Hiding Your Genes from Jack Sparrow: bioprospecting and the implications of science as a tool of colonialism in the South Pacific

Lajos John Szonner Hamers

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Hiding Your Genes from Jack Sparrow: bioprospecting and the implications of science as a tool of colonialism in the South Pacific.

Lajos John Szonner Hamers BA (Hons)

Supervisors:
Dr. J. Stirling & Dr. J. Lobb

This thesis is presented as part of the requirements for the conferral of the degree:
Doctor of Philosophy (Creative Arts)

The University of Wollongong
School of the Arts, English and Media

September 2017
Declaration

I, Louis John Hamers, declare that this thesis submitted in partial fulfillment of the requirements for the conferral of the degree Doctor of Philosophy (Creative Arts), from the University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. This document has not been submitted for qualifications at any other academic institution.
Abstract

The thesis project consists of two sections. The first section of the project develops an academic and creative investigation of colonial discourse in historical and contemporary contexts and is founded in the traditions of academic prose. The second section of the thesis re/visions the case study at the center of the project through the creative piece, *In a Lifetime*, a mixed dialogue work for theatre using folk story, song, verbatim, and original sources. This latter section connects to and is broadly based on my research.

I argue that science, as a tool of colonialism, has been and is used to transmogrify the aesthetic and political representations of the Indigenous/non-white body. The scholarly component of my project engages the debates arising from bioprospecting, and responses to it, in Papua New Guinea and abroad. I examine the historical foundations of science relevant to this aspect of bioscience and Western categorizations of the Indigenous/non-white Other. I also critique the conflation of Western scientific and religious discourse evident in the literature evaluated in this thesis using the anthropological construct of the Cargo Cult. Finally I examine some issues surrounding cultural appropriation and translation in a bridging chapter linking the investigative section of the thesis with the creative work, *In a Lifetime.*
Acknowledgements*

From the School of the Arts, English and Media I wish to thank Catherine Fargher and Timothy Daly, who had supervisory roles early in my PhD journey. I also wish to thank Dr Joshua Lobb for his compassionate and learned advice as a late addition to the supervisory team.

Important thanks must also go to my medical support team – my counsellors and GP Dr John Harvey have provided outstanding care over the journey.

My heartfelt gratitude goes to Dr Jeannette Stirling who has been with me as a supervisor since the inception of this project and without whom the project would have been a poorer one.

To my wife Susie and son Tom, there are not enough stars in the sky to illuminate my thanks to you both for your patience and love.

*This research has been conducted with the support of the Australian Government Research Training Program Scholarship.

Esa Lajosnak a musik kaya: This is Lajos’ music.
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Guildenstern: What a shambles! We’re just not getting anywhere.

Rosencrantz: Not even England. I don’t believe in it anyway.

Guildenstern: What?

Rosencrantz: England.

Guildenstern: Just a conspiracy of cartographers, you mean?

Rosencrantz: I mean I don’t believe it! I have no image.

Tom Stoppard 1966, *Rosencrantz and Guildenstern are Dead.*
Introduction: project origins and context

In 1997 I went to visit family in Rabaul, in the East New Britain Province of Papua New Guinea. This was my first overseas trip and to say my stay in Papua New Guinea (PNG) was a culture shock is an understatement of grand proportions. My sensibilities were shocked into a stupor for most of the time of my journey. I could not call it a holiday, as such was the exponential experience of my time in the East New Britain Province that it was not until I arrived back home that my ability to relax and reflect was restored. Pondering the experience of my trip and drawing on a developing academic awareness of postcolonial cultural politics I began a process of trying to understand the confusion and questions that beset me on my journey in PNG. My diary reflected my visceral inquisitiveness:

I found something curious in ‘the nature’ of PNG seems to underline the way two different societies, cultures etc. arm-wrestle with each other. Even the death of a dog (from parvovirus) seems to underline those different sensibilities. I think part of me is full of acceptance of each, but, the other part cringes at the train wreck when they crash together as they so often do ... I don’t seem to be able to clarify that point much further ... I guess a lot of it comes from within my belief system at the moment ... and all this in the smouldering caldera of an ancient volcano; to me, modern humanity’s constant desire to subjugate nature and control destiny seems pitiful in this context (Lajos Hamers, Excerpts from PNG diary, 10 - 12 July 1997).

I came to realise, further to my clumsy reflection on Friedrich Nietzsche’s 1873 essay, On Truth and Lies in a Nonmoral Sense, that there was much to unravel and unpack to understand the multiple layers of interaction between the world of my cultural comfort zone and the world developing in Rabaul, in the East New Britain province of PNG.

I was intrigued and amazed by the culture and life of the Tolai people who lived in the Rabaul area as much as I was also intrigued by the communities of non-Tolai PNG people, as well as Australian and other international ex-pats, who lived and worked in this part of the world. The ex-pats lived, for the most part, behind large fenced compounds and employed locals to clean their houses and wash their clothes. They managed local and other PNG workers in manufacturing workshops, hotels and retail outlets of all kinds but the life that the ex-pats lived was one of separateness; not just in their secure housing but in their social interactions with
very little non-work related mixing of ex-pat and local communities. The separation of communities I witnessed did not just occur between black and white but was also evident in the internal divisions between PNG people from different regions. This was highlighted on my trip when I attended a local Rugby League game. On one of the teams was a man from the highlands of the PNG mainland. Highlanders are renowned for their toughness and aggressiveness which, according to the local story of themselves, stood in stark contrast to the more laid back island ‘nature’ of the locals of Rabaul. Every time the highland fellow received the ball the crowd would erupt in torrents of yelling and catcalls; I was later informed that the crowd were yelling abuse and warnings to the player from the highlands not to start a fight.

But, for every intrigue and moment of amazement at the life and culture unfolding in the shadows of an active volcano, I was also concerned by the collision zone of cultures and what I came to think of as extant colonialism flourishing in the developing world: the prominence of missionary schools and the up-take of Western religion; the general behaviour and attitude of the ex-pats towards the locals combined with the history of colonialism, and war that had touched the volcanic port of Rabaul. In the midst of this personal ontological turmoil was the afternoon I went out taking photographs around the ruined areas of Rabaul. These parts of the town had been flattened by the ash fall from the 1994 eruptions of Vulcan and Tavurvur volcanoes. Whilst walking the area I happened upon a group of children playing cricket and I walked over to them and used one of only two phrases of PNG Tok Pidgin I knew to that point, “kissim poto?”

“Can I take your photo?”

The kids reacted with glee and posed for me with big smiles. Then as they came to chat with me one small child grabbed my arm and rubbed at my skin to see if the white would rub off! I had heard stories of the like from people who had travelled in India and other places but was gobsmacked when it happened to me and although my skin colour did not rub off I never stopped wondering how much ‘white’ had rubbed off in this part of the world and with what consequences.
Subsequent academic work has propelled me to interrogate my story of personal cultural disruption. On an academic level I began to see how PNG fitted into the global matrix of nation states and hierarchy of economic development. From early British and German colonialism, to Australia’s own second order colonial rule over Papua and New Guinea, outside interests have long held a strong sway, not only in PNG but also in the South Pacific in general. PNG’s own sovereignty is always called into question when its status as a developing country forces fiduciary constraints and conditions on the aid dollars which are vital to the PNG economy. This situation is made more complex with a continuing culture of internal corruption which has hallmarks of Western privilege and capitalist desire at its base; it also highlights the tension between Western styled governmental operations and Traditional ways of functioning. The cultural and developmental influences evident in PNG mark it as a crossroads for international influence, whether that be from continuing colonial benefactors such as Australia or the rising influence of greater Asian capital and its geographical connection to the issues unfolding in the Indonesian province of West Papua. PNG is a compelling case study for how the ‘developing’ world is touted for progress by its very nomenclature. However, the empirical reality for PNG and its citizens is much more problematic and complex, and prone to resisting any great strides towards the development and prosperity the West takes for granted.

My interest in PNG issues maintained and an article in The New Internationalist magazine led me to the substantive topic for this thesis. ‘Resisting the Gene Raiders’, written by Maori academic Aroha Te Pareake Mead (1999), alerted me to the issue of bioprospecting that was occurring in the South Pacific where prospecting for new resources, in the medical, agricultural and Indigenous knowledge realms, was being exercised by international biotechnology companies and government agencies for commercial exploitation. In the PNG Highlands, the United States government agency, The National Institutes of Health (NIH), had applied for a patent over some biological material from a tribesman from the Hagahai tribe. As it pertained to PNG, I started to research the circumstances that led to the collection of blood, and subsequent patent application over parts of that
blood, by the United States National Institutes of Health. The circumstances and implications of this case will be examined in closer detail in Chapter 1 of my thesis.

In Chapter 1, the story of blood collection and potential scientific commercialism is analysed through the hierarchized nature of the West’s relationship with the developing world. As Aroha Te Pareake Mead states, the end results of bioprospecting in Indigenous communities “have rarely benefitted local communities” (1996). In the story of bioprospecting, and according to some important protagonists in the debates around the processes, biopiracy, that is, the ‘providential telos’ of positivist development and discovery in the realm of science, demands critique and analysis.

The links between religion, science, colonialism and development have a long history that dates back to the earliest voyages of discovery in the South Pacific, by the likes of William Dampier, James Cook and Antoine Louis de Bougainville. I will argue that these influences continue to permeate contemporary post-colonialist relationships between the developed and the developing world. In Chapter 2 of this thesis I examine a genealogy of scientific discourse with particular reference to the episteme of early Industrial Revolution Europe and the effect this had on aesthetic and political representations of the Indigenous/non-white Other with particular reference to a burgeoning scientific discourse. In the early part of the chapter I discuss Jonathan Swift’s *Gulliver’s Travels*, and touch on its allegorical themes as a critique of the episteme. Further analysis provides a portal into some of the foundational aspects of scientific discourse and how these helped reassert the episteme as science developed its own epistemological strength. In the second part of the chapter I draw on Franz Kafka’s dramatic monologue, *An Ape Addresses an Academy*, as an allegory for representations of the Indigenous/non-white Other, with special reference to the developing scientific discourse and its construct of the ‘human specimen’. It is through these stories that the inevitability and necessity for continual progress, and the representations of the Indigenous/non-white people upon which the development must rest, that play across European cultural mores. I will engage and contest this parable of colonialism.
Storytelling is a powerful tool in the influence the capitalist West has over the developing world. Indeed, it has been a key strategy of the West along with a concomitant capitalist discourse in exercising growing influence over the imagination of the world. It has not been an uncontested influence, but as countries such as Russia and China move their economies to a market-based capitalist one, the story of the capitalist world and its cultural expectations has exerted a renewed influence on global imperatives. In the midst of the seeming inevitability of this grand narrative of progress and development are immeasurably more interesting stories of resistance, struggle and survival and it is my intention with this project to engage a selection of these productively disruptive narratives.

An example of competing narratives comes from Thomas King (2005) who canvasses the ways in which stories can act to give strength and seeming legitimacy to descriptions of the world around us. Through his dialogue about the traditional stories of his Native American heritage and how they, at the same time, strengthened and destabilised his sense of being and worth in the world around him, he could interrogate the power structures that gave particular versions of Indigeneity their currency in politics and society.

In the chapter, ‘You’re Not The Indian I Had in Mind’ (2005), King discusses his difficulty in grounding his own work and life as a man with North American Indian heritage. The fact that the ‘label’ needs to be spelled out so precisely indicates a level in which the stories that get told about people tend to fix them in a certain subject position in the social and cultural matrix. This stands in stark relief when King asks the question:

Yet how can something that has never existed—the Indian—have form and power while something that is alive and kicking—Indians—are invisible? (2005, p. 53)

Yet he was often mistaken for being Mexican, or in one humorous case involving the New Zealand immigration office, as a sub-continental Indian. King writes about the strange ways in which his ontological fixity was anything but and the way it
had real and material consequences on the way he lived his life and related to others.

There are undoubtedly a plethora of stories in the world. I argue that each story is a parallax piece of the puzzle of existence. Stories remind us there is no centre to the world. Nevertheless, the work of Michel Foucault and others help us to understand the intimately entwined processes of language and power as always attempting to establish a centre—that is, a core, invariably culturally-specific, from which power can be exercised to best effect. Stuart Hall refers to the dynamic relationship between language and power as they manifest in the aesthetics and politics of representation as the “circuit of culture” (1997) and understanding how systems of representation play out in the stories of science, colonialism and development is the work of this thesis.

In Chapter 3 I will interrogate the work of scientists and their positioning in the discursive matrix that surrounds the Hagahai gene patenting case. To this end I will be reading the scientific community via the prism of the Cargo Cult: an oft formulated representation of certain segments of the PNG community. Representations of the native/primitive/savage other, as explained by the Cargo Cult, sought to understand the ways in which Indigenous peoples adapted to Western contact. Well-worn Orientalist tropes not only questioned Indigenous peoples’ ability to assimilate but also constructed the ways in which researchers and scientists related to these communities and consequently went about their ‘work’. Reading the work of Western science in terms of a Cargo Cult helps to highlight some of the discursive practices that structure the scientist’s work not only in the area of bioprospecting but also in the realm of the power that science and its proclamations have in the public domain.

The final chapter of the analytical section of my thesis develops an important link between the scholarly focus of the thesis and the Creative Arts component of this PhD project. In this chapter I discuss the connection of the research of the thesis, thus far, to my play In a Lifetime. Mindful of issues of cultural appropriation and translation I draw on the work of bell hooks, and others, to contextualize the inspirations used in my play. I also discuss how resistance has been envisaged in
two plays about the colonial experience in the South Pacific. The plays, *Cargo* (1971) and *This Man* (1969), from PNG and the Solomon Islands respectively, discuss different perspectives on the ways in which diverse yet connected populations have come to terms with the colonization of not only their countries but their 'hearts and minds'. I will draw on these insights to discuss the development of the themes in my own play.

The other part of the doctoral journey is the creation of my own story reflecting on the important issues emanating from my academic considerations. My theatre script, *In a Lifetime*, takes some of the theoretical discussion and the ethical debates surrounding bioprospecting, as discussed in this thesis, and places it in a theatrical space. To place a theatrical version of this story on the stage allows the story to engage the audience on a more sensory and visceral level. By engaging sight, sound, song and traditional storytelling, it allows the story to be played and investigated in ways the strictures of academic language would struggle to deal with.

In many ways the theatre script runs a similar gamut of problems I the creative artist have to consider as I the academic. I am aware that I cannot speak on behalf of Indigenous communities and their people. However, in wishing to engage in an issue which is as much an issue for the West and its operations, as it is for the Indigenous peoples of the Pacific and beyond, I wish to interrogate the boundaries of contact where Indigenous resistance/negotiations to extant power structures have occurred around bioprospecting. As it pertains to my work in these pages, analysing the points of resistance, agitation, advocacy and activism that Indigenous peoples have been engaging in on the world stage also serves to highlight the continuities of colonialism and the evolution of colonial relationships.

Colonialism is not a relationship of equals. Aimé Césaire, poet, author and mentor to Frantz Fanon, argues this in his essay *Discourse on Colonialism*, with an assessment of what it is not:

To agree on what it is not; neither evangelization, nor a philanthropic enterprise, nor a desire to push back the frontiers of ignorance, disease and tyranny, nor a project undertaken for the greater glory of God, nor an attempt to extend the rule of law. To admit once and for all, without
flinching at the consequences, that the decisive actors here are the adventurer and the pirate, the wholesale grocer and the ship owner, the gold digger and the merchant, appetite and force, and behind them, the baleful projected shadow of a form of civilisation which, at a certain point in its history, finds itself obliged for internal reasons, to extend to a world scale competition of its antagonistic economies (2000 pp. 32–33).

Colonialism, as a function of Imperialism, continues to uphold its historical power structures in the modern globalised capitalist diplomatic legal market place. Because of this, there is an ethical line I am treading that may be impossible to negotiate cleanly or unhindered by ethical concerns. Early in the process of research for my PhD I interviewed Aroha Te Pareake Mead, a lecturer on Indigenous Intellectual Property Rights at the University of Wellington, Aoteoroa (New Zealand), on the difficulty of treading the ethical and culturally sensitive line when writing my play and developing the PhD analysis. She spoke about “in whose benefit the work is ultimately done” (Mead, 2007; 2009 pers. comm.) and urged an understanding of the history of dispossession and struggle that Indigenous peoples from around the Pacific have experienced since the arrival of voyagers and colonialists from Europe. With those words at the forefront of my thinking I believe that the critical discussion, on which I am about to embark in academic and creative forms, will engage in the discussion of ethical practice and cultural concern that mark this territory.
Chapter 1

1.1 Constituting the subject

On the cover of an Autumn edition of *National Geographic Research: A Scientific Journal (NGSR)* is the image of a woman described in the accompanying article as “an elderly, ill, and wasted Hagahai woman” (1987, p. 403). Clearly emaciated and with her skin marked with lesions the unnamed woman’s gaze is directed back at the photographer recording her image and, by extension, at the reader of this edition of *NGSR*. Her look is a challenge, breaking out from the frame. The Hagahai woman meets the observer’s look and offers a challenge to the voyeuristic gaze; in this moment there is resistance.

However, the resistance is overwhelmed, at least initially, by the woman’s positioning in a broader field of signifiers. Underneath the image is a general list of topics, for this edition of the journal, the first of which reads “Threatened Melanesians” (*NGSR* 1987). The list then includes “Tracking caribou by satellite”, “American elephant teeth”, and “Grand Canyon figurines”. The design and formatting of the cover reflect a politics of representation, consistent with historical and contemporary colonial representations, that locate the Hagahai as an archealogical artefact—“Threatened Melanesians”—contextualised by fauna audits and archealogical relics. Given the signifiers connected with the photo, and in spite of the resistance encoded in her gaze, the look of the Hagahai woman directly implicates the reader in the process of her objectification through the Western gaze. A less nuanced
reading of her image might also interpret her gaze as a plea for help from the West; in this instance, presumably from the burden of diseases that ‘threaten Melanesians’.

Michel Foucault describes the medical gaze as “a gaze that burns things to their furthest point” (1983, p. 147). Foucault argues that ‘the gaze’ contains and classifies its object as it also defines the power exerted by the observer. The woman’s returning gaze in Figure 1 disturbs this dynamic to a point; nevertheless, there is the suggestion that the examination, diagnosis and prognosis of her fate—her subjectivity—have been conflated into a Western system of representation that positions her as the object of necessary Western intervention. Indeed, of all the photographs attached to the story of the Hagahai and the medical anthropological study conducted by Dr Carol Jenkins, author of the article in question, it is only another photo of a “sick and wasted mother” (NGSR 1987, p. 417) and that of a young toddler (NGSR 1987, p. 402) where the objects of the camera’s gaze are looking out from the page.

The poetics of the images with reference to the medical anthropological study further situates the subjects of the study, the Hagahai, as a people in need. The repeated references to their ‘wasted’ state, their nakedness, their tribal accoutrement, and the privileged position of the only white person, pictured here in Figure 2 (NGSR 1987, p. 414)—a doctor, marked with his own ‘tribal’ accoutrement, a stethoscope, and who is rendering assistance over the Hagahai man named Weiyamu in an idyllic tableau—guide the reader to understanding that the plight of
the Hagahai is parlous, that white people are here to help and through Weiyamu’s smile, that the Hagahai are circumstantially pleased.

This representation of the Hagahai, combined with the accompanying description of them as a ‘prehistoric’ society of “hunters and gatherers with minimal horticulture” (Jenkins 1987, p. 412), invokes and reproduces a stereotypical aesthetic of the Indigenous Other (Césaire 1972; Ashcroft et al. 2002; Said 2003; Smith 2006) endemic across Western colonialist regimes. The cover image of the unnamed Hagahai woman is at once both scholarly and imaginary. It carries the weight, approbation and institutional imprimatur of canonical scientific knowledge to describe, or more appropriately inscribe, an ideal of who these people are and where they fit in to the matrix of Western discourses that construct their presence in a ‘civilised’ world. It is also imaginary in that it offers an insight into what appropriate ways one should view Hagahai existence from a Western perspective. It is a representation steeped in the historical narrative of Indigenous people in general, but more specifically, in the historical representation of Melanesians, along with Aboriginal Australians, as being the the lowest of the low as far as European representation of the Indigenous peoples of the Pacific is concerned (Dampier 1697; Dampier 1703; Douglas 1999; Gilroy 2003, 2014a & b).

The defining Western gaze has been well established as a colonial rule of thumb. Joseph Pugliese (1992) examines the function of the colonizing gaze in relation to representations of Papua New Guinea whereby its Indigenous peoples come to symbolize a representation of the health of their country as well. He argues that:

> The colonized country in colonial discourse is constructed in terms of an anarchic, infantile body symptomatically signalling a desire for healing order, a longing to have its corruption and vice expelled by the curative, ordering hands of the colonial patriarch, as he who will both administer and minister to the sick patient (1992, p. 33).

