the Huli landscape with “considerable violence” (Glasse, 1959).



Figure 2 - Huli men in traditional costume at Mt Gigira, August 2016 (author supplied).

2.1 Geological and climate influences for Huli culture

Papua New Guinea is located on the Pacific Rim of Fire and subject to frequent tectonic activity that results in earthquakes and volcanic eruptions. The highland basins occupied by Huli are largely limestone karst systems that often respond to earth movements in highly animated ways. The landscape is one of swamps and lakes, with ridges, mountain peaks and caves, underground rivers, waterfalls, and gently sloping hills. The

relationship between the landscape hydrology, geomorphology, and geologic activity is complex and is most obviously manifest in the behaviour of water. Lakes in these systems have the ability to disappear without notice, or rise and spread with great rapidity. Earth tremors may cause water bodies to ripple while the deep rumbling sounds of earthquake waves roll across the land. Large events, such as the magnitude 7.5 earthquake that struck Huli territory on 26 February 2018 that is described later in this chapter, have historically caused massive landslides, cracks, and the alteration of major waterways. Huli therefore live in an environment of constant and unexpected change, and mysterious and unexplained natural phenomena. These phenomena have profoundly influenced many aspects of Huli belief and ritual practice, most of which has now disappeared into the memories of the older generations. The pre-contact Huli landscape was abundant with mostly malevolent spirit beings known in Huli as *dama*. Oblations of pork were offered to lakes which were said to rise up and consume the meat. Divination spells that involved throwing offerings of pork into lakes were interpreted according to the behaviour of the rippling water that resulted from the disturbance made by the impact. The report of Jim Taylor, who led a major patrol through Huli territory in 1938, experienced an earthquake and several aftershocks that were explained by Huli in terms of “a giant pig in the nether world straining at his tether” (Taylor, 1940).

Huli also inhabit a landscape that is highly vulnerable to periodic droughts and floods. The PNG highlands are subject to highly variable climatic conditions that produce extended periods of drought and high-altitude frost, as well as periods of heavy rain and floods. Both frost and flood events can have devastating impacts on food production resulting in famine, especially for sweet potato, which is the staple crop grown throughout the highlands (Allen *et al.*, 1989). Famine is glossed in the Huli language as *hina gari*, which means lack of sweet potato, and the history of drought and flood events was traditionally preserved in the Huli oral historical record (Ballard, 1995). The instability of the natural environment forms the basis of a set of beliefs that viewed both the social and physical environment as being in a state of “entropic” decline (Ballard, 1995). Crucially, Huli believed that inappropriate moral behaviour reduces the fertility and health both of the land and of the human population (Ballard, 1998). Immoral conduct included a range of behaviours, some of which are universally recognisable, and some of which are culturally specific. Stealing food, committing adultery, murder, and outbreaks of inter-clan warfare were all seen as part of a general decline in Huli social cohesion that

was, and still is, linked to the moral decay of the universe. Failure to adhere to culturally-specific codes of conduct were largely related to control of fluids, especially menstrual blood, which was considered to be highly dangerous (Ballard, 2000). Having intercourse outside a proscribed four day window within the menstrual cycle is one example of a traditional moral code, albeit one that has largely been abandoned. Efforts to reverse the impact of severe famine events involved highly complex and “regionwide” earth rituals, known in Huli as *dindi gamu* (earth spell), the last major performances of which were likely to have occurred during the floods of 1935 and the drought of 1941 (Ballard, 2000, Allen *et al.*, 1989). Both these events induced widespread famine in the population that was remembered by elder Huli interviewed during the early 1990s (Ballard, 1995, p. 123). Yet the natural phenomenon that had the most profound impact on the Huli eschatological worldview was a single event: the 17th Century eruption of the Long Island volcano.

The Tibito ash fall that blanketed the PNG highlands had the effect of enriching the soil with essential nutrients for the growing of crops. Although initially experienced as a horrifying and confusing event, “the time of darkness”, known in Huli as *mbingi*, was quickly understood as an event of renewal that greatly enhanced the fertility of the earth. Huli came to view *mbingi* as an event that would recur repeatedly throughout history in different guises. *Mbingi* events could present in various forms such as major earthquakes or floods, and the outcome of the event depended greatly on the moral behaviour of humans and the adherence to strict codes of conduct to be followed during the event itself (Ballard, 1998). *Mbingi* may also refer to a total eclipse of the sun, the last of which occurred over Huli territory in 1962, and is remembered by older generations of Huli today. *Mbingi* occurrences are therefore highly unstable and precipitate events that are unpredictable and have the potential to bring about profound and lasting change to the living conditions of the Huli population. In the context of modernity, and especially the discovery of extractable resources in the form of gold, oil and gas on Huli territory, *mbingi* and its associated desires for transformation and renewal, has taken on a profoundly different dimension.

3. The Papua New Guinea Liquefied Natural Gas project

The PNG LNG project is the largest resource extraction project in the history of PNG. The project began construction in 2009 and was completed in 2014 for a stated cost of USD19 billion (Wardell *et al.*, 2012). At the

time of its construction it was promoted as the saviour of the PNG economy, was predicted to “more than double” the nation’s GDP, and to transform the nation and especially the lives of the Huli population who were custodians of the land that held the vast gas resource (ACIL Tasman, 2008). The main gas resource is held within the limestone geology of a mountain ridge that has the Australian colonial name of Hides Ridge. The Huli name for this ridge is *Hari Gigira*, or Mt Gigira. In 2009 the American oil and gas company ExxonMobil came to PNG as the major partner for the PNG LNG project, taking responsibility for the project’s development and subsequent operation. ExxonMobil drilled several gas extraction wells along the ridge and constructed an enormous gas conditioning plant, known as the Hides Gas Conditioning Plant (HGCP) at one end of the mountain. Construction of the HGCP commenced in 2010, and the construction phase for the project was completed by 2014. This facility processes the natural gas, separates the condensate and impurities from the gas, and sends the gas via 700km pipeline across the highlands, beneath the Gulf of Papua, to a LNG processing facility near the city of Port Moresby, PNG’s capital (Figure 3). From there the LNG is transferred into ships and exported to the global market. ExxonMobil based its operations in the Huli village of Komo, which was a former Australian administration patrol post.

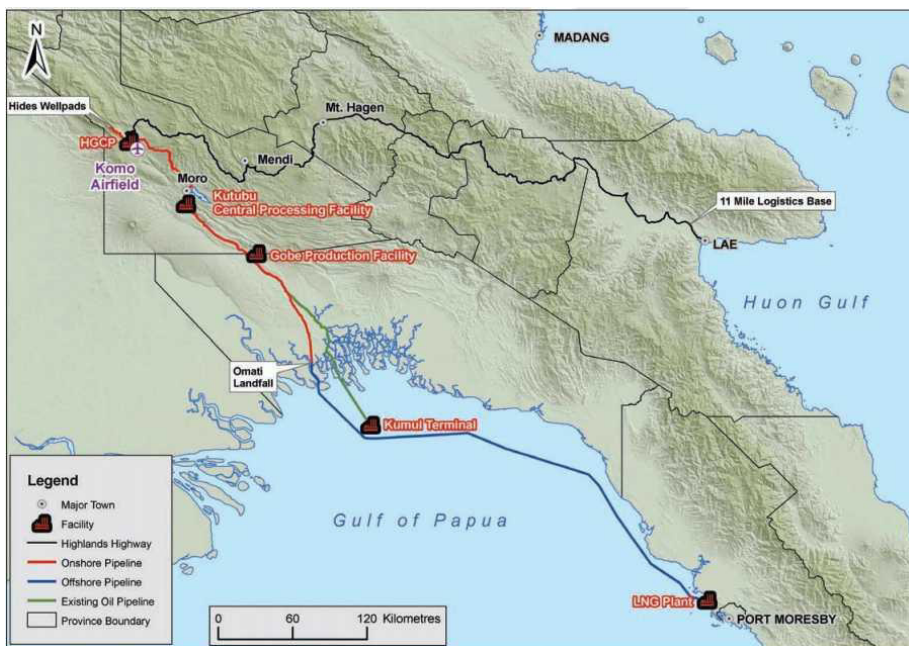


Figure 3 - Map of PNG LNG Project (source: <https://goo.gl/images/HaUy2k>).