Drawing on Pugliese's insights here, I argue that the reading and reception of the image of the Hagahai woman in Figure 1 are constituted by the framing discourses of colonialism; a framing constitutive of the colonial thrust of the reading and reception of the Hagahai woman and in many ways, constitutive of the colonial thrust of the intervention Jenkins is making into Hagahai society and culture, not
only with her medical anthropological study, but with her camera lens when she takes the photograph of Weiymu. The visual representations and documentation of her intervention are couched and justified in many ways as an exercise of altruism and compassion but, reflecting on Pugliese’s argument above, I contend that these too are encoded in the exercise of scientific colonialism imbued in the medical anthropological study of the Hagahai. This is also consistent with a continuing and broad colonial influence via “expropriative economic regimes” (Pugliese 1996b, pp. 292 – 293) that have operated since the voyages of discovery; whether it be concerned with resupply of goods for voyagers’ ships to the continuing collection of cultural, biological and human ‘artefacts’ and the operation of plantations, mines, military bases or asylum seeker processing centres on behalf of historical and contemporaneous colonial benefactors.

Even though Jenkins did not take the photo of the Hagahai woman in Figure 1 (NGSR 1987), its relationship to the discursive formations is constitutive of the representations of the Hagahai presented in the text of the journal article. Further to this point, and reflecting on Foucault’s work on the medical gaze, Stirling (2010) underscores the constitutive nexus:

... the relation between disease and the medical gaze is mutually constitutive. One can only understand the relations between theory and experience, methods and results, by making visible and examining the field that binds disease and the gaze in a shared signifying (political, cultural, symbolic) economy (pp. 19–20).

With reference to Foucault’s work on the constituting gaze, Stuart Hall argues that "being made visible is an ambiguous pleasure, connected to the operation of power" (1997, p. 195). For Hall, representations resulting from the dominant gaze are both aesthetic and political. The aesthetics and politics framing the visual representation of the Hagahai woman (Figure 1), in Hall’s terms, “suture” her identity to a scientific narrative of urgent intervention and cure.

In an attempt to minimize further epistemic violence to the Hagahai story in this section of my thesis I focus on the colonial structures that construct the frames of reference for the Hagahai and other Indigenous groups with similar and unique stories. The general advocacy that has been borne out of the Hagahai story is also
worthy of consideration. The Hagahai are not completely relegated to the margins. Although it is most certainly the case as far as their intimate relations with the machinations of power, their story has become a critical touchstone for the development of important representations of Indigenous peoples into the elite levels of governance and diplomacy. Whilst these interventions have had minimal direct impact in the home community of the Hagahai, or even in PNG generally, in other parts of the world the Hagahai legacy has made its mark. This opens the way for meditating on the resistance in the compelling stare of the unnamed Hagahai woman on the cover of *NGSR*. It resists because the returning gaze refuses to be observed unnoticed and it also stands as symbolic of a broader range of resistances by virtue of its presence in the matrices of the colonial discourse discussed above.

Resistances also describe the conditions of ‘hybridity’ (Bhabha 2004) and how colonized groups might negotiate the relationship with the colonizer. Foucault describes an analytical protocol that explicitly looks for moments of resistance to help understand the nature of a dominant discourse whereby: “[R]ather than analysing power from the point of view of its internal rationality, it consists of analysing power relations through the antagonism of strategies” (2000, p. 329). These are the strategies of resistance where reversals of discourse are brought to light and becomes a prominent journey for the narrative in this chapter.

Homi Bhabha adds his voice to the terrain of resistance by explaining that the boundary is “where ‘presencing’ begins” (2004, p. 13) but that this space is also an equivocal space for antagonistic representations. On the one hand, Bhabha explains that it is in “the space of intervention emerging in the cultural interstices that introduces creative invention into existence” (2004, p. 12) and examples of this come to light in the legacy left over from the analysis of the Hagahai and their relationship to the colonial nexus that has brought them to attention. Bhabha also reflects Foucault’s understanding of the temporal nature of reversals of discourse with reference to its effects of the colonized body: “... the very nature of humanity becomes estranged in the colonial condition and from that ‘naked declivity’ it emerges, not as an assertion of will nor an evocation of freedom, but as an
enigmatic questioning” (2004, pp. 59–60). It is within the enigmatic gaze of the unnamed Hagahai woman that our questioning begins.

The *NGSR* article stands as a prelude to a more detailed rendering of the Hagahai story. By following the threads of the broader scientific intervention with the Hagahai I will be identifying the ways in which the continuing colonial relationship is exercised by the West over the developing world. Also, the Hagahai situation helped foment a global advocacy and I will show how that legacy has impacted on other Indigenous and non-white communities.

1.2 The Hagahai: some context

In a socio-linguistic survey of the region, Markus Melliger (2000), socio-linguist, missionary and bible translator, identified the term ‘Hagahai’ as one that is used by “outsiders” to identify a diverse group of people who live in an area bounded by the East Sepik, Enga, Madang and Western Highlands provinces of Papua New Guinea (PNG). The half dozen or so related language groups connected to this region are situated on the banks of the Yuat River and Melliger’s socio-linguistic survey also identified it as a region where the national languages of Tok Pisin and English are the least spoken languages (2000, pp. 83–87). It is at this point where the first narrowing (or boundary marking) of the Hagahai community to a geographical area is documented as scientists, including Dr Jenkins, assisting the Papua New Guinea Institute of Medical Research (PNGIMR) declared their study and census area as the Northern side of the Yuat River (Jenkins et al. 1989).

The physical geography of the area is mountainous and located in the Western Schrader Ranges. Travel between local villages is restricted to bush paths whilst rope bridges are used to ford rivers. The inaccessibility of the region meant that the Hagahai remained free from European influences until the early twentieth century. Indeed, Melliger points out that:

The first known visit of Europeans to the area was in 1913 when German explorers reached the territory of the language group. Over the following decades there was only limited contact with the Western world, and it was usually limited to gold prospectors and wartime traffic. From the 1950s on patrol officers (aka *Kiaps*) began visiting the area (2000, p. 70).
The region still has next to no road system or communication infrastructure and it was not until 1995 that the area received its first airstrip at a village called Mamusi. This infrastructure is essential to the delivery of goods and health services as visitors who do not hike into the area come by helicopter or airplane. The Hagahai people are described as being “hunter-horticulturalists” (Jenkins 1987, 1988 & 1989; Yanagihara et al. 1995; Melliger 2000) who base themselves in several village areas whilst using the significant land area around them for subsistence agriculture.

In the 1960s and 1970s Baptist missionaries began reaching the larger area inhabited by the Hagahai and in the early 1980s the Hagahai people sought assistance for a host of endemic and recently acquired medical conditions that were adversely affecting their community. The main medical assistance that the Hagahai wanted was help to alleviate the damaging effects on their community of filariasis and malaria. Filariasis and malaria are contagious mosquito-borne diseases of the lymphatic and circulatory systems that are caused by parasites that have differing morphologies. Lymphatic filariasis, also known as elephantiasis, is a parasitic infection caused by filarial worms that lodge in the lymphatic system. Whilst many symptoms are asymptomatic, the damage to the lymphatic, renal and immune systems can progress through chronic to acute phases, as the World Health Organisation (WHO) fact sheet for lymphatic filariasis explains,

> When lymphatic filariasis develops into chronic conditions it leads to lymphoedema (tissue swelling) or elephantiasis (skin/tissue thickening) of limbs and hydrocele (scrotal swelling) (WHO 2016).

Malaria is also caused by a parasite, of single cell origin, that causes acute febrile illness with symptoms including: fever, headaches, chills and vomiting. Children under five years of age, pregnant women and HIV/AIDS\(^2\) patients are considered to be at the highest risk of contracting the illness and developing the most serious symptoms (WHO 2016).

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\(^2\) From the United States National Institutes of Health (NIH): “HIV stands for human immunodeficiency virus. It kills or damages the body's immune system cells. AIDS stands for acquired immunodeficiency syndrome. It is the most advanced stage of infection with HIV” (NIH 2016).
Whilst lymphatic filariasis and malaria are both considered endemic to PNG, the extent to which filariasis effects the PNG population is largely unknown (WHO 2011) although the volunteer medical group, Australian Doctors International (ADI), estimate that PNG accounts for “70% of the total population at risk of being infected with filariasis” in the Pacific region (ADI 2016). Malaria is also of concern to governmental and organisational health authorities as it ranks as the fourth highest cause of death in PNG (WHO 2015).

Both diseases are considered serious not only because of their effect on the human population, especially in the developing world where infection results in the deaths of many sufferers, but also because of the economic imperatives, or the development thereof, which are never far away from the twists and turns in the story of the Hagahai people. Bockarie et al. (2000) argue that the results of a 1996 filariasis treatment program, conducted in the Hagahai area, indicated that “[L]ymphatic filariasis is a major cause of clinical morbidity and an impediment to socioeconomic development” (p. 196). Further, WHO directly relates filariasis’ and malaria’s social impacts to economic outcomes, claiming that “[T]he socioeconomic burdens of isolation and poverty are immense” (WHO 2016). The health status of developing nations is considered key to the general economic development globally and is the third of seventeen stated Sustainable Development Goals (SDG) that were developed and adopted “unanimously by 193 Heads of State and other top leaders at a summit at UN Headquarters in New York in September” of 2015 (UN 2015). The United Nations (UN), WHO, the World Bank (WB) and the International Monetary Fund (IMF) all have policy documents guiding the implementation of these goals towards 2030 and the economic bottom line is stated succinctly by the IMF in their SDG statement, “[G]lobally, an enabling external environment with global economic and financial stability and stable trade and financial flows is also crucial for countries’ development efforts to thrive” (IMF 2016).

The combination of cultural, medical and socio-economic concerns set the conditions from which the missionaries and scientists framed their interventions in the Hagahai community. It is a privileged plane on which these concerns are
seen as vital to the Hagahai community and resistance, on their part, would be seen as a threat to the survival of their community.

1.3 **Head count and blood counts: census teams and health surveys**

The Hagahai first sought the assistance of the Baptist missionaries who attended to their immediate healthcare needs before sending for medical teams to come to their assistance (Melliger 2000; Jenkins 1987). The original census team came into the difficult terrain in 1984 with Dr Carol Jenkins, an American medical anthropologist with the Papua New Guinea Institute of Medical Research (PNGIMR) and a co-author of the filariasis treatment study mentioned above. The census team came on behalf of the PNG government and their medical research body, the PNGIMR, to take account of the Hagahai people and their medical conditions. Dr Jenkins became a pivotal figure in the subsequent gene patent controversy which is crucial to my examination of the Hagahai encounter with Western medical science.

In the course of testing the blood samples taken from the Hagahai to diagnose their illnesses, a full array of further testing, described as a “serological survey” (Jenkins 1988), was conducted by an Australian laboratory and the HTLV-1, or Human T-lymphotropic virus, was identified (Jenkins 1987, p. 428). In the human body white blood cells are called lymphocytes and are important to the immune responses of our bodies. T lymphocytes (T-cells) are specialized versions of these blood cells that “attack foreign cells or viruses in the body” (Solomon & Davis 1983, p. 424 & pp. 525–526). However, the virus in question attaches itself to a T-lymphocyte thus its name. HTLV-1 is a virus that is known to cause leukaemia and its status as a retro virus suggested the potential for research applications into, not only its own disease vectors, but also other potentially related HTLVs such as HIV/AIDS. In this isolated population it was also found that the Hagahai had a unique version of the virus (Jenkins 1988 & 1989; Yanagihara et al. 1995). This presented an important nexus, the moment where capitalist and scientific aspirations coalesced.

In March 1995 patent protection was granted over “a human T-cell line persistently infected with a Papua New Guinea HTLV-I variant” as well as
“bioassays and kits for the diagnosis of HTLV-I infections” (Yanagihara et al. 1995). Patenting offered legal protection to the so-called ‘inventors’ of these biological artefacts; those being the five scientists, of whom Dr Carol Jenkins was one, whose work developed and prepared the biological sample/s. In the patent application the “Assignee”, that is the owner of the rights to any advantage from the patent, is listed as “The United States of America as represented by the Department of Health” (Yanagihara et al. 1995). The potential market for the therapeutic and diagnostic products that were hoping to be developed was a multi-million dollar plus industry. In 1996 it was reported that one US biotech company sold their “retroviral diagnostic business to bioMerieux Vitek, part of bioMerieux of France, for $6.5 million cash” (RAFI 1996 & The Pharma Letter 1996). I will return to the assignment of rights in due course as this became a sticking point in the subsequent furore in the Hagahai case. The outcry was a global one and one that quickly put pressure on the Western stakeholders in the patent. At the height of tensions Dr Jenkins was accused of being a “big pirate” (Dorney 1996, p. 16) and was also targeted by PNG officials and removed from an international flight at Port Moresby airport. After removal from the flight, “she was abused on the tarmac and told she was forbidden to leave PNG” (Dorney 1996, p. 16). Jenkins was also threatened with deportation by Foreign Affairs officials. Although Jenkins’ situation was resolved within three days the furore also highlighted the tangential, and at times obfuscating, narratives and the confused chronology that were a feature of the writing surrounding this issue and which created further complications.

The gulf between the ways in which scientific researchers and their objects of study perceived the situation and its outcomes in the Hagahai saga is further highlighted in a document produced post the granting of the patent application.

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3 Patenting in general offers the applicants proprietary exclusivity, for a specific period of time over (15–20 years depending on jurisdiction), on any advances on research and the capitalisation of those innovations. A patent must meet certain basic criteria in order to be granted and there are four main criteria on which patent applications are judged: 1. identify novel genetic sequences; 2. specify the sequence’s product; 3. specify how the product functions in nature (i.e. its use), and 4. enable a person skilled in the field to use the sequence for its stated purpose (Pilnick 2002, p. 103). This last point also enables the commodification and monetization of the patent product to allow for research outlays to be recouped as well as, hopefully, contributing a profit to the patent holder/s corporate interests.
Published in the July 1996, ‘Genes, people and property’ issue of the journal, *Cultural Survival Quarterly (CSQ)*, a letter⁴ by Yokotam Ibeji and Korowai Gane put forward the Hagahai perspective on the collection of their blood. Ibeji is the actual donor of the blood, cells and virus, the progeny of which were subject to the patent application. Gane is a member of the Hagahai community with the most formal education and is fluent in Tok Pisin, one of the languages used in the published letter. Layering onto Gane’s translation of Ibeji’s take on the situation are the English translators Aaron Petty and Vanessa deKoninck who were community development aid workers living with the Hagahai at the time of the letter’s publication.

The letter had been requested by Dr Jenkins to, “secure their opinion about the patenting of a virus from a cell line of one of their members” (Ibeji and Gane 1996, p. 33) and it ostensibly stands as a character reference by the Hagahai about Dr Jenkins. There may be something to be made of the translations through a myriad of interpreters but the letter only appears in Tok Pisin and English, the two national languages of PNG, and not in the first language of Ibeji. Notwithstanding an allowance for some lack of clarity in the translations, the letter nevertheless stands for itself in highlighting the way the Hagahai viewed their relationship with Dr Jenkins. As an example of this perspective Ibeji is quoted as saying, “Carol is a good person and she looks after our interests well” (Ibeji & Gane 1996, p. 33); and with reference to the actual blood collection, he states, “She took our blood because she was concerned about AIDS or other diseases coming here; that is why she took our blood, and we are very happy she came to do this” (Ibeji & Gane 1996, p. 33). Further, when speaking of the United States National Institute of Health (NIH) in relation to Jenkins and their blood sample the Hagahai, through Ibeji, are straightforward in their understanding and trust that Jenkins has their best interests at heart, insisting that “you should not think she would steal, she is a good person” (Ibeji & Gane 1996, p. 33). However, in the midst of this narrative the English translators saw fit to insert a note of qualification to the Hagahai statement stating that, “although it is doubtful they fully know what the NIH is and does, they

⁴ Full copies of the Tok Pisin and English translations are included in Appendix A.
do know the NIH as the group in America that worked with their blood” (Ibeji & Gane 1996, p. 33).

At a basic level it is obvious that the Hagahai had a rudimentary understanding of what was going to happen with their blood sample. Dr Carol Jenkins had made some effort to explain what was to occur with the blood once it was donated. She told the donors that she was going to look for a “Binitang – an insect – in their blood” (Jenkins 1996; Lock 1997; Pottage 1998). Nevertheless, it would be a stretch of the imagination to believe that the Hagahai understood fully the nature of the scientific study that was to be done with their samples and the legal implications following the registering of the patent. From the letter published in *CSQ*, the Hagahai tribesmen expressed a clear and personal trust in their medical anthropologist to represent their interests to the NIH and the local government; they trusted that they would not be exploited; and they trusted her word on what it meant for the NIH to “[find] a virus in our blood and make a map of it” (Ibeji & Gane 1996, p. 33). This is significantly different from understanding what was to be done to their blood and informed consent under these circumstances must be considered tenuous at best. It must be stated, however, that the statement in *CSQ* was not the informed consent attached to the patent application. To state it plainly, there was no physical statement ever attached to the patent application. Indeed the statement by Ibeji and Gane was published in July 1996 more than a year after the patent was granted in March 1995 and some 5 years after the first application for the patent in 1991.

The Hagahai’s personal and trusting stance at this point in proceedings highlights some compelling dilemmas. Not least, the lack of insight into the legal, commercial and scientific structures that surrounded the progeny of Ibeji’s biological donation. However, Jonathan Friedlander, in his introduction to the “Genes, People and Property” issue of *CSQ*, insists that:

This case suggests that a non-literate community, with full information and consultation, can give a more informed consent to bio-medical research than most literate individuals in industrial societies when they sign consent forms (*CSQ* 1996).
Friedlander’s comments stand in stark contrast to the two Indigenous voices published in the same issue; specifically, that of Maori academic Aroha Te Pareake Mead and Solomon Islands public figure Ruth Liloqula. The commentary on the Hagahai is best encapsulated by Mead when she argues that the premise of informed consent is flawed because, “[I]t assumes equality amongst cultural negotiators that simply does not exist because of difference in world view and power” (CSQ 1996).

Canadian advocacy group, Rural Advancement Foundation International (RAFI), submitted a Freedom of Information requests for NIH documents relating to the Hagahai case after the patent had been granted in 1995 to develop a better understanding of how informed consent protocols were handled. RAFI discovered that the files had nothing from the Hagahai themselves to indicate that oral or informed consent documentation had been obtained for the patent application (RAFI 1996). The blood sample that was used for the gene patent application was taken in 1989. The patent application, lodged with the US Patents and Trade Office in August 1991, also incorporated a previous patent application (Ser. No. 07/572,090 made in August 1990) that was lodged over a genetically similar sample taken from the Solomon Islands populations. RAFI additionally reported that the:

NIH’s only documentation of Hagahai and PNG government consent to this exportation, research, and decision to patent human cells are the letter of ethical clearance for Jenkins’ 1985 National Geographic study and a document from the [PNG]IMR outlining oral informed consent procedures to be used by researchers. This latter document, however, arrived at NIH nearly 5 years after the blood samples, on April 21, 1994. This raises very unpleasant questions about the manufacturing of prior informed consent almost 4 years after the first application on Hagahai cells was filed on August 12, 1991 (RAFI 1996).

Further, after Jenkins’ own claims that her initial relationship with the Hagahai had been “difficult” (Jenkins 1987; Hanley 1996; RAFI 1996) there was a lingering question mark over how communications with the Hagahai were generally conducted. There are subsequent claims that communications between the Hagahai and Jenkins were conducted via a series of disjointed phrases in Hagahai
and pantomime hand gestures to gain the oral consent for the blood samples and the subsequent testing (Mead 1996).

Where the informed consent protocols seemed equivocal, discussion and claims about rights, royalties and potential windfalls for the Hagahai were fanciful. The scientific community had not been significantly challenged about their harvesting of plant and human biological material up until this point and the Hagahai case mobilised Indigenous advocacy and lobby groups. I would argue that the louder, culturally-tuned voices of advocates began to be heard in institutions such as the United Nations committees. What I mean by ‘culturally-tuned’, in this context, is that the access to meaningful channels of action—diplomatic, legal and political—are more readily accessed by Indigenous people who are already working within or around these institutions. Whether by education or experience, the ability to negotiate matrixes of power in turn muster representation of these issues through political channels back to the home countries, in the Hagahai case, Papua New Guinea, that would not have been open to them from their position as citizens of a developing country. Read in this context, the defensive claims by scientists surrounding the Hagahai inclusion in the cell line patent seem reactionary at best.

Put simply, in the full text listing of US Patent 5,397,696 there is no assignment of any rights to the donors of the biological material, the Hagahai and Solomon Islander communities. The only assignee, as stated earlier, was the US government via their Department of Health (Yanagihara et al. 1995). RAFI reported in their 1996 communique that four out of the five scientists as part of their work contracts with the NIH “had made arrangements to assign their rights to the government”. The fifth scientist, Dr Carol Jenkins, was not employed directly by the NIH but had collaborated with them, as an employee of the PNGIMR. When questioned about whether she had assigned her rights to the PNG government the reply was faxed to RAFI stating, “I am not expected to assign my rights to the PNG government according to the [PNGIMR] director Dr M Alpers” (RAFI 1996). In the absence of any documentation it was assumed that Jenkins had assigned her rights, along with the other scientists, to the US government. This ambiguous positioning appears to have authorized the many erroneous claims about the status of the Hagahai in the patent itself.
Dr Michael Alpers' claims that the mere mention of the Hagahai in the patent claim “was to ensure they would benefit if in some remote future some commercial development arose from the discovery” (Dorney 1996, p. 16) is extraordinarily equivocal whilst also giving the impression of a gross misreading of patent law and the role of assignee. Even the NIH's own representative, Amar Bhat, seems unaware of some of the salient details of the patent application when he states, “Dr Jenkins, a co-inventor on the patent ... had pledged to the Hagahai that she would give the group her share of any royalties to be realized from the patent” (Bhat 1996). Claims made by Jenkins that, “despite what exploitation may take place around the world, in this case the rights of the Hagahai people have been specifically safeguarded” (Pottage 1998, p. 742), and others on Jenkins' behalf that “the anthropologist who mediated with the Hagahai had arranged ahead of time that 50 percent of any royalties arising from a product or products made from the patented material should go back to the community” (Lock 1997, p. 288), could not be substantiated in the patent document itself or by any supporting documentation held by the NIH (RAFI 1996).

Almost as an afterthought, when the research had reached a dead end and the patent was to be abandoned, Jenkins and her colleagues discussed signing over the rights of the patent to the Hagahai should anything be made of their genetic material in the future; however, the administration costs proved prohibitive and this course of action never eventuated (RAFI 1996; Pottage 1998).

The trust exhibited by the Hagahai highlights the disjuncture between the divergent ways of seeing. The traditional way insisted that trust should be the prime motive in dealing with the scientists and allied academics who had offered to heal their community. Jenkins and her colleagues, on the other hand, were unable to manoeuvre in any meaningful way away from the scientific, legal, privileged and ultimately colonial trajectory of their endeavour. Also, given the subsequent criticisms of the efficacy of the intervention with the Hagahai, it is obvious that the story for the Hagahai themselves fragments very quickly once the initial impetus has been exhausted. It is surely not coincidental that once the economic potential had been exhausted so too did the outside world's interest.
The reality is, that any research progress that may have come from Hagahai blood donations to progress the treatment or potential cures for disease would have had little impact in the home community. Indeed, promised improvements in the Hagahai circumstance with regard to treatments for malaria and filariasis, that were promised as part of the blood collection and health census process, were few and ultimately short lived leaving the community confused and suspicious of researchers who may happen upon the Hagahai in the future. In reviewing the Hagahai’s perceptions of their involvement in the genetic patent process, Dr Pauline Lane (2005) argues that the community feels that there have been no substantive beneficial outcomes for them from the intervention of Jenkins and other scientific researchers. She reports that:

[The Hagahai] feel that Jenkins had helped their community, but they also felt that maybe they had been cheated out of some money for their blood. They did give informed consent for blood to be taken for diagnosis but NOT to be taken out of the country for research. They suggested that they would NOT trust researchers again (Lane, in Harry & Marks, in Meskell and Pels, 2005, p. 37).

Lane’s engagement with the Hagahai over two decades after their encounters with those earlier researchers leads her to conclude that the community’s deep-seated suspicion of Western scientific research into their circumstances is completely understandable. Once the scientists had obtained the desired blood samples, they seemed to lose all interest in the ongoing health problems of the community.

More recent accounts of the Hagahai have been left to the missionaries still working in the area using the tools of religion to modernise this ‘pre-literate society’ (Melliger 2012). The discursive intertwining of religion and science identified in relation to the Hagahai case study will be discussed in a subsequent chapter but one has to wonder at the work being undertaken in these societies when you consider that, in the Pinai-Hagahai area, it is copies of portions of the New Testament which are being translated and handed out in print and audio form to a society which, in the personal testimony of Markus Melliger, bear all the hallmarks of those dialogues which so informed the travel literature produced from the voyages of discovery:
Because the Pinai-Hagahai live in such a remote area, lawlessness and crime were a serious problem. I sometimes thought, “This is indeed a God-forsaken place.” But God had neither forgotten nor abandoned the Pinai-Hagahai (Melliger 2012).

And this, from as recently as February 2016:

As you may know, the past several months have been very difficult for us. The Pinai-Hagahai have experienced tribal fighting, sin and violence as they had not seen it in a long time (Melliger and Melliger 2016).

The invocation of God in this context is not just a story of holy benefactors, it also allows for the evocation of sin, and redemption, and a positioning of the Indigenous Other as always needing intervention.

Evangelism is encoded in every aspect of the work undertaken, not just by missionaries, but scientists and aid workers alike. Carol Jenkins’ own positionality as Western saviour is evoked when she opines soon after her initial contact with the Hagahai:

The author’s intention to monitor and promote improvement in their health status will, hopefully, alter the course of their future and aid their adaptation to the inevitable modernization of their biology and culture (Jenkins 1987, p. 428).

Whilst there is little doubt that cultures adapt, change and evolve after contact with each other, the tone, infusing Melliger’s and Jenkins’ assessments of the Hagahai is a standard and recognisable colonial construct for the establishment of colonial infrastructure and one that Pugliese describes as a ‘circuit of lack and supplement’. He argues that:

The economy of Western colonial law is a phallic one of lack and supplement: what the indegenes lack is supplied and supplemented by an array of colonizing apparatuses (1992, p. 25).

The relationships of power between the developed and the developing world structure the direction in which cultural adaptation will flow. I argue that this adaptation is by and large for the Indigenous Other to come to terms with.

There is a strong link here between the ways in which colonial governance is administered and the ways in which scientists and missionaries, religion and science, operate to maintain the colonial apparatus. However, researchers’ career
paths and their subsequent mobility, the inability of national governments to pick up the slack on health initiatives and further controversies consistently leave the last word about the status of the Hagahai themselves to the reporting of others; which is not an insignificant metaphor. The Hagahai letter is the one artefact that articulates the community's thoughts on the gene patenting issue. But such is the emotional and authentic tone of the letter, combined with the very fact of its layered translation, that their voices are quickly subsumed into the stories of others. It is an uncomfortable metaphor that brings up ghosts of the ‘dying race’ myth that is not so far away from the narrative in this story as is evidenced by the ‘hopeful’ modifier in Dr Carol Jenkins' statement above. Even in this—my—thesis, as it was for the advocacy that came out of the moment of the patenting of the Hagahai’s biological material, the Hagahai will subside and become incorporated into the discussion about the rights and representations of Indigenous/non-white peoples generally. With due deference to the unintended violence of their sublimation, their legacy is the important story here and it is a story being told by others to foster justice and better advocacy for the rights of Indigenous people globally. The Hagahai case study is perhaps only a minor reversal of the colonialist discursive formations but it is one that is having some beneficial impacts for other Indigenous communities around the world and this is certainly a story that Foucault would have recognised as an “antagonism of strategies” (2000, p. 329).

However, there is a political economy that operates in the very notion of legacy and this provides insight into how the human can be detached or sidelined in the discourse surrounding the collecting and development of biological materials from marginalised donors. In trawling through DNA from Indigenous bodies, for example, the unique representations of Indigenous bodies as bodies to be exploited for the ‘common good’ offer a homogenous ideology of what the ‘common good’ is and demarcates its appropriate uses in direct association to relationships of power. The ‘common good’ is always circumscribed by the limits of its discourse that implies that the rights of the community subsume the rights of the individual. By legacy building, by consuming unique cultural attributes into a homogeneity defined in the complexity of human DNA, by making unique biological artefacts, counter intuitively and simultaneously, into a generic and
special gift for humanity, the process of detachment begins. This I classify as an instance of ‘transmogrification’. Transmogrification is identified as a process of magical or surprising transformation with grotesque or humorous effect (Oxford online Dictionary 2016; Merriam-Webster online Dictionary 2016).

In the context of my argument, transmogrification is apparent in the moment where the value for the progress of scientific knowledge and the value projected for the ‘common good’ of humanity/relief of the suffering of others is projected into a plethora of separate yet related economies. It is a value often projected on to the Indigenous/non-white Other to ascribe value to their existence within the matrix of Western economies and is a foundational moment in the colonial discourse of scientists when bioprospecting in these communities. The Hagahai legacy is one that demands we should always bear in mind their positionality as citizens of a developing country and the colonial position of PNG, as well as that of the biological material donated by the Hagahai, to understand how value is projected into the operations of the colonial matrix. Transmogrification from invisibility to intense presence in Western medico-legal, religious and economic discourses, no matter how briefly that spotlight may have shone for the Hagahai, has been a hallmark of colonial relations from its earliest days. Subsequent chapters historicize that relationship and I will show how that very transmogrification and value imbued in the redemption of the Indigene built the foundations of the scientific method from its religious antecedents.

However, once ‘value’ is identified in the biota of the Indigenous/non-white Other it authorizes the actions of those in the privileged position to exercise their hegemony over the direction of the gaze and authorizes the search for the ‘magic’ in their marginalised bodies.

1.4 Bioprospecting and an ‘antagonism of strategies’

The term ‘bioprospecting’ is a descriptor of that work which scientists and others do who search and prospect through the biological database either through live collection or looking through the historical collections of flora and fauna, often in botanical gardens and zoos, for elements or properties that may be of use for development in the medical, health or beauty industries (RAFI 1996b). With
regard to human biological material, it may be done when samples, such as blood are taken from Indigenous groups, or, as with the Hagahai biological material, may be accessed through cloned samples held in storage but always with the economic imperative that, “bioprospecting means looking for ways to commercialize biodiversity” (WHO 2001). Because of this connection to potential exploitation in the systems of capital Indigenous activists and others reference these acts of research and collection, without seeking permission or without acknowledgment of the historical traditional knowledge base, as ‘biopiracy’ (RAFI 1996a; WHO 2001 & 2002; Shiva 2007).

In 2007 a group of like-minded advocates, activists and Indigenous academics, under the auspices of the Call of the Earth Llamado de la Tierra (COE) and the United Nations University – Institute of Advanced Studies (UNU-IAS), produced a report, Pacific Genes and Life Patents: Pacific Experience & Analysis of the Commodification and Ownership of Life, discussing the burgeoning examples of bioprospecting and biopiracy that were occurring in the South Pacific. The report canvassed issues of intellectual property rights and human rights that were coming to the fore in the acts of bio and agri-tech companies from the developed world prospecting and reaping culturally sensitive knowledge, culturally important crops and fruits, and in the most sensitive cases, harvesting human biological material. Major concerns surrounded the patenting of ‘products’ derived from cultural knowledge, such as the medicinal and ritual use of flora, as well as the patenting of human DNA samples. Patenting of human DNA samples also highlighted another issue violating cultural and personal sovereignty in that the samples of DNA had been immortalized: that is, cloned to enable potentially infinite capacity for storage and research.

The main goal of the report was to raise awareness of the issues in the Pacific region surrounding cases such as the Hagahai gene patent, Kava patents, loss of bio-diversity due to local infrastructure projects and general bioprospecting endeavours by governments, scientists and the Human Genome Diversity Project. The reporting group also sought to begin to produce diplomatic legal instruments that might assist Indigenous groups across the Pacific to protect the ‘products’ that
were becoming desirable to the developed world. In the preface of the report, Professor A H Zakri, Director of the UNU-IAS, explains the agenda of the project:

Many international organizations are seeking to engage with indigenous communities in a mutually beneficial relationship, and in ways that enable indigenous communities to have greater visibility in national and international processes affecting them (2007, p. 6).

There are a range of diplomatic legal instruments already in force, through bodies such as the United Nations (UN), the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and other UN bodies such as the International Labour Organisation (ILO), that have taken these issues on board as issues of concern. Declarations such as: Declaration on Race and Racial Prejudice (UNESCO 1978), ILO Indigenous and Tribal Peoples Convention 169 (ILO 1988), Universal Declaration on the Human Genome and Human Rights (UNESCO 1997), Declaration on the Use of Scientific Knowledge (UNESCO 1999), International Declaration on Human Genetic Data (UNESCO 2003) and the Universal Declaration on Bioethics and Human Rights (UNESCO 2005), have brought to diplomatic prominence to some of the issues that have come out of the early bioprospecting projects.

Indeed, UNESCO in 2010 added the Nagoya Protocol on Access and Benefit Sharing to the 1993 UN Convention on Biological Diversity (CBD), as the realities of the ever increasing search for useful and profitable biological material and continual technological advancements required the adjusting of the checks and balances already in place. In 1993 concerned Indigenous leaders in the Pacific were also expressing themselves through their own declaration, The Mataatua Declaration on Cultural and Indigenous Property Rights of Indigenous Peoples, which was submitted for consideration in the deliberations of the CBD. In 1995 the Pacific Indigenous leaders also came up with a proposed Treaty for a Life-Forms Patent Free Pacific and Related Protocols. Their activity operated alongside other Indigenous groups from around the world who gained accreditation to submit and be heard in the diplomatic processes underway to come up with global diplomatic legal protections for their life and culture. Unsatisfactorily, even though the fact of these diplomatic instruments being developed shows, at the very least, those substantive issues are being brought to broad diplomatic attention and are
receiving some regard, problems still remain with such diplomatic legal instruments.

Firstly, not all nation states feel morally bound by such declarations or conventions and often refuse to accept and ratify them. Their operation is, to quote the old cliché, ‘honoured more in the breach than the observance’. Some countries are taking seriously the responsibilities encouraged by these diplomatic instruments but many, like teenage children, are still pushing the boundaries seeing how much they might get away with. This applies equally to the home state, where the biological database originates, as well as states and corporations seeking to invest in those countries. The colonial-based Western governmental structures, combined with the global network of diplomatic relationships, in operation in the Pacific make their imbrication into the global capitalist matrix one that confounds adherence to some of the aforementioned declarations and protocols problematic precisely because of their developing nation status. To bodies such as the International Monetary Fund (IMF) and the World Bank (WB), that have immense influence over the operation of budgets and aid spending in developing states, making concessions to minority populations at the expense of capital investment can have ramifications immediate and profound to the operation of a sovereign state’s budget which makes the diplomatic sphere one of economic import as well.

Vandana Shiva, Indian physicist, environmental and anti-globalisation activist, writes about this process and how the poor become leveraged against the gamble of economic growth by selling off important and self-sustaining flora:

For centuries, living according to principles of sustenance has given human societies the material basis for survival. Limits in nature have been respected and have guided limits of human consumption. When society’s relationship with nature is based on sustenance, nature exists as a commons. It only becomes a resource when profit becomes the organising principle and creates a financial imperative for the exploitation of this ‘resource’ for the market (2005, p. 23).

Shiva’s argument points to the economic invariant being encoded in the status of “a resource” which takes the control of the ‘resource’ out of the hands of those not positioned to exploit it. This applies to the developing world by situating it in a
continual state of underdevelopment by taking away the benefits of sustenance living and placing citizens into a dependant relationship with the industrialised manufacturing and consumerist global economy where multi crop farming for sustenance is turned into mono-crop farming for production and export or where the land becomes degraded because of resource extraction and manufacturing. In addition with these less than ideal internal conditions, the aforementioned IMF and WB, as well as international aid donor countries, continually monitor economic development, where management of developing economies is closely watched, and if necessary, managed for the purposes of integrating these economies into the broader global capitalist matrix.

It is a matrix that can define and confine the experiences of Indigenous peoples. It becomes a circumstance where personal sovereignty, in a climate where state sovereignty, in diplomatic and economic terms, is a contested, fluid and mediated construct, can be subsumed by the many institutional discourses in operation. As bioprospectors/biopirates make proprietary claims, where the foundation of these efforts to claim ownership is to make harvested materials marketable and profitable to a global market place, Indigenous people struggle to be heard and acknowledged as creators and owners in their own right. Traditional knowledge has little currency in the Western capitalist market place of ideas and invention that is legislated in a myriad of Intellectual Property Rights (IPR) and international relationships. The clash of cultures inherent in the way traditional knowledges get dealt with in the legal frameworks of IPR law are worth further analysis.

IPR law is the place where scientific endeavour becomes thoroughly enmeshed in the neo/colonial project where patenting law, like the operation of the science, is ill equipped to deal with traditional knowledges for several reasons. In making this point, Greaves argues:

It will be obvious ... that Western intellectual property laws immediately pose requirements that most of the cultural information these [indigenous] groups want to protect cannot possibly meet: (1) there is no identifiable author or inventor; (2) what is traditional is, by definition, not new; (3) there is no documentation of when or where the creative act occurred; and (4) what is traditional is, obviously, already in the public domain (1995, p. 204).
Because of the Western habit of privileging individual creativity, even though several names may attach to a patent application, communal cultural insight has little to no standing in the operation of IPRs. This is irrespective of the fact that communal processes in the development and application of IPR claims are inherent in the work of science, scientists and their sponsoring agencies. The Hagahai patent, for example, was itself based on the prospecting through the blood of several villagers from the Pinai-Hagahai area in PNG combined with work done on blood samples from Solomon Islanders that showed similar qualities to the Hagahai blood (Mead 2007, p. 48). The scientists named as ‘inventors’ in the Hagahai patent applications had little to do with the actual blood testing, or trawling, and relied on the work of other scientists and science professionals, not named in the patent application for their results. Moreover, this says nothing of the donors other than to describe them in an omniscient fashion as if one was looking through a microscope, or the lens of colonial relationships. Thus, the quality and standing of Western law and its overriding of Indigenous concerns is typical of the historical and continuing colonial project.

In elucidating this point, it is worth elaborating on the historical power relations inherent in the colonial project with specific reference to PNG and the ultimate end to which these endeavours are exercised. Joseph Pugliese has written extensively on the power structures deriving from colonialist expansionism. He describes the hierarchical power structure imbued in the League of Nations’ covenant that set up the colonial relationship between Australia and PNG as “the relationship of tutor and student [that] underscores the unequal power structures” (Pugliese 1996a, pp. 27-28). In 1992 Pugliese wrote of a “providential telos” (p. 30): a promise for a glorious future in the interventionist and paternalistic nature of colonial power. There are, however, institutions that exercise power in order to administer this providence and tutelage.

Pugliese’s elaboration goes to the nature of these institutions, where:

Justice, mercy and good, however, require the mundane institutions of law and order, and the colonial apparatuses of administration and governance ... As we can see, the religious and the legal aspects of colonial discourse cannot help but always resolve themselves into that predictable invariant: the economic (1992, p. 30).
During Australia's colonial rule of PNG the “mundane institutions” were manifest and replicated in the institutions transplanted to Australia as part of British colonization. Also, the bottom line for administrative involvement in trustee territories was the development towards self-governance and integration of those regions into the stratified global capitalist system. However, Australia’s policies in PNG helped stymie rapid or consistent development towards the aims of self-governance and left an indelible trace for the future direction of the colony. Tom Nairn (1975) describes this problem thus:

There was neither the time nor the sociological space for even development. The new forces of production, and the new state and military powers associated with them, were too dynamic and uncontrolled, and the resultant social upheavals were far too rapid and devastating for any such gradual civilization process to take place … the problem was not to assimilate culture at a reasonable rate it was to avoid being drowned (p. 10).

The administrative responses, by Australia in PNG, were critiqued by key commentators as inadequate to fully prepare the fledgling nation towards full integration/assimilation into the globalised system of governance (Hudson 1971; Mamak et al. 1974; Wolfers 1975; Amarshi et al. 1979). This point is well articulated by Edward P. Wolfers, who argues that:

Papua New Guineans were so assiduously protected from exploitation and the disruptions that development might bring that they were sometimes denied the opportunity to participate in the educational and economic benefits that might follow from development. But, then, the primary aim of all colonial administrations in Papua and New Guinea until the 1960s was neither 'development' nor 'preparation' for self-government, but control (1975, p. 5).

These controlling strictures went to all levels of the colony and they echo the voices of Indigenous people world-wide who have railed against colonial rule and still continue to agitate because little has changed in the tenor of the control over the self determination of their lives. The economic invariant exercises its power over almost every part of social and civil life in developing countries.

None of this is to say that Indigenous peoples are not willing to share their traditional knowledge with the outside world (Vermeylen et al. 2008; Neelika Jayawardane 2011). The producers of the Pacific Genes and Life Patents (Mead &
Ratuva (2007) report declared that their main concerns were not the ‘in principle’
idea of sharing knowledge for an equitable benefit sharing outcome, as is
consistent with their own community and cultural expectations, but that the issue
was the hijacking of ownership and thereby economic development of any
‘product’ without acknowledgement and benefit sharing with the home
community. If the final yardstick is “who will benefit” (Mead & Ratuva 2007, p. 25)
it becomes quickly evident that there is much work to be done to ensure the
Indigenous owners of traditional knowledge share any meaningful benefits in the
development of said knowledge, if that is indeed their wish.

Although there is limited recourse to taking legal action on behalf of aggrieved
communities (the Hagahai as an example), there have been moments where the
activism and advocacy on behalf of Indigenous groups has had an impact. Recently
some Indigenous communities, whose knowledge has been seminal in propelling
the scientific and state’s efforts to commodify the knowledge and usefulness of
particular ‘products’, have been factored into benefit sharing agreements and a
recent example from South Africa bears this out (Vermeylen 2007; Maharaj et al.
2008; Wynberg 2010; Foster 2011).