Figure 3 above shows the basic outline of the PNG LNG project, a full description of which is beyond the scope of this chapter. This chapter focusses on the area of the gas resource, which contains the majority of the project's major infrastructure, including the gas wells, the HGCP, and the Komo airfield. In order to bring in the equipment needed to construct the HGCP in such a remote location Exxon constructed an airfield at Komo that was capable of landing Antonov AN-124 cargo planes (see Figure 4 below). The 1,600 metre altitude of the landing zone required a runway that was 3.2km in length. This runway was carved out of the jungle for a cost of approximately USD1 billion and a planned total of 89 landings. In 2009 I was sent to Komo with a team of cultural heritage consultants to collect data on sites of cultural heritage that were to be destroyed or otherwise disturbed by the project. I encountered a Huli population that was teeming with expectation and desire for the project to proceed and for its promised era of wealth and abundance to be realised. The PNG LNG project was a transformational event that took the form of rapid and profound changes to the built environment. Based on observations during my fieldwork, it was clear that the project was being greeted with a set of expectations that paralleled those of the anticipated *mbingi* events of the past. With the advent of the era of PNG LNG it was clear to the Huli population that an eschatological end time had arrived.



Figure 4 - Komo Airfield (Source WT Partnership website, <http://wtpartnership.com.au/our-team-experience/png-lng-komo-airfield-png/>).

3.1 Huli cosmology and the PNG LNG project

In addition to the mythological understandings associated with *mbingi*, Huli keep traditional stories about features in the landscape that are often associated with prophecies. One such story about Mt Gigira that had been held and passed down through generations of clans whose ancestry was associated with the mountain, began to emerge and be retold as the PNG LNG project unfolded. The Gigira story was first published in a blog post at the beginning of the construction phase of the project in 2009 (Cuthbert, 2009). As the project progressed, the story was continually being retold and, during my fieldwork, I experienced many different people from all over the province telling me the same story. Running beneath the length of the Gigira range is said to be a giant, burning tree that is in perpetual flame. The type of tree is known in Huli as *lai*, which has a very dense timber and is the best choice of wood for burning.³ The Huli word for the glowing coals of a fire is *tebo*, so beneath the Gigira range is the *Gigira lai tebo*. The crucial element of the story is the prophecy that one day a man with red legs will come to take the Gigira fire. The Huli custodians of Gigira may give this man some of the fire, but are prohibited to give away all of the fire lest the world come to an end. Figure 5 below shows the impact of the PNG LNG project on the Huli landscape. The vast HGCP glows into the night, providing material evidence of the giant fire that burns beneath Gigira.



Figure 5 - *The Hides Gas Conditioning Plant and the Huli Landscape (author supplied).*

³ *Dodonaea viscosa*, of which an unusually tall variety grows in the PNG highlands.

The fire that runs beneath Gigira is an offshoot from a broader Huli cosmology that was influenced by the presence of oil seeps in various parts of Huli territory. Prior to colonial influence in the 1950s, Huli cosmology placed the Huli population at the centre of a regional trading network that followed the path of a giant underground cane that was coiled by a snake. This was known as *dindi pongone*, or “root of the earth”. The path of this root was reflected in the presence of oil seeps that became important ritual sites in the Huli landscape (Ballard, 1994). Mineral oil was collected from these seeps and brought to centrally-located ritual sites for the purpose of ensuring that the root of the earth was kept fertile and that the land would not go bad. This oil was “poured over fires said to emanate from the root of the earth” (Ballard, 1994, p. 142). Prior to the period of first contact with the outside world, Huli viewed themselves as having a central role in the maintenance of the fertility of their entire known universe. If Huli lost control of the lines of trade that included collections of mineral oil, and therefore the proper maintenance of the fertility of the earth, then the world would come to an end. Huli ceremonial display involves the use of body paint, and often the lower part of the leg is painted red. The red colour represents the talons of a parrot and symbolises beauty, strength, and warrior-like qualities. In the post-contact era the red leg prophecy has been variously interpreted to describe the coming of white men. When ExxonMobil came to extract the gas, negotiations began as to how royalties, development funds, infrastructure projects, and other benefits would be distributed and carried out. For the Huli landowners it was immediately clear that, if they lost control of their fire and gave it all away for nothing, then their world would come to an end.