A diverse Indigenous group of southern Africa, called the San, have had some
minor success in challenging the capitalist power of the bio-prospectors who
claimed proprietary ownership over a hunger-suppressing agent in a cactus used
by the tribe’s people on long journeys into the desert to gather food. The ridiculous
and ironic nature of this situation is that although it was the San’s in-depth cultural
knowledge of the cacti’s hunger supressing qualities, it was South Africa’s Council
for Scientific and Industrial Research (SACSIR) that had identified the chemical
compound – P57 – as early as 1963 (Vermeylen 2007, p. 428), as the marketable
quotient of the Hoodia gordoni cactus. SACSIR began to patent it in 1996 for
development as an appetite suppressant with no reference to the San’s centuries, if
not millennia, of cultural knowledge and usage of Hoodia. Subsequently, in 1997,
the SACSIR sold on licensing to allow development of P57 to a UK based
pharmaceutical company, Phytopharm, who then went on to sign a sub-licensing
agreement with multinational pharmaceutical company Pfizer in 1998 for further
development and commercialization. In 2004 Pfizer chose not to pursue
pharmaceutical research into *Hoodia* which leaves the way open for multi-national food and beverage company Unilever to come in and develop the appetite suppressant for the lucrative diet supplement market (Vermeylen 2007; Maharaj et al. 2008; Wynberg 2010; Foster 2011).

In 2001 the San were alerted to the P57 patent by human rights organisation Survival International (SI) and this intervention garnered an apology on behalf of the SACSIR:

“We apologise to the San for having ignored them,” said Dr Marthinus Horak, manager of CSIR’s bioprospecting programme, speaking at a workshop on biopiracy held during the World Summit on Sustainable Development in Johannesburg last year (2003).

This seeming magnanimity enabled the process towards a benefit sharing agreement that was finally realised with Pfizer in 2003 and renegotiated with Unilever afterwards. It was a rare positive moment in the substantive operation of the CBD. However, the well-known tale of disappointment has again manifested and the San have seen very little in the way of material benefit from the benefit sharing agreements for several reasons: some money has been paid, but the agreement “failed to incorporate all stakeholders” (Vermeylen 2007, p. 433) raising the prospect of disquiet amongst the culturally diverse San community (Neelika Jayawardane 2011); and the actual value of the market looks to have been over-stated in the efforts to sell on to proprietary interests (Wynberg 2010, p. 24). The San case also shows the reluctance of investors for capacity building and development of products where monopoly guarantees for profits are mediated through benefit sharing agreements. Lastly, environmental concerns were also raised with regard to *Hoodia* and the sustainability of farming the cactus for a potential global market (Wynberg 2010). This is combined with the inviolable status of Indigenous people in relation to dealing with the institutional structures of the West, which is well expressed by Vermeylen (2007):

... the *Hoodia* benefit-sharing agreement, whilst being an improvement on previous practice of uncompensated appropriation, has not fulfilled the expectations of the San ... This failure is not simply a cultural misunderstanding. The crux of the problem lies in the power inequalities between the parties, which are exacerbated by the San’s precarious socio-
economic position as a stigmatized underclass consisting of impoverished and widely scattered minority communities (p. 433).

A notable consequence of the West’s grab for ownership of these products is that the products of appropriation are seen as panaceas for the diseased developed world. More importantly for this project, is the link that can be drawn between the San case and the case of the Hagahai gene patent, whereby, in the early days of the patent application over the gene samples from both the Hagahai and Solomon Islands communities, similar qualities for human application and therapeutic potential made their existence desirable in the arena of HIV/AIDS research. The San, the Hagahai, the Solomon Islanders, and others, all hold in their cultural and biological heritage things that have potential in the Western context.

The quest for panaceas for the developed world is a thread of research that seems to elicit a strong projection of potential into the Indigenous biological database. Transmogrification is a driving force in the exploration of many kinds that has occurred in the historical record. Transmogrification, and Indigenous responses to it, offers an insight into the foundations of the majority of the bioprospecting and biopiracy enterprises, the strengthening of status markers of the scientists who walk these research paths, as well as the historical operations of colonialism and the ontological foundations of science in this matrix.

The elevation of Indigenous/non-white biota as panaceas in the Western context favours a mythical circular relationship of equality. However, the vital Western body is the only one capable of identifying and bringing to fruition any of the possible benefits from such scientific research. In particular, the immortalization of human cell lines, seen as a necessity in the patenting process, privileges vitality into Western hands as the only way to confirm ongoing survival.

1.5 What cost ‘immortalization’?

The notion of a process towards immortalization of biological material, that is the reproduction of cells, via cloning, which guarantees said material for research and experimentation for an indefinite period of time, offers rich territory for understanding the scientific hubris which seems to effortlessly sideline individual concerns with Pangloss—an overall optimism regardless of context—for its
communal benefit. This was a crucial element in the Hagahai patent. There is a striking similarity to the controversy surrounding the cell lines of African-American woman Henrietta Lacks whose cervical cancer cells were processed to become the first immortal cell line developed for scientific research in the 1950s (Javitt 2010, p. 717). Designated the name HeLa, the legacy these cells have created is one of immense value for the progression of scientific knowledge, health research and public health outcomes. Importantly, among the many notable outcomes in disease and genetic research fields the HeLa cell line was instrumental in the development of a polio vaccine (Skloot 2000; Keiger 2010; Callaway 2013). The HeLa cell line has been, and still is, the vanguard of the issues surrounding the handling and use of human DNA samples.

Out of concern for privacy and the management of their family’s DNA, the Lacks family began to ask questions in the early 1970s as blood was being taken from other members of the family for further genetic research (Callaway 2013, p. 132). How was the blood being used? What research was being done? The researcher taking the new blood samples answered the Lacks family’s questions dismissively, with an autographed textbook and the direction that the answers they sought “lay within its dense pages” (Callaway 2013, p. 132). In 2013 the complete DNA profile of the HeLa cell line was released online without the knowledge of the Lacks family. The European Molecular Biology Laboratory, who had conducted the sequencing, protested that no family information could be generated from the genome sequence. However, the information very quickly found its way to a database called “SNPedia, a Wikipedia-like site for translating genetic information” (Skloot 2013) and soon after a report containing information pertaining to the Lacks family’s DNA was generated.

The ethical concerns generated by this process highlight the foundational and continuing inequity in the practice of this kind of scientific endeavour. Dale Keiger, reporting on the Lacks case, quotes researchers from Johns Hopkins:

Daniel Ford, vice dean for clinical investigation at the School of Medicine, observes, “In that era, researchers got a little carried away with science and sometimes forgot the patient, and physicians treated patients the same way clinically—it wasn’t shared decision making.” David Nichols, vice dean for education at the school, adds, “It was a relationship that was utterly
imbalanced with respect to power and privilege. There’s a lingering sense, even today, of this imbalance, which has deep historical roots” (2010).

Rebecca Skloot’s observation that the researchers at the time of receiving Lacks’ blood sample “knew only the barest facts about Henrietta: She was black, she was a woman, and she was dead” (2000) reinforces the ease with which personal sovereignty can be overridden. Ultimately, whether researchers gain financially is immaterial to the institutionalized privilege that attends their position. As Javitt argues: “there is no doubt that the discovery was beneficial to the researchers and the institution at which it took place, in terms of intellectual achievement and professional prestige” (2010, pp. 720–721).

On the one hand, the Hagahai are offered a similar exulted place in the ‘family of humanity’ when scientists opine that their ‘donation’ will help other sick people around the world, as happened with the HeLa cell line. Yet it also opens the territory for the dissociation of the human element from the deliberations surrounding the biological donation. With ethical protocols pertaining to human biological material still in a state of flux at time of writing, the immortalized cells, detached from their life source (the human donor), are further separated from the need for stringent protective protocols, thereby providing a plethora of opportunities for them to be investigated and used at will for scientific and capitalist purposes.

The infected T-cell line yields insight into how the Hagahai were, and perhaps still are, represented in any considerations of this issue. The persistently infected T-cells are reproduced, via cloning technology, in the process identified as ‘immortalization’. These cloned cells can then be stored, or reproduced ad infinitum, for future research and its genetic material and information are the basis for accusations that the NIH had patented a human being. There is some merit to this argument when it comes to light that the first invention recorded in the patent documents describes how, “[T]he inventors have established a human T-cell line, designated PNG-1, derived from peripheral blood mononuclear cells of a healthy New Guinean” (Yanagihara et al. 1995). The persistently infected T-cell line has the PNG HTLV-1 variant virus as well as containing the complete set of genes and chromosomes from Yokotam Ibeji.
In critiquing how the ‘human’ is moved to the periphery in these sorts of scientific endeavours Margaret Lock (2001) invokes the Hagahai saga in her paper, ‘The alienation of body tissue and the biopolitics of immortalized cell lines’. She argues:

Although such cell lines constitute an human/non-human hybrid, a discontinuity between the human source and the biological invention must be established; in other words, reification of the cells as solely a technological creation is integral to patent claims (2001, p. 74).

In raising the “fetishisation” of blood, Lock highlights what I consider to be a foundational concern as she goes on to point out that:

What we are currently witnessing with the escalating procurement of human body materials is a globalised commodity fetishism that goes virtually uncontrolled, in which ‘regimes of value’ (Appadurai, 1996), those at the site of production and those at the site of consumption are at a great remove from one another (Lock 2001, p. 65).

Maori academic Linda Tuhiwai Smith argues that this kind of “systematic fragmentation” in the process of collecting cultural and biological artefacts is a direct “consequence of imperialism” (1999, p. 28). Smith’s observation resonates with Lock’s concern raised above, about whether the Hagahai would have received any benefit from the patenting and development of their biological donation.

The initial aid that reached the Hagahai dried up quickly, and if the administrative cost of keeping the patent alive was prohibitive, it can be surmised that the possibilities of any diagnostic or treatment regime reaching that generation of Hagahai would have been extremely small; a view supported by Lane’s (2005) observations discussed earlier in this chapter. Whilst the site of production was in the Western Schrader Ranges of PNG and from the bodies of the Hagahai, the site of consumption was the NIH and the broader globalized scientific market place. Lock goes on to make clear the link to colonialism in this process:

There can be no doubt that the current extraction of wealth of all kinds by multinational conglomerates from the so-called developing world has exacerbated the situation originally set in place as part of colonialism ... foreshadowing of the contested commodification of body parts so evident today was clear in the extraction of human labor from formerly colonized sites (2001, p. 68).
There are echoes of this colonialist dynamic, I contend, in the Pacific example of labour extraction; the ‘blackbirding’ of Pacific islanders and New Guineans (Stevens 1950; Corris 1968; Gailey 1994; Knauft 1994) to the Queensland cotton and cane fields had similar contractual vagaries evident in the Hagahai gene case. Their labour was indentured, or in many cases just taken, creating what some academics have called, a South Pacific slave trade (Gailey 1994). The survival and growth of the sugar industry in particular was predicated on the access to this “cheap coloured labour” (Corris 1968, p. 85). As Eric Stevens un-ironically wrote in 1950,

There is no intention here of discussing the ethics of this traffic; much of the condemnation it called forth was based upon emotional rather than realistic views. It may be fairly said there was a measure of inevitability in it. Past history shows that, where there is a clash between primitives and more advanced peoples and the conflict has an economic basis, material ends subdue ethical standards. England’s industrial greatness rested upon social conditions that would not for one moment now be tolerated (p. 362).

Moreover, and as we have seen in the Hagahai case, this kind of appropriation of Indigenous/non-white bodies continues under the banner of the supposed generic benefit to humankind. Tuhiwai Smith explains that no matter how egregious the behaviour of slave traders or scientists to Indigenous communities, “their actions and intentions are always justified as being for the ‘good of mankind’” (1999, p. 24) and also contextualizes this claim in general terms with regard to contemporary research on Indigenous bodies:

Research of this nature on indigenous peoples is still justified by the ends rather than the means, particularly if the indigenous peoples concerned can still be positioned as ignorant and undeveloped (savages) (1999, pp. 24–25).

Tuhiwai Smith’s observations resonate with the statements made in a paper titled ‘Control of Lymphatic Filariasis in a hunter-gatherer group in Madang Province’ (2000), where Carol Jenkins et al. explicitly identified a strong capitalist impetus behind the work to heal the Hagahai community. The researchers argued that “[L]ymphatic filariasis is a major cause of clinical morbidity and an impediment to socioeconomic development” (Bockarie et al. 2000, p. 196). Filariasis, along with malaria and other endemic diseases, are not just seen as a product of poverty but
as a producer of poverty. Indeed, the economic invariant (Pugliese 1992) becomes crucial to the exercise of the scientific and legalistic colonial discourses which will be further discussed in later sections of this thesis. Even so, given the short lived therapeutic benefits published in Jenkins et al.’s paper as a result of immunization, it is hard not to see a modicum of self interest present in the actions of those involved with the Hagahai.

In PNG today, Public-Private Partnerships (PPP) are the standard for health care delivery and the nexus of direct government aid from countries such as Australia, mining interests and pharmaceutical companies are combined to achieve positive health outcomes. Corporate interest is as important, if not more so, than the public outcomes, especially in a specific type of PPP known as Product Development Partnerships purportedly designed for, “the development of new products to address malaria, TB and other communicable diseases highly prevalent in Asia Pacific” (MMV 2014). The proposals for the development of these drugs would operate under a “commercially oriented lean operating model” with commercial offsets and intellectual property right concessions for “product under development” (MMV 2014). Even given the corporate generosity present in the gesture, the potential for further research and bioprospecting would surely be part of the decision making process and it is precisely these companies and companies of their ilk which stand to gain the most out of any discoveries made in or from the bodies of the people they are trying to help. Further, it is the status that is undoubtedly attendant to this part of the academic/researcher’s journey that embroiders self-interest into the story.

As a professional researcher Dr Jenkins would also have been mindful of the status-producing effects of promoting the Hagahai’s cause. Indeed, such was the importance projected in her work that much of the research done on the Hagahai was supported by recurrent funding from sources such as the “US National Geographic Society” (Jenkins 1987; RAFI 1996a). The stakes are high in such an economically loaded environment and the reputation of researcher and nation are intimately tied to positive outcomes. Sean Dorney (1996), an expatriate Australian journalist writing in the PNG newspaper *The Independent*, explicitly outlined such concerns when writing about Carol Jenkins being escorted from a flight out of PNG.
by Foreign Affairs officials at the height of the Hagahai blood patenting controversy. Dorney's journalism decried the concerns of government officials with regard to Jenkins’ research as “rot!” He further expressed the all important reference to reputation when summing up the resolution of government concerns with Carol Jenkins’ work:

Had the meeting between Dr Jenkins and Secretary Dusava [PNG Foreign Affairs] turned out differently and resulted in her deportation the reputation of Papua New Guinea would have taken another battering. Happily it did not (1996).

Dorney's conclusions are an example of the politically complex colonial matrix that is constitutive of the exercise of various complementary and competing discourses in both PNG and the Hagahai issue. In one reading, Dorney is criticizing the hindering of helpful internationally based scientific research in PNG, yet another reading could just as easily assert that the government’s official’s response was trying to protect PNG, and its citizens’, sovereignty. Dorney’s conclusions further uphold the tenor of relations, as discussed thus far, with PNG’s place in the global matrix overwhelming parochial concerns of its citizens.

1.6 The Hagahai Legacy: after the genes have gone

The controversy surrounding the collection of gene data is endemic of this continuing colonial process as Aroha Te Pareake Mead, Foreign Policy Convenor and Deputy Convenor of the Maori Congress in Aotearoa, points out in contextualizing this issue. She has written of the situation that:

Human genes are being treated by science the same way that indigenous ‘artifacts’ were gathered by museums; collected, stored, immortalized, reproduced, engineered – all for the sake of humanity and public education, or so we are led to believe (1996).

The gene patenting issue has enlivened a political arena in which the Indigenous and unrepresented peoples around the world are starting to organize and exercise a voice. The Indigenous Peoples Council on Bio-colonialism produced a document in 2000 entitled ‘Indigenous people, genes & genetics: What indigenous people should know about bio-colonialism’, in which they express their concerns about
storage, patenting, immortalization and sale of collected biological samples. As it pertained to the Hagahai, their “cell line is now available to the public at the American Type Culture Collection as ATCC Number: CRL-10528 Organism: Homo Sapiens (human) for $216 per sample” (Harry et al. 2000, p. 23). It is unknown at this point how many cell lines have been sold or if the Hagahai had or have any outstanding royalties due from the sale of their cell line. Suffice to say that there is now significant concern about this form of exploitation across many Indigenous and ‘third world’ populations.

The Hagahai case serves as a modern exemplar of the continuing colonial relationship the developed world has with the developing world, but it is not the only case where Indigenous peoples have expressed their dismay at the overriding of their concerns about self-determination of their own bodies, subsistence crops and cultural products. Aroha Te Pareake Mead expresses that breadth of concern with her observation that: “The mistakes made in the Pacific region, have become the flagship case studies used in bioethics, genetics and law texts all around the world” (2007, p. 35). The Hagahai case was a turning point in the advocacy on behalf of Indigenous communities and their intellectual property rights in relation to cultural knowledge and biological ‘donations’ or acquisitions.

For all the positivity that surrounds potentially good outcomes in the battles waged in the interests of scientific progress and the expansion of Western knowledge systems, the larger ‘war’ must nevertheless agitate against certain ways of seeing and exercising power over the Indigenous/non-white Other in the realm of scientific research. As I have argued above, the recurring justifications for the ‘common good’ have rarely delivered long term positive outcomes for the bodies and communities being bio-mined for Western consumption. The analysis developed in this chapter also demonstrates the necessity of continuing to ask questions about the cultural and political foundations of scientific practice and how those fundamentals still pertain to today’s scientific practice. To that end, the following chapter will describe the historical foundations that have enabled the contemporary representations of the Indigenous/non-white Other within the development of the scientific gaze.
Chapter Two

Fitz-Dotterel: But what is a Projector?
I would conceive.

Ingine: Why, one, Sir, that projects
Ways to enrich Men, or to make 'em great,
By Suits, by Marriages, by Undertakings:
According as he sees, they humour it.
(Ben Jonson 1616, The Devil is an Ass, Act I Scene VII.)

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2.1 Science and the episteme

This chapter examines some of the historical foundations of Western scientific discourse with particular focus on how this discourse categorised and represented the Indigenous/non-white Other. In establishing the foundations of Eurocentric representations of the Indigenous/non-white Other, maintaining a focus on the peoples of the South Pacific and science's imbrication in that colonialist enterprise, I begin an archaeology of the episteme that enabled the representations produced from voyagers of discovery such as William Dampier, James Cook and Louis Antoine de Bougainville. These voyagers, and their historical contemporaries from across Europe, embarked on their explorations as the vanguard of colonialism and global mercantilism as well as founding the possibilities for the story of science.

Foucault's notion of the episteme is an essential part of the framework for this project as it helps to explain the “conditions of possibility” (1970, p. xxiii-xxiv) that help delimit the discursive formations foundational to the work of the voyages of discovery. The period, encompassing the sixteenth to eighteenth centuries and leading into the Industrial Revolution, is critical to the analysis developed throughout the chapter; specifically, the flourishing into discursive visibility of science and the continued discursive influence of religion. This scientific flourishing combined with the expanding importance of mercantile interests, being sought from broader climes, and in turn affected the representations of the Indigenous/non-white Other produced by the colonialist voyages of discovery. I argue that with each enunciation of ‘new facts’ or ‘discoveries’ about Indigenous/non-white Others, representations served to complement, reify and
strengthen the already circulating representational systems defining the Indigenous/non-white Other for a European audience.

Stuart Hall, in theorising the relationship between systems of representation and what he calls the “circuit of culture” (1997, p. 1), acknowledges the interconnected nature of the producers, consumers and regulators of these systems which are necessarily encoded with the values and ideologies of the dominant culture. Representational systems—language and visual imagery—are the most visible aspects of the ‘circuit of culture’ and hence most traded upon to secure the authority of the producers of knowledge as well as the veracity of their conclusions about the objects of knowledge. Thus, in the context of pre-Industrial Revolution Europe, the Indigenous/non-white Other is often set in classificatory opposition to the European; certainly Edward Said makes this assertion in his introduction to *Orientalism*:

> ... it can be argued that the major component in European culture is precisely what made that culture hegemonic both in and outside Europe: the idea of European identity as a superior one in comparison with all the non-European peoples and cultures (2003, p. 7).

This became an important foundation to the increasing scientism of the age. ‘Scientism’, as I see it in this context, denotes the progress and increasing influence of the development of science, its literatures, language and discourse on the politics and aesthetics of what constitutes valid or culturally-meaningful representation in developing Western knowledge systems. The centre of this knowledge, its base of power, is always with the producers, and here in this chapter I look closely at the foundations of the representations of the Indigenous/non-white Other that were constructed and circulated by colonialist Europe to help contextualize some of the competing and complimentary systems of knowledge.

One question explored by this chapter then, is how did this power relationship manifest itself in relation to the representations of Indigenous/non-white Others during this germinal period in the establishment of the discursive regimes of science? Michel Serres instructs us as to the possibilities in these representations:
In the seventeenth century the master and possessor of nature, science now wanted to make itself master and owner of men ... In order to take power, everything had to be classified. The *Encyclopédie* made a circle within which everything might be grasped and enclosed, so that its centre should be the one where all was decided (1995a, p. 431).

To build the *Encyclopédie* of the voyages of discovery in the Pacific, privileged knowledge producers were able to ‘discover’, or more correctly, forge representations of the Indigenous/non-white Other consistent with their contemporary epistemic codes. These conventions operated on the assumed superiority, and therefore accepted authority, of the standard created by the discursive regularities produced by the white privileged gaze of the 'discoverer'. ‘Discovery' is an ideologically-charged term in the context of Western knowledge production as Serres succinctly argues:

> Discovery is always the guarantee of the authenticity of the work ... scientific order determines social progress whose order determines scientific progress (1995a, p. 452).