4. The morality of development failure

In 2016 I returned to Komo, two years after the first shipment of LNG had left the shores of PNG, and by this time it was clear to anyone that all the promises of benefit and renewal had been plundered. Promised infrastructure had failed to materialise, much needed schools and hospitals had not been constructed, employment was scarce, expected benefits such as power and water supply remained a faraway dream, the Komo airfield had become a huge white elephant used only for small aircraft brining in expatriate ExxonMobil employees, the government had run out of money to pay for the identification of landowners to receive royalty payments, and the

PNG LNG project stood as yet another failure of an expected *mbingi* event. The overwhelming Huli reaction to the situation was, and continues to be, one of extreme frustration, resentment, and anger. The development failure of the PNG LNG project is largely considered to be a result of government corruption and neglect. The *Gigira Lai Tebo* prophecy is often cited and, during the course of my fieldwork, Huli landowners often explained to me that the troubles that are being experienced are because they have given all of their fire away. However, the moral failings that have led to the current state of social decay have largely been outsourced to the state. The spectre of *mbingi*, which formed a vital component of Huli cosmology in the past, has disappeared from public discourse, but has been replaced by the overwhelming presence of the PNG LNG project, situated as it is in a social landscape of abject poverty. After the construction of the PNG LNG project was completed, Huli became post-*mbingi*. The scale of the project is such that Huli no longer live in anticipation of a *mbingi* event that they might be able to control and harness for their own good. The PNG LNG project is so large that it exists beyond the realm of Huli control.

Between 2015 and 2016 the PNG highlands were in the grip of severe drought that brought frost to higher-altitude areas. The frosts destroyed the sweet potato crops that are a staple food for hundreds of thousands of people living in these areas. In the contemporary context Huli perceived this situation largely in terms of a naturally-occurring weather event, however anger at the lack of response from both the state and ExxonMobil was constantly expressed widely throughout the Huli population. A report prepared for the Australian Department of Foreign Affairs and Trade found that the PNG government's response to the emergency was slow, uncoordinated, insufficient, lacking in transparency, and hampered by political interference (IOD PARC, 2017). This was no news to Huli and other highlands groups who had been suffering from the impact of the drought. Huli will often speak of the land going bad, and of an increase in violence and general social disorder. This strong tendency for Huli to view their land as being in a state of "entropic decline" has been recorded by several ethnographers, and is clearly related to both the instability of disasters, and the occurrence of social instability, especially in the form of clan warfare (Frankel, 1986, Ballard, 1994). However, the moral relationship between how Huli behave, the observance of strict moral codes, and the correct performance of *dindi gamu* ritual that used to be closely associated with a decline in the fertility of the earth (Ballard, 1998), is now considered to belong to the ancient practices of the ancestors. The advent of resource development and the involvement of both the state and foreign oil

and gas companies has relocated the site of intersection between moral behaviour and the health and prosperity of the people from Huli traditional practices and ritual leaders to the seat of power that is held by the state. This process of relocation began with the establishment of the Australian colonial administration during the 1950s, however, the vast wealth that is being extracted from Huli territory in the form of natural gas has raised expectations to levels that were never experienced in the past. Immoral behaviour in the form of corruption, graft, and state neglect are held as the reasons behind the social decay that Huli perceive is happening around them.

In August 2016 landowner frustrations with the PNG LNG project reached a climax when a group of landowner leaders blockaded ExxonMobil's HGCP facility at Hides. The issue related to the failure of the state to make any promised royalty payments to landowners since production began in 2014. Payments had not been made because the state had failed to identify who the beneficiary landowners were and claimed to be holding the money in abeyance until the rightful landowners could be identified. The Huli system of landownership is extremely complex and a group of landowner leaders had been using the court system in PNG's capital, Port Moresby, to argue for their recognition. Land ownership in Huli is based on agnatic descent and tied to oral histories that include deep generational recall as well as mythological understandings of clan origins. After struggling for two years Papua New Guinea's Supreme Court refused to recognise the group as being legitimate landowners, and this prompted the landowner leaders to return to their clan lands and organise their clansmen to mount an armed blockade of the PNG LNG project. They also attempted to turn off taps at the gas wells installed along the Gigura range. The landowners were quite specific in directing their grievances towards the state, rather than the project developer, ExxonMobil. The landowners even composed a letter to ExxonMobil that was almost apologetic in explaining the reason for their actions, highlighting the failings of the state as providing the reason for their actions, and asking ExxonMobil to voluntarily shut down the project on the landowners' behalf. It was only when they received no response from ExxonMobil that they took matters into their own hands and blockaded the project, locking the gates and refusing the facility to be supplied by road. The landowners then demanded that members of the PNG government, including the Prime Minister, come to them to hear their concerns.