The ‘producers’ of these knowledge systems are not operating in culturally-neutral spaces or without foundations.

More than this, this hegemonic knowledge system elides the presence of complex histories that would contextualize the Indigenous/non-white Others’ existence. Foucault argues that the development of Western knowledge systems typically function to silence or subjugate the voices of those who cannot be easily incorporated into the dominant culture, hence they become ‘othered’; that is, located on the negative axis of a normal/abnormal binary. In the newer “forms of the will to truth” (1972, p. 218) developing in “the great mutations of science” (1972, p. 218), from the sixteenth century onwards, Foucault reminds us that:

> ... this will to truth, like the other systems of exclusion, relies on institutional support: it is both reinforced and accompanied by whole strata of practices such as pedagogy - naturally - the book-system, publishing, libraries, such as the learned societies in the past, and laboratories today (1972, p. 219).

To aid in the unravelling of these systems of classification and exclusion, drawing on the insights into the marginal relationship Indigenous/non-white Others had to the knowledge systems representing them—ascribing meaning—within the
evolving discourses of European colonialism and the developing scientific episteme, I draw on narratives from Jonathan Swift’s *Gulliver’s Travels* (1726) and Franz Kafka’s *A Report for an Academy* (1917).

It is necessary to identify the impetus behind choosing Swift’s and Kafka’s texts to build a foundation of critique in this chapter. Although there is a vast range of historical, documentary and scholarly material on colonization, I have chosen to examine representations of Indigenous/non-white Others through a literary lens precisely because of the critique evinced reflects back on the *episteme* that produced the representations for public consumption. *Gulliver’s Travels* was chosen for its temporal and critical relevance to the voyages of discovery and the colonialism that not only formed the basis of this forwarding into the “new world” but also because it was inspired, in part, by the material and cultural realities of living under a colonizer’s rule. Swift’s censure against the lived experience of colonialism also strongly identified the creeping scientism by which methods and justifications of colonization could take place. His close assimilation of the generic conventions of the published travel diaries from contemporary voyages of discovery further strengthens/enmeshes the allegory.

Whilst *Gulliver’s Travels* has been an oft used basis for the criticism of colonialism and the burgeoning scientism of its time, *A Report for an Academy* has not, and I believe it is a text ripe for use as a critical catalyst by virtue of its allusions to the ontological confusions under the gaze of the colonizing influence of the scientific dialectic. The academy, as represented in Kafka’s text, is not just the audience implied in Red Peter’s address but also the edifice of power relationships that define who can speak and under what rules one may speak or be spoken for. The other disturbing metaphor in Kafka’s story is that of the civilised ape which is also discussed in detail. I read the characters of Lemuel Gulliver and Red Peter as notional avatars for the colonialist and colonized experience respectively and the insights from these avatars help to guide us through the ‘circuit of culture’ and the *episteme* under investigation in this chapter.
2.2 The age of projectors and the early evolution of science

The satirical works of Swift critique and challenge the developing power bases and claims to authority of both religion and the sciences in the early eighteenth century. Early examples of these concerns in works such as *A Tale of a Tub* (1704), which caricatures the religious excesses of the dominant Christian churches of his time (Smith 1979), and the *Drapier’s Letters* (1724) which deploys satire in canvassing Britain’s colonial influence on the Irish economy (Spratt 2012), place Swift as a contemporary and privileged participant, by virtue of his education and position as a clergyman, in the circuit of culture of his time. His work is more than just a literary portal to the historical *episteme*. Because he is contemporaneous with the system he critiques, his satire connects with concerns about the material effects of colonialism. Further, engaging with Swift’s critique of internal colonialism as exemplified in the allegorical narrative of *Gulliver’s Travels* (Wedel 1926; Nicholson & Mohler 1937; Rogers 1975; Sherbo 1979; Spratt 2012), provides a useful way of generating a general critique of colonial desires and operations; not just within Britain, but more extensively as colonialist expansionism reached far beyond the coastlines of the British Isles and abutted the colonialist ambitions of Western Europe.

There are several important metaphors discernible in *Gulliver’s Travels* that are productive in analysing the ways scientific discourse was developing into the eighteenth century. The overall argument of my thesis is that the conflation of science and religion so notable in the Hagahai case study (Chapter 1) has a solid basis in the expansionist and proselytising discourses leading into the eighteenth century. Swift’s critical examination of the knowledge claims of both religion and science, as a general critique against colonialism, therefore provides a rich metaphorical perspective on these interconnectivities as they come together in the colonialist project. Swift’s figure of ‘the projector’ is particularly useful to this stage of analysis. The figure of the projector—in Jonson’s words, the “one, Sir, that projects Ways to enrich men, or to make ‘em great” (1616)—is elucidated by Swift in the third chapter of *Gulliver’s Travels* and stands as the embodiment of colonial desires as they interlock with the development of scientific, economic,
philosophical and technological underpinnings of the colonial enterprise. I will return to concepts of the projector in the broader cultural context below.

The corporeal narrative throughout *Gulliver’s Travels* is also significant. Gulliver is variously a monster in Lilliput, a pygmy in Brobdingnag, and species imposter in the land of the Houyhnhnhms; he is literally represented as the ‘freak of nature’, or *lusus naturae* (Spratt 2012), and this aspect of the novel, combined with the character of Red Peter from Franz Kafka’s dramatic monologue, *An Address to an Academy*, will be canvassed further below to help focus my critique of the scientific rhetoric developing in the colonial era. As Danielle Spratt argues in her article ‘Gulliver’s Economised Body: Colonial Projects and the *lusus naturae* in the Projects’, Gulliver is, “a projector who represents both the problematic logic of the colonizer and the problematic effects of projection on the colonized” (2012, p. 152). Moreover, beginning my analysis with Gulliver’s third journey in particular, ‘A Voyage to Laputa, Balnibarbi, Luggnagg, Glubbdubbdrib, and Japan’, I will bring the main theme of my thesis—the analysis of the discourse of science (as it was developing at the time) and its impacts on the representation of the Indigenous/non-white Other—into focus to unravel what Pugliese calls the “anterior plurality of moments” (1996b, p. 278). At such a formative time in the establishment of these enduring discourses we are introduced to the fruitful character of the ‘projector’ who stands as an avatar for the many players exercising said discourses.

On his third journey, ‘A Voyage to Laputa, Balnibarbi, Luggnagg, Glubbdubbdrib, and Japan’, Gulliver visits the Grand Academy of Lagado, an institution set up with the aim of “putting all arts, sciences, languages, and mechanics on a new foot” (1988 [1726], p. 204). Although Gulliver is represented as being curious and open to the ideas he might find in the Grand Academy, having considered himself a projector in his youth (p. 211), he is more than just an “empirical observer” (Phiddian 1998, p. 52). Gulliver operates as Swift’s satirical spy as he speaks in deference to the generic conventions of colonial travel literature. Spratt argues that Swift’s Gulliver is:
... constantly invoking England’s colonial powers to justify himself and his travels, Gulliver exhibits a projector’s preoccupation with the governmental and economic structures of the nations he visits (2012, p. 138).

Swift persistently insinuates the issue of Ireland and its fractious colonized relationship with Great Britain, but never more so than when Gulliver describes how the farms of Laputa and Lagado are rendered fallow and “the whole country lies miserably waste, the houses in ruins, and the people without food or clothes” (Swift 1988 [1726], p. 210) because of the policies of the realm to favour research over feeding their fellow citizens. The relentlessness, even in the face of failure, and as a metaphor for colonial power and the momentum of change in this era, is further expressed by Gulliver when he opines, “instead of being discouraged, they are fifty times more violently bent upon prosecuting their schemes, driven equally on by hope and despair” (Swift 1988 [1726], p. 210). It is also in the allusions to the political realities of the day that Swift hones his satire to its sharpest edge.

Gulliver’s proto-scientific observational tone gives further air to an existential voice, against the petty occupations of humankind and its institutions, as he laments the collateral damage done to the citizens of these realms where the pursuit of knowledge is oft times to the detriment of the pragmatic concerns of basic survival:

How low an opinion I had of human wisdom and integrity, when I was truly informed of the springs and motives of great enterprises and revolutions in the world, and of the contemptible accidents to which they owed their success (Swift 1988 [1726], p. 237).

The Grand Academy of Lagado stands as an example of these “contemptible accidents”, and although the above is by no means a close critical analysis of Swift’s literature, in drawing on aspects of his work, specifically Gulliver’s Travels, to illuminate historical tensions and pre/tensions rife in both the scientific and colonist projects of the eighteenth century this engagement also demonstrates the imperviousness of these projects to satirical attack.

The projectors in the Grand Academy of Lagado have long been considered a satirical allegory for the pretensions of the Royal Society in England (Wedel 1926; Nicholson & Mohler 1937; Sutherland 1957; Rogers 1975; Sherbo 1979; Phiddian 1998; Spratt 2012). The satirical absurdity is highlighted in projects concerned
with how to “extract sunbeams from cucumbers” (Swift 1988 [1726], p. 212) or, in the second mention of faecal enquiry for the chapter, how one might, with an alchemist’s obsession, return faeces to its original food states rather than researching beneficial methods of improving crops and feeding people. The first mention of faeces in this chapter is on the flying island of Laputa where it is theorized that seditious people could be identified by the quality of their stool – the original form of muckraking (Swift 1988 [1726], p. 226). Literary analysts argue that as *Gulliver’s Travels* was being written Swift was aware that the speculations of the Royal Society were as much specious as they were illuminating in furtherance of what we now call scientific knowledge (Nicholson & Mohler 1937; Rogers 1975; Patey 1991). Swift’s critiques notwithstanding, The Royal Society maintains its influence into the twenty-first century.

As I have suggested earlier, and in keeping with Swift’s allegorical narrative, the age of projectors stands as a useful metaphor to interrogate the way colonial power was exercised not least in the obvious simile of the projector as being one who projects a vision, a value, an ideal, not just into the activity of being a projector but into those material entities being represented by that vision whether they be political, technological or the early scientific representations of the Indigenous/non-white Other. Initially, in the era of Swift (1667–1745), which is broadly concomitant with the transition period leading into the Industrial Revolution (Temin 1997; Mokyr 1999; Allen 2006), ‘projector’ was the term used for the people who embarked on creating inventions, mercantile activities, and scientific endeavours. Scientists at this time were referred to as natural philosophers (Patey 1991; Phiddian 1998), a nomenclature of status; however, this nexus of emerging knowledge economies and mercantile concerns is described as “a bustling, uncerebral world of entrepreneurs and inventors” (Rogers 1975, p. 261), which had as their focus, the economic development and the furthering of British Imperial ambition. Alex Keller (1966) and J. D. Alsop (1991) point out that ‘projectors’, at least the ones most successful in gaining governmental patronage, were also aggressively imperialistic. Securing the geographical importance of Swift’s satirical attention to the age of projectors and its links to Britain, Keller contends that the age of projectors was especially relevant to England (and
France), as England had been perceived as a technologically and economically “backward” region compared to “Northern Italy and the Low Countries,” (1966, p. 467) and therefore ripe for rapid development. Keller also acknowledges the cost of such an unfettered rush to development, with the view that:

... those economies which develop later do so at a faster pace, which is, however, accompanied by a sharper sense of social dislocation, has by now become a platitude; and we need hardly be surprised to find it equally true three centuries ago (1966, p. 468).

Keller published this argument at a time of global decolonization, post the United Nations Resolution 1514 (UNR 1514) of December 1960, which was also known as the Declaration on the Granting of Independence to Colonial Countries and Peoples, and provides a productive link to the idea of continuity of colonization, in spite of the mechanics of political decolonization, because of an enduring mercantile episteme that has never given over its colonial realm.\(^5\)

The age of projectors encompassed a multi-faceted endeavour of not only the internal projectors, developing Britain towards being a power in the Industrial Revolution, but also in strengthening its mercantile, religious and scientific endeavours, in the service of becoming a colonial power; a projection not unrelated to the tracks of industrial development. Given the pragmatic descriptions of the concerns of the age of projectors, Spratt is unambiguous about the discursive thrust of the voyages of discovery as represented in Swift’s writing:

... by virtue of its generic aims, one that links the individual with society, as well as scientific practice with government policy, Swift’s satire exposes the relationship among economic, scientific, and colonial modes of hegemony (Spratt 2012, p. 152).

This discursive nexus made the voyagers of discovery, such as Dampier, Cook and de Bougainville, projectors in their own right. In the epistemic reflections produced in their travel diaries, as an example of the genre, we can see how these “modes of hegemony” worked to reinforce and stabilize the representations of the Indigenous/non-white Other.

\(^5\) It is worth noting that eighty-nine countries voted to ratify the declaration, none voted against, but nine nations did abstain. Of those nine, eight – Australia, Belgium, France, Portugal, Spain, South Africa, the United Kingdom and the United States of America – can all be considered important in the global colonial matrix (UN Bibliographic Information System, online, viewed April 25, 2016).
2.3  Science’s links to travel literature

Swift read and was inspired by many of the contemporary travel diaries published for public consumption and this ‘cross pollination’ is an example of the traffic in representations in the evolving circuit of scientific culture and literary culture. Just as literary authors such as Swift draw on non-literary sources to animate narrative representations, so too scientific writers refer to literary representations to provide embodied presence for the human objects of ‘discovery’. Given this traffic in representations, the diaries of William Dampier were an important element of Swift’s library and researchers have commented on how Dampier’s work, as well as that of other contemporary travel writers and publishers such as Hakluyt and Purchas, had circumstantial import into the penning of *Gulliver’s Travels* (Nicholson & Mohler 1937; Rogers 1975; Sherbo 1979).

Dampier and other travel writer’s claims to veracity in the multitude of published travel diaries also helped Swift craft a tone in the book that was easily recognisable to the contemporary reading public and imbued that same claim of veracity for his critique of colonialist expansionism. Many writers in the travel diary genre had claimed, by virtue of their imbrication into the institutional network of knowledge creators via institutions such as the Royal Society, that ‘truth’ and reputation were the foundation of their work. As Arthur Sherbo points out:

> … like all other narrators of tales of strange peoples and customs or editors of collections of travels, claimed either to be utterly truthful himself or to have transmitted the words of others verbatim (1979, p. 117).

The claims to truth in the projector’s vision—or more accurately, imagination—bound up as it was in the divine colonial project, secured the varied representations of Indigenous/non-white Others. Patriotism, relating to not only fealty to the relevant empire, but a Pangloss about all things European/Western, all things considered civilized, also entrenched a right to colonize the exotic “flora and fauna” and “modes of life totally alien to Europeans” (Sherbo 1979, p. 126) by any means necessary whether that be with “the Bible, or with baubles for the natives, or, literally, with weapons” (Sherbo 1979, p. 126).
Reflecting back on the Hagahai’s earliest sustained contact with missionaries, in the 1980s, the standard protocols of colonization—‘baubles’ and the Bible—bear remarkable similarity to the approaches William Dampier and James Cook made to the Indigenous people they encountered on the west and east coasts of *Terra Australis*. Both Dampier and Cook had recorded similar experiences of the local Indigenous populations shunning their respective material offerings and to shun the baubles of the voyagers was tantamount to shunning the jewels of civilisation.

Of its time, travel writing was an important genre of literature, not only because it was popular and widely read by the educated classes of Europe who digested and circulated the representations of Indigenous/non-white peoples exemplified in their prose, but also because it was an important artefact of the new scientism of the age. The importance of this observational speculation was secured by much of it appearing in the journal of the Royal Society, *Philosophical Transactions*. Nicholson and Mohler note that between 1700 and 1720, in particular, that much space had been “devoted in the *Transactions* (sic) ... to the accounts of travel”6 (1937, p. 303). Edward Said argues that the “increasing influence of travel literature, imaginary utopias, moral voyages, and scientific reporting” (2003, p. 117) founded the representations of the Indigenous/non-white Other in the popular imagination. It also secured the structures of canonical scientific knowledge bound up in the social, religious and cultural hegemony of the day because, as fantastical as the “innumerable speculations on giants, Patagonians, savages, natives, and monsters” (Said 2003, p.117) were, Europe remained as the central pillar of the colonial project.

Said elaborates on the veracity encoded in the tenor of the evolving scientific discourse with his observation that, “[S]cience gives speech to things” (2003, p. 140). By this he means that the language of science in turn authorizes the colonial scientific voice to project its discourses onto the unexplained and readily construct culturally and historically specific representations of the Other. *Gulliver’s Travels*, although fictional, provides a mimetic rendition of contemporary travel literature

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6 Indeed, subsequently, much of the work of James Cook was also published in the *Philosophical Transactions*. Louis de Bougainville, French explorer of the South Pacific and contemporary of Cook, also had many writings published in the journal of the Académie des Sciences, *Comptes rendus de l’Académie des sciences*. 
that contrives to explain the world with reference to the embodied, culturally constructed points of view of the traveller, always maintaining that the central vision, the eyes of the colonizer, voyager, scientist, ‘projector’ represent the observations of a civilised and objective gaze. Douglas Patey comments that Swift’s satirical rendition of the ‘privileged narrative voice’ operates “in the realm of certainty” (1991, p. 812) that is reflective of the representations presented in travel literature, as well as the machinations of “traditional (sic) authority” (1991, p. 812) that was capable of covering over any infelicities in the “logical proof” (1991, p. 812).

It is Patey’s enunciation of ‘traditional authority’ that propels us here to identify the main discourses that delineated the episteme of the day. Religion, mercantilism, and the developing language of science did this in a very recognisable way that privileged relationships of power as the constitutors of truth. Certainty in scientific imagination, in the projection of surety, as an idea, works well with the relationships of power set up by the religious discourse.

Nicholson and Mohler elaborate on this fundamental discursive influence on the burgeoning scientific knowledge during Swift’s time showing how the power of religious institutions and religious doctrine still held strong sway. As an example of this moment, Nicholson and Mohler comment on the work of Edmund Halley, who, as well as writing treatises on comet motion, had also presented a paper to the Royal Society “on the subject of Noah and the Flood!” (1937, p. 315). They argue that such was the episteme, relating to the power of religion, that the writing of the new science was often entwined with Biblical analysis in such a way as to, “keep the reverence for the Bible, yet make it consistent with scientific thought” (Nicholson & Mohler 1937, p. 315).

The enduring power of religious institutions, Christian institutions, insisted that all knowledge had to be filtered through the dominion of the church. Moreover, this era was also the time when the divine right of kings was exerting its influence in Protestant reformation Europe. In the English context, Anglican Bishop of Rochester John Buckeridge, ratified divine right in a sermon delivered in 1617 when he proclaimed that:
For the King is first among men, and next, or second to God; neither Pope nor people stand betweene God and the King: For he is Gods Minister, not mans. He is superiour and above all men, and inferiour, and under God only. Hee hath no equall in earth, and no superiour, but in Heaven; greater than all men, and solo Deo minor, lesser then God only, from whom he immediately receives his power over all men, and all sorts of men, Priest and people, in all causes Civill and Spirituall (sic) (quoted in Burgess 1992, p. 857).

In the invocation of guidance to ‘truth’ through God in the legal, judicial and governmental contexts, European society was governed by a profoundly entrenched religious episteme that could not be unhitched from the exercise of science in that context. Therefore, the adherence to an ethereal and an earthly hierarchy also impacted on the ways scientists and philosophers could present their messages. Moreover, these parallel discursivities worked in tandem in the rhetoric that constructed the representations of the Indigenous/non-white Other.

2.4 Science: excavating discursive foundations

In theorising the changing of the guard with respect to the status and positioning of power between religious and scientific discourses Michel Serres (1995a) charts a course for this evolution post French Revolution. However, Serres’ argument is not one of total replacement but rather an archaeology of this moment in history whereby the establishment of science’s status as a dominant discourse borrows, and indeed, inhabits the familiar tropes of religion. He contends that: “...we have lived with the self-evident fact that science and the rational form a single united domain, though in fact it is the first which has claimed the second for its own” (1995a, p. 428). Because of the efforts of Thomas Aquinas et al. to constitute Theology as a science, and thus a rational pursuit, as elucidated by Paul Benoit, the very act of establishing the status of this knowledge, “helped to define science as it was being born in the West” (1995a, p. 245). The links between science and religion as argued by these writers are formative and demonstrate the strength of religious discursive formations. As Serres further asserts:

There is therefore no functional or structural difference between the world of faith in a transcendent God and the belief that there exists a scientific object independent of us and capable of being expressed in and through a universal truth, binding upon all and objective in itself ... (1995a, p. 454).
Thus, science was easily adopted into the frameworks of power that had been established by the exercise of religious power but also because the religious impulse had never functionally disappeared but had been assumed by science.

The religious regime of knowledge demanded order and hierarchy (Bryson 1999) and so too did science, which inherited the hierarchy, especially as it related to the representations of the Other. It fixed the representations of the Other and offered little, if any, opportunity to improve status once a position had been secured and identified in the scientific matrix of knowledge. The ‘Great Chain of Being’ is one of the earliest taxonomical systems that operated in the developmental stages of the scientific era with its “widest diffusion and acceptance” in the eighteenth century (Lovejoy 1964, p. 183). Its explicitly Romano-Christian hierarchy of existence held the perceptions of early scientists in thrall and as such impacted the way in which observation and representation were described and written about. It was inevitable then that when ‘monsters’, ‘lusus naturae’ (freaks of nature), and other strange configurations of the European imagination that approximated human form were encountered, the scale of humanity would be formulated in contrast with the already ordained position of the European. These early classifications, precursors to Linnaean taxonomy and Darwin's treatises on evolution, maintained their potency even as Linnaeus and Darwin inched their ideas from a theological to a scientific domain.

The Great Chain of Being stratified mankind’s place in the world as a ‘blessed’ nexus of God, science and the harbingers of white power throughout the New World, and provided projectors, voyagers and the evolving colonial projects with much wind for its sails. To understand the nature of this ideology it is worth excavating some of the underlying assumptions that gave this ideology its power. The Great Chain of Being is a hierarchy of creatures and worldly matter, a scala naturae developed and adapted from the concepts of Aristotle and Plato, which strictly and theistically placed life on planet earth into a taxonomical system. Arthur O. Lovejoy best explains the hierarchy as such:

The chain consists of the totality of monads, ranging in hierarchical sequence from God to the lowest grade of sentient life, no two alike, but each differing from those just below and those just above it in the scale by
the least possible difference ... the gradation is defined primarily in psychological rather than morphological terms; it is by the levels of consciousness that severally characterize them, the degrees of adequacy and clarity with which they "mirror" or "represent" the rest of the universe, that the monads are differentiated (1964, p. 144).

With God at the apex of the chain, and plain rocks at the bottom, humanity bridged the gap between the spiritual and the earthly plane. This positioning as the bridge between the spiritual and earthly plane set a standard for human behaviour that privileged religious desire, rationality and 'higher' order emotions of love and imagination – indeed a schematic of psychological and moral imperatives (Campbell 1980, p. 53; Bryson 1999; Moore 2008a, pp. 68–73). It also highlighted the limitations of humanity that differentiated it from the spiritual realm of God, and sub categories of angels, in that humans are bound by their manifold corporeal desires.

Given the necessity to identify difference in the chain, one can easily contemplate that different humans, and the hierarchizing of Others, became the project of the intelligentsia of the era. These ideas were being applied because of a profusion of reports coming from around the globe as the voyages of discovery stretched farther and further into realms unknown to the European story of being. Under these circumstances the Great Chain of Being was used to create a taxonomy of fixity. Foucault extrapolates on Swiss botanist Charles Bonnet's (1720–1793) conception of the chain to highlight the fixity inherent in the system:

He implies further that this 'evolution' keeps intact the relation that exists between the different species: if one of them, in the process of perfecting itself, should attain the degree of complexity possessed beforehand by the species one step higher, this does not mean the latter has thereby been overtaken, because, carried onward by the same momentum, it cannot avoid perfecting itself by the same degree (1970, p. 165).

This ontological fixity had a profound impact on the conception of the Indigenous/non-white Other during the eighteenth century. Often created in sub categories in between the flora and fauna listed in the Great Chain of Being, Indigenous/non-white peoples, based on the prevailing conceptions of man's positioning in the hierarchy of the chain, were never seriously considered as part of the brotherhood of man in the prevailing episteme. It is clear that Indigenous
peoples, and those people of colour and 'strange' cultural design, were never substantially given any consideration nor possibility of advancing into brotherhood with the 'civilised', and closer to God, people of the West.

2.5 The ig/noble savage dichotomy

As an example of the representations of the Indigenous/non-white Other under the influence of the Great Chain of Being it is worth briefly interrogating the idea of the Noble Savage as a contested representation of the Indigenous/non-white Other that is germane to the age of projectors. Considered the human ideal, as is often paraphrased from a Rousseauean primitivism, of man in synchronicity with nature, the Noble Savage was the best of what humans could be away from the infelicities of the 'modern' world of Europe. In the Pacific context these ideals are still traded on today in numerous advertising campaigns describing tropical idylls (Campbell 1980, p. 45). However, Campbell argues that in this limited reversal of discourse:

The entire, intricate complex of ideas about non-European peoples involving a multiplicity of images in addition to that of the mid-eighteenth century Noble Savage, belongs unequivocally to the intellectual history of Europe, not to the social history of the Pacific ... (1980, p. 56).

Campbell expounds on a dialectic that nurtured both poles of the Noble/Ignoble savage dichotomy. He explains the complexity inherent in that system of thought by suggesting, “[T]he existence of the idea of the Noble Savage is intimately though indirectly related to the existence of the irrational dread of cannibalism, almost in the sense that one is dependent on the other” (1980, pp. 57–58). The writings of Michel De Montaigne also postulate on the foundations of this Janus-faced position of the Noble Savage, in the context of its intellectual historical foundations, in his 1588 essay On Cannibalism. De Montaigne compares the “barbarity” of the Noble Savage to the European, whom in his estimation “surpass them”, whilst also elevating an Edenic mythos around the Noble Savage by suggesting that, “[T]hey are still at the happy stage of desiring no more than their simple appetites demand; everything beyond that is to them superfluous” (1993 [1588], p. 114). There is no evidence that De Montaigne ever experienced a ‘primitive’ culture first hand. His commentary came from a dedication to his library and as such relied on his privilege to allow his learned opinions to thrive.
At no point was there an egalitarian dialogue whereby the Indigenous/non-white Others might be able to speak of their existence without the interpretive hand of the scholars, authors, clergy and scientists being present. So the concept (and representation) of the Noble Savage, as it stood, was in essence an allegorical tool that elided the stories of the Indigenous/non-white peoples in the soon-to-be colonized territories. These competing Eurocentric representations did nothing more than underline the expanding colonialist nature of the West over the South Pacific as these representations were solely a construct of the dialectic of the moment. To reassert Césaire, it was a society and project bent on domination of the welfare and development of the 'primitive', and ultimately uncivilised peoples of colour, in the geographical boundaries of the Pacific and beyond.

As such, the stereotypical representations of the Indigenous peoples of the Pacific held much more in common with Dampier's description of the Aboriginal people he encountered on the Western Australian coast:

The inhabitants of this country are the miserablest people in the world. The Hodmadods of Monomatapa, though a nasty people, yet for wealth are gentlemen to these; who have no houses, and skin garments, sheep, poultry, and fruits of the earth, ostrich eggs, etc., as the Hodmadods have: and, setting aside their human shape, they differ but little from brutes (1927 [1697]).

Dampier was as seminal in the conception and description of Indigenous/non-white Others, as ignoble savages, to Cook as he was to Swift. This in turn had a ripple effect in the way that it would reinforce the episteme to inflect the scientific workings of the voyages and voyagers of discovery as can be seen in Captain James Cook’s entry in the Endeavour Journal where he postulated that the people of Tierra del Fuego "are perhaps as Miserable a sett of people as are this day upon Earth" (cited in Smith 1950, p. 75).

As projectors, the voyagers, scientists, colonialists and their contemporaries set about their work and the prevailing episteme was crucial in framing the representations produced in this era. The strength of the religious dialectic in framing these representations is what Campbell refers to as the “invisible baggage” (1980, pp. 58–59) of colonialism. The idea, the story, of the characters that inhabited the rest of the world had been theorised, described and analysed quite
deeply before the voyages of discovery blew into the atolls of the South Pacific. Indeed, the construction of 'blackness' was well established even prior to concerted efforts to explore and colonize. Indigenous academic Aileen Moreton-Robinson explains the religio-suspicious definition of 'blackness' that was expounded in the sixteenth century:

... it was identified in the Oxford English Dictionary as being ‘deeply stained with dirt; [...] Foul, iniquitous, atrocious, horrible, wicked [...] Indicating disgrace, censure, liability or punishment, etc’ (Jordan 1968, p 7). Over the next century the meanings attached to 'blackness' as a colour became transposed ephemerally to represent the black body as the signifier of inferiority. By the time Cook ‘discovered’ Australia the black/white binary had become part of the English language and the inferiority of black people was entrenched in the discourse (editing in situ 2009, p. 28).

‘Blackness’, cannibalism, lustful immorality held the ultimate influence in representations of the Indigenous/non-white Other (Campbell 1980, pp. 58–59). The market place of colonialist expansion was not just for the resources and geographical reach; it was also about knowledge and the currency such burgeoning 'scientific' observations were having in an increasingly knowledge bound society. It is also important to note that that knowledge, simultaneous to this scientific curiosity with Indigenous/non-white Others, yet consistent with the religious rationality in the episteme, inspired the eruption of Evangelical Christian missionary groups who were often the vanguard of colonial settlements around the Pacific. The influence of the representation of the Noble Savage was a limited one and Campbell makes a curious note that the perceived “imperfections”, in the Noble Savage, that were held by Christian missionaries “were likely to be increased by contact with Europeans” (1980, p. 47).

In the fourth chapter of Gulliver's Travels, “Voyage to the Country of the Houyhnhnms”, Swift deploys both sides of the Ig/Noble Savage binary with reference to the un-examining hoi polloi, the worst examples of human like behaviour, being represented by the brutish and ignoble Yahoos (with more references to faecal displays). In a description that echoed the sentiments of Dampier’s diary and consistent with the extant episteme, Swift, through Gulliver, describes these characters thus:
Upon the whole, I never beheld in all my travels so disagreeable an animal, nor one against which I naturally conceived so strong an antipathy (1988 [1726], p. 266).

The Houyhnhnms, by comparison, are a horse race whose name indicated that they were ‘the perfection of nature’ (Swift 1988 [1726], p. 280). Gulliver is seduced by the immense grace and civility of the Houyhnhnms but as time draws on the horse society can no longer brook the miscegenation of friendship between Gulliver’s Houyhnhnm host and his own countenance as a Yahoo even though Gulliver had ‘some rudiments of reason’ (Swift 1988 [1726], p. 333). This marginalisation, based on visual aesthetics, is thoroughly consistent with representations of the Indigenous/non-white Other at this time.

Swift’s reflection of the narratives replete in the travel diaries of his era firmly links the character of the Yahoo with the Indigenous/non-white Other yet it is also and inevitably a description which reflects strongly back onto Gulliver as a representation of European civility. Gulliver is a useful vessel of satire against his own culture yet, in the final analysis, his experiences with the cultures he meets does nothing but imbue a self-flagellating hatred of his own culture and its vices, a melding of Said’s commentary on the superiority of European identity (2003, p. 7) and de Montaigne’s observations noted above, that ultimately serves to underline the myopia implicit in the episteme:

Here commences a new dominion acquired with a title by divine right. Ships are sent with the first opportunity, the natives driven out or destroyed, their princes tortured to discover their gold, a free licence given to all acts of inhumanity and lust, the earth reeking with blood of its inhabitants: and this execrable crew of butchers employed in so pious an expedition, is a modern colony sent to convert and civilize an idolatrous and barbarous peoples (Swift 1988 [1726], p. 352).

This rationality is bound in the European visage of Enlightenment thinking that is “steeped in dualist discourse: preaching enlightenment, scientific rationality, and humanism but at the same time practicing violence and irrationality” (Vermeylen et al. 2008, p. 207) and continues to view with scepticism the ‘savagery’ and strangeness of other people’s customs.

The repeated scatological references in the Academy of Lugado and in the land of the Houyhnhnms literally point to a world that is full of shit and the final damning
statement of humanity's fixity is Gulliver's realisation that rationality is not for humanity. Finally, however, the play of language, which is certainly the primary dialectic, belongs to the language of the colonizer in all his guises: priest, voyager, missionary, scientist. No matter what questions Swift's satire intoned, no matter what questions can be asked of the colonizer, the colonizer inevitably maintains their status and position to exercise power over the regimes of truth, the 'circuit of culture' and the hierarchy of monads.

2.6 Colonial science and the fixity of specimens

To elaborate further on the fixity of the Indigenous/non-white Other within scientific discourse as a function of the episteme operating at the time of contact with the voyagers of discovery I now draw on the character of Red Peter from Franz Kafka's short monologue, A Report for an Academy (2003 [1917]). I read Red Peter as metaphor and allegory productive to this discussion. I contend that the journey to 'civility' described in Red Peter's report is implicit in the experience of most colonized communities. In a colonialist context Indigenous/non-white Other's redemption could never be fully realised according to the 'hierarchy of monads' and is the raison d'être of the colonial projector, whether they be voyager, colonialist or missionary. It is important to acknowledge that Kafka's 'civilised ape', Red Peter, is dangerous. The representation of the 'civilised ape' is one that has the potential to slip into the most heinous stereotypes of the 'civilisation' of the Indigenous/non-white Other that have been mustered in the literature of colonization around the world. As we have seen, under the guise of scientific impartiality, Indigenous/non-white peoples around the world were described and categorised and secured in a system of domination and exploitation. Red Peter, however, holds the mirror up to the academy in a brief reversal of scientific discourse. He is presenting to the audience. He is looking out from his frame of reference to explain and highlight the limitations of being able to report from his position as a civilised ape, reminding the 'academy'/audience/world that almost all semblances of his 'ape' nature would be impossible to report on because:

This achievement would have been impossible if I had stubbornly wished to hold onto my origin, onto the memories of my youth. Giving up that
obstinacy was, in fact, the highest command I gave myself. I, a free ape, submitted myself to this yoke (Kafka 2003 [1917]).

As a direct result of the civilisation process Red Peter is cut off from those elements of his primary self as his “development was whipped onwards” (Kafka 2003 [1917]) and he seeks to maintain the civility imposed on him and exercised by him in order to pass, and parse, as a civilised Other rather than having the freedom of civility into which one is born/takes for granted.

There is an element, circumstantially and metaphorically, of Red Peter being what Henry Louis Gates identifies as the Signifying Monkey:

The ironic reversal of a received racist image in the Western imagination of the black as simianlike, the Signifying Monkey - he who dwells at the margins of discourse, ever punning, ever troping, ever embodying the ambiguities of language - is our trope for repetition and revision, indeed our trope of chiasmus itself, repeating and reversing simultaneously as he does in one deft discursive act (in Rivkin & Ryan 2004, p. 988).

Gates’ explanation of the allegory of the Signifying Monkey, a figure in African mythology, is situated in the narrative traditions of African-American literatures. Although stemming from disparate historiographies, the fortuitous parallel concerns, of Red Peter and the Signifying Monkey, allow for a serendipitous (and careful) merging of their critical power. Circumstantially, Red Peter bares a limp similar to the monkey Esu (in Rivkin & Ryan 2004, p. 988) from the Yoruba myth on which the Signifying Monkey is based. Yet it is in Red Peter’s play of language, especially in relation to his ape past and his birth into civility through the “distant hole” through which he cannot return (Kafka 2003 [1917]), that he embodies more closely the simultaneous mimicry, parody and playful allegory of the Signifying Monkey.

Red Peter, in the early dialogue of his report, establishes a conventional story of capture and confinement. It is when he begins the reportage of his indoctrination into civility that Red Peter begins his play as the Signifying Monkey. His report to the Academy is done in self-deprecatory humility, which befits the tone of one who has been civilised, but there is a sting in his narrative self-awareness:

Speaking frankly, as much as I like choosing metaphors for these things—speaking frankly: your experience as apes, gentlemen—to the extent that
you have something of that sort behind you—cannot be more distant from
you than mine is from me. But it tickles at the heels of everyone who walks
here on earth, the small chimpanzee as well as the great Achilles (Kafka
2003 [1917]).

His dialogue acknowledges his interpolation into a civilised dialectic in his
preference for metaphor and references to broader philosophical/scientific
concepts such as evolution. Yet, in his acknowledgement of the hierarchy from
small ape to the gods, and its resonance with the categorisations of humanity on
the Great Chain of Being, Red Peter plays doubly on the irony of his civility; he is
civilised enough to present his report in the academy, yet he will never be as
civilised as the unseen academy audience. Gates references this narrative trend, as
extrapolated in his work on the Signifying Monkey, when he suggests:

... signifying can also be employed to reverse or undermine pretense or
even one’s opinion about one’s own status. This use of repetition and
reversal (chiasmus) constitutes an implicit parody of a subject’s own

Red Peter, commenting on his earlier struggles to assume the violent lessons of his
captors, reiterates the parody of his mimicry whilst looking for ‘a way out’ when he
suggests that:

I soon realized the two possibilities open to me: the Zoological Garden or
the Music Hall. I did not hesitate. I said to myself: use all your energy to get
into the Music Hall. That is the way out. The Zoological Garden is only a new
barred cage. If you go there, you’re lost (Kafka 2003 [1917]).

Red Peter further remarks on his tenuous exercise of freedom, in spite of his choice
away from the zoo, that fixes his position as object of the academy’s gaze.

It is that position of specimen, the *lusus naturae*, in front of the academy that sets
the power relationship and ultimately sets the audiences, from within and outside
the story, as the arbiters for the regimes of truth being applied. As Red Peter
explains:

And such progress! The penetrating effects of the rays of knowledge from
all sides on my awaking brain! I don’t deny the fact—I was delighted with it.
But I also confess that I did not overestimate it, not even then, even less
today. With an effort which up to this point has never been repeated on
earth, I have attained the average education of a European man. That would
perhaps not amount to much, but it is something insofar as it helped me out
of the cage and created this special way out for me—the way out of human beings. There is an excellent German expression: to beat one’s way through the bushes. That I have done. I have beaten my way through the bushes. I had no other way, always assuming that freedom was not a choice (Kafka 2003 [1917]).

Red Peter acknowledges the fixity of his situation, in spite of the efforts made to teach, acculturate and assimilate his existence, that full admission to the society that surrounded him was never a ‘choice’ he could exercise. Kafka’s metaphor serves well for the realities facing those who encountered the tsunami of white colonization.

The boundary region whereby the marginalised body is held at bay from a complete transition into a civilised entity is where the fixity lies; because of the episteme that delimited the scope of representation of the colonial projectors, using the proto-scientific classifications of the Great Chain of Being, Indigenous/non-white Others are placed in a position of infrahumanity. Infrahuman is a term Paul Gilroy (2003; 2006; 2014a; 2014b) deploys to identify the position of peoples dominated, if not overwhelmed, by the praxis of colonial discourse, and aligns with Moreton–Robinson’s elaboration of other-worlding imbued in the colour coding of the Indigenous/non-white Others in the colonial matrix. Gilroy argues that the hierarchy, the “geometry involved in locating infrahumanity” (2014a, p. 35):

... manifests not the ultimate unity of all varieties of life but a complex gradation of the human configured so that some kinds of people are closer to nature than others whose more highly valued lives are endowed with a variety of historicality that guarantees their dominance and superiority (2014a, p. 36).

Gilroy directly refers to Kafka’s generic considerations of placing the “human, infrahuman and the animal in disturbing relation” (2014a, p. 37) thereby intimating a multivalent discursive relationship that not only calls into being the boundaries and prohibitions of representation but also the difficulty of mobility within these spaces.

With regard to the use, and ultimate effectiveness, of mimicry and mimetic expectation that is encoded in the colonization of Indigenous/non-white Others Bhabha concludes that:
The ambivalence of colonial authority repeatedly turns from *mimicry* – a difference that is almost nothing but not quite – to *menace* – a difference that is almost total but not quite (1984, p. 132).

In the light of the metaphor of Red Peter, combined with the commentary in this chapter thus far, and the further working of Bhabha's discussion of mimicry and its incomplete figuring of the Indigenous/non-white Other, I wish to show some genealogical samples of the fixity imbued in the representations of Indigenous/non-white Others as examples of the human specimen: Aotourou, a Tahitian islander who joined de Bougainville in 1768 as he voyaged through the South Pacific and Angelo Soliman, a Viennese courtier who, post death in 1796, transmogrified into a grotesque museum specimen. Aotourou was just one example of a plethora of human specimens taken or transported back to Europe during the voyages of discovery.

The French voyager Louis-Antoine de Bougainville's (1772) diary describes the “zeal” of Aotourou’s desire to join his crew as an emissary on behalf of the people of his island. Aotourou's knowledge of the neighbouring islands and inhabitants was a useful addition to the knowledge being collated by the French voyagers and de Bougainville accords Aotourou with some respect that aligned with his own projector's vision of his voyage when he ruminates:

> Besides, supposing our country would profit of an union with a powerful people, living in the middle of the finest countries in the world, we could have no better pledge to cement such an alliance, than the eternal obligation which we were going to confer on this nation, by sending back their fellow-countryman well treated by us, and enriched by the useful knowledge which he would bring them (1772).

The well-established directionality and bias of this exchange of knowledge is familiar with the travel diaries of the era and the privileging of European civility and it is also remarked upon by de Bougainville when complimenting the effort Aotourou made to imitate their physical behaviours “exactly” (1772). Aotourou walked the streets of Paris “without once missing or losing his way” (1772), he mimicked the pleasantries of the people who entertained him and he developed an appreciation for opera. Yet for all this ‘civility’ there was the glaring deficiency of his inability to learn any French language from his stay. De Bougainville, in the
culturally-encoded racist language of the day, attempted to theorise Aotourou’s lack of language acquisition:

The Taiti-man (sic), on the contrary, only having a small number of ideas, relative on the one hand to a most simple and most limited society, and on the other, to wants which are reduced to the smallest number possible; he would have been obliged, first of all, as I may say, to create a world of previous ideas, in a mind which is as indolent as his body, before he could come so far as to adapt to them the words in our language, by which they are expressed (1772).