Generations earlier, Huli leaders had organised broad gatherings of clan groups from across the highlands to perform large-scale *dindi gamu* rituals,

imposing strict rules and moral codes of conduct, in the event of famine, disease, or other cases of the earth going bad. This was an inherited form of leadership that relied on closely-guarded cultural knowledge that was passed down through generations of a select few agnatic lines. The last major *dindi gamu* ritual that was held was in 1972 in response to drought and highland frost that destroyed much of the staple sweet potato crops across the PNG highlands (Ballard, 2000). In the context of development failure and the PNG state, landowner leaders organised the blockade of the PNG LNG project, which forced the government to gather in front of them to be questioned and face the demand that they morally justify their actions. This modern form of leadership relies on a different form of knowledge that is based on the western education system, which facilitates access to western forms of power, such as PNG's court system, the ability to hold political positions, and the opportunity to engage in commercial activities. The most revealing moment came when the PNG Finance Minister, James Marape, who is a Huli, was challenged by one of the landowners to *dindi napaya*, which in Huli means "we eat the land." Marape had been trying to explain the fate of promised development funds and the landowners believed that he was lying about those funds. *Dindi napaya* is a traditional Huli method of divining the truth. When there is a dispute it is assumed that the ultimate truth about any claim is known to the land itself. If the two who are arguing both consume a piece of dirt from the ground where they are arguing then the person who is lying will be made sick and eventually die. Marape responded to this challenge with stunned silence. Thus the land, which cannot lie and has no capacity for immorality, remains the final arbiter in any dispute between landowner and state.

Huli widely regard the PNG LNG project as a disaster, both in terms of its failure to deliver on its promises, and of the social decay that has accompanied the decline in government services since the project's inception. The PNG LNG disaster, much like previous disasters that have occurred throughout Huli history, cannot be separated from its moral components of corruption and state neglect. ExxonMobil, as project developer and operator, and as a foreign entity engaged to extract the resource on behalf of the state, was, for the most part, left out of the moral argument. That situation remained the case until the magnitude 7.5 earthquake that struck the PNG highlands on 26th February, 2018. The epicentre of the earthquake was only a few kilometres from the gas wells and HGCP of the PNG LNG project. The earthquake was the largest to strike the PNG highlands since before the colonial period, and its intensity was well beyond anything in the lived experience of the local population.

Many houses collapsed as well as aid posts and schools, roads were split open, and massive landslides buried people and houses. The PNG LNG project itself was not designed to withstand such a large earthquake, and ExxonMobil promptly declared force majeure, shutting the project down for six weeks while it could be repaired. For the Huli population, the impacts of a development disaster were now compounded by the devastation of a geological disaster. The event caused an almost immediate shift in the moral topography of the Huli landscape.

4.1 Disaster and blame

The initial reaction to the earthquake was widespread belief that it had been caused by the PNG LNG project itself. This view was informed by the experience of tectonic activity caused by fracking in other parts of the world, especially the United States. However, the PNG LNG project is a conventional gas extraction project that does not involve fracking, and the magnitude and 16km depth of the earthquake's epicentre did not lend support to the theory that it had been caused by the project (Main, 2018). However, for the Huli population, the fact of the earthquake's occurrence was not easily separated from the PNG LNG project in moral and mythological terms. The earthquake was, for many Huli, perfectly in accordance with the *Gigira lai tebo* prophecy. In acting against the wisdom of the ancestors the world appeared to be coming to an end. Yet more importantly, the suffering of the population was increased by the lack of basic services and the poor state of infrastructure throughout the highlands. The material impact of the earthquake was directly linked to the development failures of the PNG LNG project. The locus of moral failure was therefore expanded to include not only the administrative behaviour of state officials, but to the material reality of the project's existence. Virtually overnight moral responsibility was extended to the organisation that was materially responsible for the project and its continued operation: ExxonMobil.