The English translator of de Bougainville’s diary also sees fit to enter into the theorising of Aotourou’s insufficiency when he interjects in a footnote that despite the author’s “pleading” on behalf of Aotourou, the Englishmen who saw him in Paris, and English reports from Aotourou’s own countrymen, concluded he was “one of the most stupid of fellows” (1772).

Bhabha (1984) theorised mimicry overall as a constrictive quality, yet, with severe limitations, it was also theorised as a productive one:

… mimicry is like camouflage, not a harmonization or repression of difference, but a form of resemblance that differs/defends presence by displaying it in part, metonymically (1984, p. 131).

Aotourou, for all his willingness, could not come close to the margins of ‘civility’ because of his deficits in the primary tool of the colonial dialectic, language. Aotourou left France with money and provisions to help transform his homeland but died of smallpox on his journey home (Roberts 2007, p. 126).

Angelo Soliman (1721–1796) in contrast, acquired fluency in the language of the dominant culture and so had a modicum of respect as evidenced by his membership of the Freemasons (Nettl 1946; Seipel 1996; Morrison 2011). Yet after his death, the Viennese society that once lauded his presence transformed his corpse into an exhibit in the “Zoological Museum” of Vienna (Seipel 1996, p. 3). Sold into slavery as a boy, Soliman had the good fortune to find himself in the service of prominent families in the European court until finally coming into the service of “Prince Wenzel Lichtenstein” (Nettl 1946, p. 43). Soliman’s life in the service of the Viennese court afforded him an elevated level of status and material comfort until his secret marriage to a well-connected widow from the Netherlands
(Nettl 1946, p. 43). As a result of the miscegenation Soliman was fired from service to Prince Lichtenstein yet continued to live in modest comfort.

Soliman’s story is not so extraordinary, given his capability to manoeuvre within his circumstance, and given that up until his marriage he was in service to the nobility. His regard and status, on a surface reading, endowed him with a measure of privilege that he was free to exercise. However, the commentary on his representation of himself, via his clothing, his position within his Masonic lodge, and the preparation of his remains as museum exhibit, bring us back to the fixity imbued in the bodies of the Indigenous/non-white Other in the age of projectors.

To help direct the further discussion of Angelo Soliman’s fixity I wish to found this next stage of my argument in the following elaboration of mimicry by Bhabha:

Mimicry is, thus, the sign of a double articulation; a complex strategy of reform, regulation, and discipline, which "appropriates" the Other as it visualizes power. Mimicry is also the sign of the inappropriate, however, a difference or recalcitrance which coheres the dominant strategic function of colonial power, intensifies surveillance, and poses an immanent threat to both "normalized" knowledges and disciplinary powers (1984, p. 126).

Heather Morrison discusses in detail the sartorial decisions Soliman made to bridge the cultural strains written on and about his body in the episteme of eighteenth century Europe. Choosing an Oriental style, Soliman’s “dress subsumed his identity as a black African, in effect denying his real heritage, but also allowed him a position of respect and leadership in a powerful prince’s court” (2011, p. 367). Considering Bhabha’s commentary, directly above, Soliman’s clothing mimicked representations of power from a nobility that had been defeated by the nobility he now served. He embodied, at least in his clothing, the ‘double articulation’ of Bhabha’s schema. Furthermore, the problem of Soliman’s non-whiteness was again doubly articulated in the special role he had within his Masonic lodge.

Soliman had been given an important role, more prominent in French Masonic lodges, of the “fearsome brother” (Morrison 2011, p. 372) that acted as mentor to new initiates into the lodge. As part of the hazing process the initiates had to go through before induction, the initiate had to sit with Soliman:
The “fearsome brother” greeted postulants in a dark room, dressed entirely in black robes or swathing evocative of allegorical death ... The darkness of the room, glimpses of human remains and a coffin, along with strategic torch placement created the impression of a spectral guard not bound by human or natural laws. Soliman’s dark skin contributed to the effects (Morrison 2011, p. 373).

Soliman appeared to understand the limitations of his power and the way it could be exercised in certain prescribed ways in the court of Vienna. Yet there was always the indelible inscription of his existence as infrahuman. In the case of the Masonic lodge, he was the living example of a momento mori; after he died, although many commentators seemed aggrieved at his treatment, because of his position in the court, it is entirely consistent with the scientific episteme discussed in this chapter that he should find his body flayed, mounted, dressed in tribal accoutrement and placed in an exhibit, with other mounted corpses of non-white Others, and decorative representations of flora and fauna, in the Zoological Museum (Nettl 1946; Seipel 1996; Morrison 2011). Morrison sums up the ignominious presentation of Soliman’s remains:

In public view at the imperial collection, viewers who had no experience of Soliman’s humanity were taught that he was one step removed from the animals (2011, p. 375).

I argue that the lessons of Soliman’s imposed and ultimately enforced infrahumanity were well established before his remains went on display at the museum; it is precisely the foundational frame to understanding Morrison’s conclusion. Soliman’s position, even amongst those he counted among his intimates, was always in the pantheon of what Bhabha has categorized as “not quite/not white” (1984, p. 132).

The fixity imbued in the classificatory regimes of the burgeoning scientific discourse, in combination with a contesting yet foundational religious discourse, was always the ultimate arbiter. The episteme was not univocal, as Bhabha’s account of the equivocal ‘not quite’ space identified a room for those willing to play that colonial game, but it always assumed Red Peter’s insightful interdiction, “that freedom was not a choice” (2003 [1917]). Nonetheless, fixity is situated in the classificatory systems that operated around Eurocentric representations of Indigenous/non-white Others and its projections and prescriptions are inherent in
the dominant circuit of culture. The practice of science, and scientists, operated as if the justifications for their actions were *fait accompli*. The epistemic legacies of these historical and ‘traditionary’ confluences are discernible in the reportage of the Hagahai case where redemption through Western scientific endeavour combines with the mercantilism of gene patenting and the capitalist quest for potential profit. I argue that Jenkins’ ongoing conviction that the Hagahai project conformed to appropriate scientific guidelines despite a lack of significant health benefits for the Hagahai, and subsequent criticism of a possible conflict of interest in relation to the gene patenting, can be understood through critical attention to the discursive frameworks shaping and informing her approach. In the next chapter—Chapter 3—I will continue to interrogate these foundations with reference to the ‘nature’ of contemporary scientific practice.
Chapter 3

Wer Wissenschaft und Kunst besitzt
Hat auch Religion;
Wer jene beiden nicht besitzt,
Der habe Religion.

Who owns science and art
Also has religion;
Whoever does not possess those two,
He has religion.

(Johann Wolfgang von Goethe, 1786 – 1830)

Science is a very human form of knowledge. We are always on the brink of the known, we always feel forward for what is to be hoped. Every judgment stands on the edge of error, and is personal.

(J. Bronowski, *The Ascent of Man*, 1973)

3.1 Science in the realm of biopower/biopolitics

Drawing on the discussion developed in Chapter 2, in this chapter I inquire into and critique contemporary discursive practices of science, asking questions about identified relationships to contemporary circuits of culture. This process of critical examination will at times contest the regulatory foundations of scientific practices, specifically, the scientific method. I will analyse how representations of Indigenous/non-white Others, perpetuated and reified in scientific discourse as it developed from the seventeenth and eighteenth centuries, continue to adhere to the biopolitics (a term I continue to explicate as the chapter progresses) of Indigenous/non-white existence as argued in the thesis thus far. In Chapter 1, for example, I contended that twentieth century Western scientists, and the scientific community—those who exercise power in collecting, creating, and explaining knowledge—invoked historically and culturally specific regimes of truth with special reference to Indigenous/non-white communities around the world. The analysis developed in Chapter 1 concluded that key theorists and advocates clearly demonstrated science to be thoroughly imbricated in the contemporary episteme
with respect to the economies of truth/knowledge and power. The resultant symbiosis with the capital economy exerts significant influence over Indigenous/non-white communities. Aimé Césaire, Linda Tuhiwai Smith and Aroha Mead, amongst others, highlight and speak from these marginalised positions to contest the positivism of science and contemporary development politics.

In Chapter 2 I undertook a genealogy of the foundations of science as a method and an example of knowledge creation establishing its authority within the *episteme* of pre-Industrial Revolution Europe. In doing so, I highlighted the development of tropes of the Indigenous/non-white Other and showed how these examples impacted on their representation as a basis for knowledge creation/stabilisation about the Indigenous/non-white Other within the realms of scientific and classificatory language as it developed in this period.

In this chapter I will be drawing on Joseph Pugliese's work on biometrics, which is founded in Foucault's work on *biopower/biopolitics*, with specific reference to DNA technology, as a foundation to further contextualise science as a discursive practice. I will also contextualise the bioprospecting/biopiracy work of scientists and explain the interconnectedness between scientific practice and biopolitics as these systems come into play in relation to the Hagahai case study at the core of my thesis. The discursive imprimatur associated with scientific truth claims is evident in the following reflection of Dr Carol Jenkins about her work:

> The author's intention to monitor and promote improvement in their health status will, hopefully, alter the course of their future and aid their adaptation to the *inevitable modernization of their biology and culture* (Jenkins 1987, p. 428. Italics added).

Pugliese argues that the context of the positioning of “intersectional categories as race and ethnicity, gender, age, class and (dis)ability” (2010, p. 7) within the realm of biometrics as an intrinsic mark, are formative of the very baseline assumptions encoded in the use of biometric technologies such as DNA testing. Jenkins establishes this intrinsic marking, a movement of ‘othering’ in her statement, by evaluating the Hagahai’s biological status against the modernity, or the Western biological standard, to which their biology must adapt. Jenkins’ privilege in making such a statement is consistent with Pugliese’s identification of “*infrastructural*
“normativities” (2010, p. 7. Italics in the original) that “constitute the a priori conditions of the technology’s operation” (2010, p. 7). Biometric technology, in Pugliese’s analysis, has already encoded the ‘norm’ against which the ‘exceptions’ stand out and because they have a priori status; that is, “the discriminatory elements of the technology remain unrepresentable because they constitute the infrastructural presuppositions of the technology” (2010, p. 7).

Pugliese’s invocation of infrastructural normativities, draws upon Foucault’s efforts to describe the conditions of biopower. Biopower is conceived by Foucault (1978; 1997; 2003; 2008) as the colonizing relationship between society and the human body; or more explicitly, the structures, the measurements, and the technologies that order the matrices of power around the body (Foucault 1978; Pugliese 2010). Biopolitics, then, is the exercise of that power within the cultural framework. Foucault argues that the transformation of discourses of sovereignty that allowed the exercising of biopower—that is, the power to exercise real or metaphorical death over a population—transformed in the seventeenth century, alongside the development of science, and became a classificatory tool in-and-of itself. He points out:

But a power whose task is to take charge of life needs continuous regulatory and corrective mechanisms. It is no longer a matter of bringing death into play in the field of sovereignty, but of distributing the living in the domain of value and utility. Such a power has to qualify, measure, appraise, and hierarchize, rather than display itself in its murderous splendour; it does not have to draw the line that separates the enemies of the sovereign from his obedient subjects; it effects distributions around the norm (Foucault 1978, p. 144).

The concept of metaphorical death still pertains, as Pugliese identified, with regard to the discriminatory presuppositions of normalcy of biometric technologies. As this relates to the Hagahai, the ‘norm’ and the Hagahai’s exceptions to that norm as a consequence of the results gained from their DNA profiles realised barely a brief enhancement of their “value and utility”, and only for as long as it was useful within the possibilities of extracting said value and utility. As I briefly explored in Chapter 1, the transmogrifying moment comes with the identification of value that is never implicit in the Indigenous/non-white body, but has to be made explicit by the scientist working within the matrix of biopower in combination with the
discourse of ‘discovery’. It is a discursive process that reanimates the Hagahai, and, indeed, the Indigenous/non-white Other in general, in the role of one who must be redeemed into "... a plenitude of the possible” (Foucault 1978, p. 145). The success or failure of that project is then measured against how far the Indigenous/non-white Other can ‘modernize’ their biology and culture according to the ‘norm’.

In bringing the focus of this thesis into its contemporary circumstance I further develop the notion of transmogrification introduced in Chapter 1 to show how the operation of science within its own regulatory schema, the scientific method, impacts in new yet ultimately familiar ways on Indigenous/non-white bodies. The focus of my argument is not embedded in the infelicities of the story of science as a process of research but rather engages science as a discursive tool that uses its status as certitude to effect political outcomes. This chapter will examine how the archaeology of a scientific idea, as a basis of knowledge, is combined with a broad range of cultural and political discourses to exercise a power over Indigenous and non-white communities around the world. In the example of the Hagahai, this is shown in the conundrum of patent law and its uses in combination with scientific research. But more than this, in the way that the scientific method, as a biometric technology, exerts its biopower by classifying the Indigenous/non-white body against the vital Western body whilst also infusing the Indigenous/non-white Other with value and utility.

The main thrust of this thesis is to examine a genealogy of representation—the politics and aesthetics—that has led to the transmogrification of Indigenous/non-white communities into fields of potential and the impacts that this has had, and is still having, on the marginalised body. As far as the scientific method is concerned, there are key moments where imagination, creativity, and hope, help to propel the enquiry of scientists—moments which are erased in the celebratory meritocracy of status/genius/revolutionary thinking that goes with apportioning credit to discovery. There are surely moments of serendipity; however, scientist’s pursuits are also surrounded with a multitude of ancillary activities, connected with status and capital economies, that show that the position fulfilled by Indigenous/non-white communities, their ‘Othering’, continues a long history of colonial domination. Pugliese remarks that, “[T]he institutional sites that legitimately
ground and authorise the discourse of science and the discursive practice of scientific method include the academy and the laboratory” (2010, p. 4). Embarking from this point, the focus of the remainder of the chapter will analyse the circumstances of this authority as it pertains to the practice of the scientific method.

3.2 Scientific method and its discontents

In 1974 renowned physicist Richard Feynman delivered a commencement speech for students at the California Institute of Technology (Caltech). He spoke against a decline that he perceived occurring in scientific culture, focusing initially on the pseudoscientific New Age practices of reflexology, extrasensory perception (ESP), and parapsychology (including PSI), that lend themselves to a critique of their usage of the scientific method. In his speech Feynman covered the basics of the scientific method of repeatability and falsifiability and further elaborated on some important points which stymie the operation of the scientific method. To that end, Feynman identifies several competing, yet also symbiotic, economies that impact on the operation of the scientific method.

I call one of these economies a capital economy: this is the economy where competition for research funding and job security (tenure) holds sway. These concerns can impact on scientific outcomes depending on external political, commercial and public relations demands for the information being researched. One prominent example expressed in Feynman’s speech (1974, p. 12) is the now well-known obfuscations in the research conducted by tobacco companies in the second half of the twentieth century. For Feynman, a commitment to the scientific method is akin to honesty with the self and his commencement speech is, in part, a sermon against self-delusion in service to the capital economic demands on research. Further to this, the self-delusion might apply when giving evidence within the halls of political power where threats to funding and reputation can be made.

This leads to the second economy identified by Feynman, which I call the status economy. This status economy, intimately linked to the capital economy of science, has to do with more ephemeral ideas of integrity, prestige, reputation and public
relations. Feynman expresses frustration that these ideas were gaining too much sway in the way science was being conducted, where “publication probability depends upon the answer” (1974, p. 12) and argues that short cuts in research undermined the foundations on which the development of scientific ideas were formed.

Feynman's Caltech speech expresses another important idea that is picked up by French philosopher and sociologist of science, Bruno Latour, in 1998. Feynman's impassioned plea against self-delusion is also about the importance of the story of research. The way the twists and turns, the ebbs and flows, of research speak to the understanding of scientific outcomes can be instrumental in forming more complex understandings of the objects of consideration, but too often, according to Feynman (and later elucidated by Latour), corners are cut or the scientific method is ignored in order to determine a particular outcome. He concludes:

In summary, the idea is to try and give all of the information to help others to judge the value of your contribution, not just the information that leads to judgement in one particular direction or another (Feynman 1974, p. 11).

The scientific culture, as described above, where facts/results are made to fit theories rather than the preferred obverse, Feynman calls “Cargo Cult Science” (1974, p. 13). Feynman's catachresis, as a targeted yet destabilising use of the cargo cult descriptor in this context, is evocative of Gayatri Spivak's description of catachresis as a “reversing, displacing, and seizing of value-coding” (1996, p. 206). His use of the anthropological construct of specific ritualised practices identified in Indigenous/non-white communities, “primarily of Melanesia” (Jarvie 1983, p. 52), invokes the infrastructural normativities of the scientific method yet still maintains the discursive power identifying the outliers from the normalising discourse.

The consolidation of theories under these circumstances aligns Feynman's critique with Foucault's discussion of biopower/biopolitics, founded in the latter's discussions of power/knowledge where he argues:

'Truth' is to be understood as a system of ordered procedures for the production, regulation, distribution, circulation and operation of statements. 'Truth' is linked in a circular relation with systems of power
which produce and sustain it, and to effects of power which it induces and which extend it. A 'regime' of truth (1980, p. 133).

A further elaboration on science’s own circuit of culture, via engagement with the respective works of Hall and Latour, will be discussed in due course; at this point though I contend that Latour adds perspective to Feynman’s observations when he writes of the development of science as being “characterized by the transition from the culture of "science" to the culture of “research,” Science is certainty; research is uncertainty” (1998, p. 208). For Latour, the representations of science and its discoveries in the public domain are too often touted/codified in the language of certainty that do a disservice to the conversation around the actual status, development and history of scientific knowledge.

As an example of this impulse in science I refer to an edition of the New Scientist magazine from October 2007 that dedicated a feature section to “Cheating death: dispatches from the war against mortality”. Although the articles in general are more speculative in tone, this edition of the magazine discusses the idea of death and the scientism of overcoming death. In doing so, science and the work of scientists are intimately structured around positivist ideas of the vital body, not just in relation to the objects of study but also in its own unacknowledged construction of itself where expertise, elitism and status play into the economies and authority of the science itself. Scientific conclusions, in the realm of mass media and public consumption, are rarely discussed in a way that acknowledges their liminality; that is, their status as ideas in transformation.

This impulse is notable even in the most acknowledged consensus-based facts of science, where there is a process of elaboration and clarification that continues with reference to different contexts. Whether it is the constant elaborations on gravitational theory, or in the more politically charged arena of climate science, the standard models of scientific storytelling are either in the heroic mode of discovery, the more contentious denouncement of consensus, or the battle for ‘truth’, which favour existing models of discourse/episteme operating at that historical moment. Thus Latour seeks to complicate this notion of scientific certainty with respect to a focus on research and its complex and variegated discussions around a hypothesis or theory. Before returning to Latour, and
science's own circuit of culture, I will now review a selection of those influential voices that also engage in meta-analyses of the operations of science in order to further contextualise my argument in this chapter.

Arguing that science has the power to answer questions fundamental to our place on the organic, geological, physical and chemical planes, Jacob Bronowski investigated the ways that humans uniquely embraced the gift of inquiry and creativity to improve the status of our understanding of these fundamentals. However, he was also a critic of the abuses of knowledge and the human “itch” to cast the knowledge of any given historical moment into concrete terms. A resonant example of Bronowski’s thesis is developed in the BBC television series *The Ascent of Man* that was first broadcast in 1973. One episode in particular, ‘Knowledge or Certainty’, is instructive in its critique of the ways in which the scientific knowledge of a particular moment in history can be misused and abused to the detriment of other humans. Knowledge, he argued, works on a plane of uncertainty, or as he preferred to describe it, a “region of tolerance”. Tolerance, in Bronowski’s schema, argues that there should always be granted a margin of error as described in his epigram at the outset of this chapter. Bronowski’s quote asks us to be aware that science, and indeed knowledge in general, is more about exploration and conversation than certainty. In the closing scenes of the ‘Knowledge or Certainty’ episode Bronowski wades into a pond where the ashes of Holocaust victims from Auschwitz (including some of his family) were flushed. In the final frames he bends down and scoops up the sludge from the pond and exhorts, “we have to cure ourselves of the itch for absolute knowledge and power.” The reverberations of this strong personal conclusion, intertwined with the philosophical underpinnings of the television series, highlight that science and its endeavours are not outside of human experience, nor immune from the matrices of the institutions that scaffold the human project and are parallel and complimentary to Foucault’s work on biopower/biopolitics.

Michael Polanyi’s work also holds to the idea that knowledge is personal and thus not value free. This idea of creative tension in his work is similar to the ideas explored by Bronowski. Polanyi proffers the view that in the scientific realm the creative tension refers to the commitments to ideas and ‘hunches’ that a scientist
might have when developing a theory or stratagem for furthering their research. The personal judgement of a scientist drives the development of their scientific endeavour; their creativity and personality cannot be taken out of the equation when considering their results and directions. As Polanyi observes:

The beauty of the anticipated discovery and the excitement of its solitary achievement contribute to it in the first place. The scientist also seeks professional success, and, if scientific opinion rewards merit rightly, ambition too will serve as a true spur to discovery (1966, p. 79).

Although Polanyi’s ideas speak against the positivist impulse in science, that is that valid knowledge is the sole purview of observable and scientifically tested knowledge, Polanyi himself speaks mostly in a positivist light espousing what he described as the ‘open’ dialogue of science in the West to be preferable to the directive and state sanctioned science of Communism.