Prior to the earthquake the overwhelming attitude expressed by Huli towards ExxonMobil could be best described as ambivalent. The letter composed by landowner leaders in August 2016 represented the charitable view, and expressed the ideal that most Huli expected from the arrangement between the state and the developer. Some Huli had even expressed to me their sympathy for ExxonMobil as being itself a victim of the government corruption that had forced the landowners to take action. Others expressed

anger at the lack of engagement between ExxonMobil and the community. Following the earthquake Huli attitudes towards ExxonMobil became very dark. A landowner group based at a gas field called Angore immediately started making threats that the PNG LNG project would be destroyed if promised royalties from the project did not start to flow. The Angore gas field is located approximately 10km to the east of the Hides gas field, and was being developed by ExxonMobil to be connected via pipeline to the HGCP at Gigira. Since gas production began the Angore landowners group had been advocating peacefully for landowner issues to be resolved and government promises kept. After the earthquake the Angore landowners took up arms against ExxonMobil's facilities at Angore and destroyed ExxonMobil's camp site including its vehicles, buildings, and machinery (Woods, 2018). ExxonMobil was now being unequivocally blamed for the development failures of the PNG LNG project and was being portrayed in starkly moral terms as a greedy, neo-colonial thief taking resources for its own profit while the landowners suffered. The ambivalence that had previously been expressed towards ExxonMobil was, to an extent, a reflection of the disorganisation of blaming mechanisms that exist throughout Huli more generally (Douglas, 1992, p. 6). Blame is broadly understood in moral terms, but the locus of moral failure is largely subject to individual opinion, and cause is polyvalent. Is it because Huli gave away their gas? Or because the state is corrupt? Or because ExxonMobil is greedy and does not care about the landowners? All these opinions were variously expressed to me during the course of my fieldwork. The earthquake had the effect of organising blame and uniting Huli landowners towards a common understanding of cause, which is the lack of development as a moral failing of both state and the company.

5. Conclusion

After the attack on the Angore camp, soldiers from the Papua New Guinea Defence Forces (PNGDF) were deployed to Hela Province in order to protect the PNG LNG project from further attack. When the PNG LNG project was first proposed more than ten years ago, Huli landowners interpreted the development, not as a neo-colonial imposition of Western-style development and resource greed, but as the arrival of an era of abundance to which Huli were cosmologically entitled. The promises of wealth and prosperity that were being made by both the state and the company were inseparable from the expectation of an era of fertility and

abundance that had been expected by generations of Huli since the great *mbingi* ash fall of the mid to late 17th Century. Only the incorrect observance of moral codes of behaviour could result in the failure of *mbingi* and the inexorable decay of the Huli universe. Today, as the state guards against the consequences of its own moral failings by deploying its army against its own people, the PNG LNG project remains an unpredictable time of darkness for its Huli landowners.

The gas resource for the PNG LNG project is located within a setting of great social and cultural complexity. The failure of both the state and ExxonMobil to adequately understand these complexities has contributed to the development disaster that now largely defines the project for the Huli landowners. This failure of understanding is not unique to the PNG LNG project, or to PNG, and it has been observed that “many conflict-haunted development failures and disasters stem from an inadequate recognition of precisely these cultural complexities” (Raj Isar and Anheier, 2007, p. 24). It is possible to bookend a period of Huli history between two geological upheavals: a volcanic eruption, followed three and a half centuries later by a massive earthquake. These events have occurred in a cultural context of deep genealogical recall, and a strong commitment to the oral preservation of historical accounts. Based on research following a devastating tornado in the US, Sunday Moulton (2015) highlights the role of narrative construction following disaster events in the development of new identities, and the division of time into “pre-disaster and post-disaster eras”. This analysis can be applied to Huli responses to the geological events described in this chapter. In response to these phenomena, Huli developed collective narrative accounts that serve to make sense of the event, and the Huli oral historical record divides history into pre-*mbingi* and post-*mbingi* eras. The earthquake of 26 February 2018 redefined the relationships that Huli have with the exploitation of their gas resource, and with their own role in the creation of a desired future for themselves. New narratives have emerged that seek to redefine accountability through the realignment of blaming mechanisms, and to relocate the locus of moral responsibility towards the company, in conjunction with the state. These accounts continue a tradition of narrative construction in response to geological upheaval, yet they do so in combination with new material desires and expectations of development that provide a volatile and dangerous context for the popular representation of disasters.

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Generations pass on to each other a specific selection of memories, which is a “memory of the lived experience”. Through that narrative, the story of the present is measured day by day with forms of existential precariousness, in a vision of risk which is conceived as a perennial societal state. By investigating popular and oral literature, focus on narratives related to risk and disasters, as described in the social imaginary, from the most remote eras to the most stringent current affairs, this book is a precious element for a comprehensive reconstruction of cultural resources have allowed to face and manage material and spiritual concerns and problems arising from disasters.

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