Polanyi refers obliquely in *The Tacit Dimension* (1966), and more pointedly in *Personal Knowledge* (1962), to the practice of science categorised generally as Lysenkoism. In short, the categorical term refers to the scientific practices of the Soviet Union, in genetics and agriculture, which were espoused by leading Soviet scientist Trofim Lysenko, which had most sway under the regime of Stalin. Going against the general scientific consensus of Mendelian genetics (Hagemann 2002; Hossfeld & Olsson 2002), Lysenko exercised his political sway to promote a style of scientific endeavour more in line with the political realities of the regime of the day rather than scientific consensus (Wolfe 2010). His ideological commitment also had material effects against those who disagreed with this political reality with the exile, imprisonment and death of many of its opponents (Hagemann 2002; Hossfeld & Olsson 2002).

However, by privileging the ideal of Western science as desirable Polanyi ignores the potential corruptions that are implied in his invocation of the status and capital economies in the Communist context. Comparatively, Feynman’s contribution to the debate is an insistence that science and its endeavours can just as easily be directed and corrupted by outside forces in the West as anywhere else. Indeed, perhaps one of the most prominent examples of this would be the German and American efforts to build an atomic bomb during World War Two; a state directed
scientific project whose ripples still impact on science and politics worldwide. The important idea I take from Polanyi’s work is that in arguing for an idealised scientist working on a “metaphysical” (1966, p. 70; p. 82) plane, he has to evoke “the cruder anthropocentrism of our senses” (1962, p. 3) which tacitly acknowledges the personal in the directive impulse in science. Bronowski’s and Polanyi’s work show how the influences of the discursive regularities of a given moment, the political *episteme*, can influence and undermine the “more ambitious anthropocentrism of our reason” (Polanyi 1962, p. 3).

I now return to Latour, whose work consistently questions the idea of an objective scientific plane and interrogates the idea that scientific culture is one in which the personal desires of the scientist, the politics of the laboratory or the interpersonal relationships of scientific colleagues are at arm’s length from the scientific endeavours at hand. More than this, and as stated above, Latour insists that there is a noteworthy divide between how the mass media represents the idea of science and how scientists actually do their work. Latour acknowledges that the mass media representation of science as certainty has coloured the ideas of what science can provide. In similar language to the “war” on mortality headline from *New Scientist* (2007), the reportage of the research for cancer cures is also often couched in war-like editorial terms, at least in banner headlines, concerning cures and timelines for the eradication of cancer. The invocation of war and the competitive binary of winners and losers places science on a battle footing and licences a scientism that is the only appropriate agent to deal with illness and mortality. It is a rhetorical style that also relies on the established normalcy of the vital body. In this context, the representation of science has recouped and reasserted its positivist impulse. Combined with a political economy of scientific endeavour, whereby multivalent factors of influence can be brought to bear on the analysis and reporting of data, we can see how public perceptions can be skewed by the contemporary mass media more concerned with fuelling a culture of fear and desire which can then be brought to bear on the capital economy of funding from both public and private purses. Latour’s work helps us understand that internal and external cultural aspects affect the way in which scientists do their work.
Developing an analytical framework for science that eschews a metalanguage of privilege and authority, which would thereby formalize certainty, Michel Serres argues that the *episteme* of the Enlightenment “was very instrumental in categorizing as irrational any reason not formed by science” (1995a, p. 50). In preferring a dialogic approach between scientific frameworks that attempts to bridge the divide, or translate between accounts of science to provide a broader and more fully developed picture that accounts for political and discursive views of science, he articulates this critique of scientific practice:

... the spontaneous history of science is often reduced to a holy or rather a sacred history. Geniuses take on the role of prophets, breakthroughs are revelations, while the controversies and debates oust the heretics and symposia emulate councils. Science is gradually becoming incarnate in time as the spirit once did (Serres, 1995a, p. 5).

Serres’ insight dovetails with Latour’s brief discussion of ‘science as certainty’ and also complicates ideas around discovery and history that have coloured the story of the case studies examined in this thesis. Latour further develops this idea in his book *Laboratory Life: The Construction of Scientific Facts* (1986 [1979]). Here Latour and co-writer Steve Woolgar analyse the ways in which scientific facts are produced to exercise their power of validity and how that process plays out in some broader societal matrixes. They emphasise the point that:

Our argument is not just that facts are socially constructed. We also wish to show that the process of construction involves the use of certain devices whereby all traces of production are made extremely difficult to detect ... (1986, p. 176).

Pugliese also identifies a similar thrust, in common with Serres and Latour, in the construction of discursive regularities and the methods which demarcate the way of presenting information to help produce truth effects:

In Nietzschean genealogical terms, the anterior plurality of moments of origin needs to be reduced to an autochthonous singularity in order to maintain the illusion of an originary irreducibility from which the truth of law is said to begin (1996b, p. 278).

The ‘truth of law’, as far as it pertains to scientific discourse, is the veracity of scientific facts and their import in the operation of science and the impact that has
on the broader social fabric; in my project it pertains to the exercise of science as biopower/biopolitics.

Acknowledging concerns similar to those explored by Feynman, particularly the way that capital and status economies impact on the way the stories of research and scientific conclusions are constructed, Latour and Woolgar argue:

> A laboratory is constantly performing operations on statements; adding modalities, citing, enhancing, diminishing, borrowing, and proposing new combinations ... (Latour & Woolgar 1986, p. 86).

The power of the ‘idea’ of scientific veracity calls into question all moments of discovery as a discourse of uniqueness and singular vision; whether it is the narrative of *terra nullius*, the ‘discovery’ of *in situ* traditional knowledges, or the projection of value into the Indigenous/non-white body as a global panacea. Feynman’s speech called for an adherence to the methods of science as a mechanism by which the veracity and respectability of science could be safeguarded. However, the scientific method exerts its own discursive regularities and its methods of constructing truth are prime areas for investigation.

What the theorists above allude to in their work is that scientific method is meant to be a dialectic so that infelicities in the practices may be weeded out to clarify and help strengthen the process of scientific enquiry. In the representation of science amongst its initiates, in its internal circuit of culture, it is meant to operate as a regulatory tool. However, Stuart Hall and Paul du Gay’s concept of the ‘circuit of culture’ (1997) deliberately evokes a broader web of influence that is precisely the matrix of influence that Feynman (1974) and Latour (1986 & 1998) are highlighting in their work. Hall and du Gay’s schema is an interlocking web of influence whereby representations, as applied to my field of enquiry, show how the Indigenous/non-white Other is politically and aesthetically constructed within the discourse of science. This is precisely the web of influence that constructed the visual representation of the Hagahai woman on the cover of *NGSR* and the Hagahai community within the article by Dr Jenkins as objects of and subject to the scientific work undertaken. Representations such as these are impacted on by other discrete sectors of the cultural cycle; those being, identity, production,
consumption and regulation. Identity within scientific discourse is closely related to representation and is referenced in various classificatory systems.

We have seen how, in the birth of scientific enquiry, the classification of humanity impacted on the way people were identified as civilised and uncivilised. In the sector of production, the representations of Indigenous/non-white Others, based in scientific enquiry, gained further prestige as the “veridic discourse” (Said, 2003) of science established itself over, while remaining influenced by, religious discourse. Consumption of these representations of the Indigenous/non-white Other in the public domain helped establish a broad conceptual basis of normalcy in the episteme and its imbrication with the economy of knowledge impacted its influence in the capital and status economies that funded and authorized voyages of discovery in the early phases, and the bioprospecting of scientific expeditions in the contemporary era.

Regulation is an important characteristic of discourse in that it authorises and therefore limits the scope of the dialectic. In the discourse of science, the scientific method is part of the regulatory system that provides clear protocols, in falsifiability, on how to test the veracity of its claims; it is what Feynman refers to as “scientific integrity [...] you must put down all the facts that disagree with it, as well as the facts that agree with it” (1974, p. 11). Moreover, Latour and Woolgar describe science’s broader circuit of culture as a “cycle of credibility” (1986, p. 201) and set out to show, as do Hall and du Gay in their work on representation and the circuit of culture, how “… different approaches (for example, economic and epistemological), are united in the phases of a single cycle” (1986, p. 201). Further, these capital and status economies are explained as the force of activation for the “cycle of credibility” with reference to Foucault’s “political economics of truth” (Foucault in Latour & Woolgar 1986, p. 229).

On an ideal plane, these regulative structures are meant to guide the practice of science. However, the volume of potential interferences on that practice makes it impossible to believe that ideal plane exists. These influences may come from outside the practice of the scientist, like those identified in the capital economy of scientific work, or they may be a combination of internal and external influences as
identified in the status economy. To better understand the irresolvable tensions apparent in the Hagahai study, it behoves me to deconstruct the practice of science in an effort to identify how there are many moments in scientific practice that “stand on the edge of error” (Bronowski, 1973) as I also deepen consideration of what Feynman was attempting to convey about science with his invocation of the ‘cargo cult’ trope.

3.3 Scientific method and cargo cults: wheels within wheels

Ian Jarvie’s work develops a comprehensive consideration of why and where concepts of cargo cult are formed. Jarvie has a strong grounding in anthropology and it is his well-regarded work on the formation of cargo cults, albeit from a non-Indigenous perspective, that is of most interest to this thesis. His research and discussions around theories of the cargo cult reside in a critical realm whereby his discussions over a twenty-plus year period have concentrated on the anthropological accounting of descriptions of cargo cult rituals around the world but mainly in the Melanesian communities he researched. His early work, written in the 1960s, was a meta-analysis of the foremost work that had been undertaken in the field up until that point.

In general terms, according to Jarvie, cargo cults are seen to be reactions formed against contact with a colonizing force and discrepancies in access to goods. A point worth noting here is that the development of a cargo cult is viewed by anthropologists as a response to a perceived unwillingness to share the goods being coveted or the ‘secrets’ to acquiring the goods being sought (Jarvie 1963 a & b; 1966; 1967; 1983). This perception stands in stark contrast to Indigenous ways of operating, as highlighted by Mead (2007) in Chapter 1. When commenting on the Indigenous response to gene patenting and bioprospecting for potentially valuable biota, Mead highlights the communal and cultural expectation of sharing for the equitable benefit of all.

Another explanation of cargo cults is theorized by Azeem Amarshi et al. (1979) who describe the possibility that worker consciousness may have been a developing trait that also helps explain the “widespread cargo-cult activities” in PNG (p. 141). They go on to argue, “[T]hey are inchoate but meaningful forms of
class action by workers in the early stages of the development of agricultural and mining capitalism" (p. 141). In spite of the acts of resistance that can be read into the cargo cult activities of Indigenous/non-white communities the description of these activities also highlights the discursive normativities of Western-styled religion against which cargo cult is usually interpreted or understood from a non-Indigenous perspective.

Although Jarvie's work focuses primarily on anthropology and philosophy, his theoretical processes are productively relevant to this project because he developed a repeatable description of cargo cults that can be considered foundational to subsequent work done in the field. I quote here at some length because: a) I wish to do justice to the honed description that has been developed over many years and is one that remains relatively stable throughout Jarvie's work; and b), because the intricacies in the description of cargo cults will provide the foundation for the subsequent analysis; that is, the critiquing of the uses of science as a tool of colonialism. Jarvie's description thus goes:

Cargo cults are messianic religions, primarily of Melanesia, which expect the consummation of their religious efforts in the form of a return of the spirits of the dead, bringing with them a massive shipment of European consumer durables (hence 'cargo') to be distributed to the natives ... Anything, indeed, natives in Melanesia might have seen Europeans using and might have coveted. Cargo cults are thus exceptionally exotic phenomena cloaking as they do, hardware-store aspirations in a religious form.

Here were people whose cults seemed irrational and bizarre, although the rest of their social behaviour seemed straightforward enough. Moreover, the cults made very daring predictions which were falsified: spirits and cargo did not arrive. It is possible that ... cargo cultists have a multiplicity of ad hoc argumentative devices to explain away failures of prediction. Failure often reinforces the faith of those involved. The cargo cultists’ explanations of how cargo is to be obtained never get beyond the groove of magic and ritual. This cannot be explained by any failure of thought (logic), nor of methodology (e.g. empirical investigations) (Jarvie 1966 & 1983, pp. 52-53. My edits).

From this point I will be critically engaging with elements of the above description of cargo cult activities and, drawing on Spivak's rendering of the term, applying my analysis 'catechristically' to elaborate on Feynman's invocation of science as cargo cult. These insights will either be applicable directly to my subject of enquiry or be
complicated by other factors on which I will elaborate and will help draw this section of the thesis project to its conclusion.

The first element I wish to engage with is that of the “messianic” impulses notable in scientific discourse and at the heart of cargo cult rhetoric. This conceptual component is touched on by Serres, and to a lesser extent Feynman, who both suggest that the standard meritocratic organisation of scientific institutions and scientists is primarily an order of authority that strengthens the discursive nexus around the objects of enquiry. What underlies the work of science within the discourse of colonialism, as a Western construct, is that Indigenous and non-white bodies are still, and always, marginal. In the context of present political hegemonic struggles, where science’s own power for authority and ‘truth’ are waning, the episteme of marginalisation continues to remain the *modus operandi*.

Foucault argues that the problems of “power and knowledge” in the scientific realm are necessarily and always politically and socially effected (1980, p. 109). At the time of writing this thesis, I argue that there is a neo-Lysenkoism being played out in the battle for power and knowledge in the scientific realm whereby the capital economy is exerting a strong influence over the conception of what is an acceptable standard of not only scientific evidence, but the influence it should have in curtailing the development of the capital economy. This is exemplified in the battle zone around climate science and is, according to advocates such as the International Indigenous People’s Forum on Climate Change (IIPFCC), one that disproportionately impacts on Indigenous/non-white communities:

Indigenous peoples (IP) are among the first to face the direct consequences of climate change. Given their widespread reliance on natural resources and ecosystems, indigenous peoples and local communities are especially vulnerable to, and disproportionately impacted by, its effects (IIPFCC 2017 online).

The IIPFCC is an organisation set up to help Indigenous communities caucus and participate in the United Nations Framework Convention on Climate Change (UNFCCC) that is fundamental to the Kyoto Protocol and the Paris Agreement. However, the IIPFCC only has observer status and although Indigenous
communities use the access this provides to lobby on behalf of their communities, there is profound frustration that their concerns do not carry stronger merit:

Chief Bill Erasmus, 28-year elected leader of the Dene Nation, voiced his frustration: “We have our own land, our own language, and our organizations and laws. We meet the criteria of a nation. We are a nation. Why are we not in that room?” (DeLuca et al. 2016)

Whilst advocacy of Indigenous/non-white concerns may have some destabilising effects in some genres of scientific endeavour, the spaghettification of discourses—scientific and political—around the Indigenous/non-white Other will not impact on the way marginal bodies are represented as their domination under colonialis

struggles such as the Dakota Access Pipeline, or the ability of uncontacted peoples to live the life of their choosing, are current examples being played out under these conditions.

With regard to the metaphorical death in the discriminatory presuppositions of normalcy, as argued above, the power of reanimation is an effect of biopower. Therefore, a “returning spirits of the dead” trope in this context invokes a discourse of redemption whereby the marginalised body is not capable of representing itself. Moreton-Robinson’s discussion of the entrenched construction of ‘blackness’ from Chapter 2 of my thesis reminds us that there is a deep genealogy of marginal depictions operating in the representation of Indigenous/non-white bodies. My argument is that these bodies, on the margins of Eurocentric culture, civilisation and representation are lifeless in Western colonial considerations and are dependent on the discursive regularities of colonial assimilation, to bring the body into the light of existence. Pugliese (1994), explains that this cultural reframing was solely for the traffic in the colonial economy and not, as he quotes Edward Said, “a veridic discourse” (p. 176). Pugliese goes on to say:

In this specific sense, the signs ‘Negro’, ‘Hindoo’, and ‘Oriental’ have nothing to do with their supposed referents. Rather, this series of signifiers refers back, again in a convoluted and circuitous way, to the absent body of the Western philosopher. This absent body (il)logically reconstitutes itself precisely in the guise of its most alienated and alien forms: its sheer materiality can only be clandestinely textualised, fleshed out as the othered
body and the corpus of the other. This critical dénégation maintains the boundaries of the Cartesian dichotomy (body/mind) and thereby establishes the illusion of a safe distance from which othered flesh can be critiqued, brutalised, and also un/consciously consumed and enjoyed (1994, p. 176).

One of the results of this dénégation provides the space for redemption in the religious discourse that abounds in Western narratives of the Indigenous/non-white body. If, then, colonialism is an exercise of power over the marginal body, the constitutive religious episteme is part of its regulatory instruments and operates by imposing a self-disciplinary schema over the populations. In the assimilation of the narrative of the sinner, for example, the marginalised body further binds the Indigenous/non-white body in the margins. Marginalised as a sinner because of colour and an hypothesised infrahumanity, as exemplified by Kafka’s Red Peter, the Indigenous/non-white Other is elided from full integration because of a perceived ‘un-civil nature’. The marginalised body can never be fully redeemed and thus is reliant on the representations of discourses such as scientific discourse to explain and authorise its use by and within the Western body. It is because of this, narrative devices such as the ‘dying race’ trope have been a convenient stereotype to evoke in the descriptions of the marginalised body and so authorise colonialist intervention guising as a necessary altruism. When Dr Carol Jenkins expresses that part of her job when working with the Hagahai, is to aid “[T]he modernization of their biology”, she is impelled to add the mortally grim prediction for the Hagahai’s future if this project does not succeed (1987, p. 428).

Only when the marginalised body becomes visible, tameable, theoretical can it be manipulated into a potential as “cargo” for the dominant regime: something which can be traded and has marketability. As we have seen, the cargo reward for the scientist is twofold – reputation in the status economy of the scientist and the potential imbued in the marginalised body, as identified by the scientist, to endow visibility in the capital economy. The cargo is also that which cannot be produced or developed by the marginalised body itself. Only civilisation through colonialism as mediated by science can discover and develop the potential. As Moreton-Robinson argues:
Being perceived as living in a state of nature relegates one’s existence to being an inseparable part of nature and therefore incapable of possessing it (2009, p. 34).

If Cook and Dampier held, at least initially, that Australia was a barren place then scientists, as represented by the voyagers of discovery and their religious backgrounds, could recover the value of the Aboriginal people. As curios, as scientific ponderings, the country and its people were terra nullius and by that justification the colonialists could occupy the body as much as they could claim the land and set about recovering whatever humanity might be gleaned from these “miserablest people” (Dampier 1927 [1697]). Thus, the trade in ideas and the currency of knowledge began to ensnare Indigenous/non-white Others around the globe in a knowledge economy that would be quickly bound up into the mercantile matrix building its global network voyage by voyage, and prerogative by prerogative, supported by religio-scientific moral and intellectual justifications for the saving of souls and the modernisation of biology.

The cargo of the marginalised body, from James Cook to Dr Carol Jenkins, is also in a liminal state. Whether it is the body as a whole, or its constituent parts, the puzzle of the Indigenous/non-white body can only be understood within the “state of becoming” (Gosden & Knowles 2001, pp. 4–5). Gosden and Knowles further explain this liminality in their study of museum artefacts collected during colonial contact by arguing:

[A]n object is best viewed as indicative of process, rather than static relations, and this process is ongoing in the museum as elsewhere, so that there is a series of continuous social relations surrounding the object (2001, pp. 4–5).

Applied to the marginal body, the process of guiding this liminality, as we have seen, is inflected through the colonial discourse that has been in operation since the first colonial projectors. In many ways the modern collection of biological artefacts by scientists has been done within a familiar trope of colonial discourse, that is the idea of terra nullius. Darrell Posey, in considering the position of Indigenous peoples and traditional knowledges in the institutional frameworks of the West, asks:
Is this nothing more than adapting old colonial policies to create *intellectual* or even *genetic terra nullius*? Could it just be another example of more powerful forces and institutions again usurping indigenous knowledge and genetic resources with impunity? (2002b, pp. 31–32)

In my thesis the answer is a qualified yes. Considered engagement with the responses of the San and Indigenous advocacy groups acting on behalf of Indigenous/non-white communities has revealed examples whereby some of these communities have found the space to resist such a colonization. Yet these examples are also in the minority and do not ultimately reverse the tide of colonial interaction.

In Chapter 1 I outlined Margaret Lock’s argument that cells harvested from Indigenous/non-white bodies are reified—I would add as colonialist ‘cargo’—in the patenting process. This extant transmogrification of biological material from Indigenous/non-white bodies, or from traditional knowledges surrounding the uses of plant, animal or mineral wealth, is also seen in broad terms as the exercise of a continuing colonial discourse. Linda Tuhiwai Smith describes this process thus:

... the search is still on for the elixir of life, no longer gold this time but DNA, cures for Western diseases, and other ways of finding enlightenment and meaning. The mix of science, cultural arrogance and political power continues to present a serious threat to indigenous peoples (1999, p. 99).

The transmogrification of value, via reification, into specific “elixirs of life” can be seen to fit in with the idea of “exotic phenomena” in the cargo cult in that the value system is one that is projected into and on to the marginal body. It is also a value that is significantly worked in science’s “cycle of credibility”, as identified by Latour, as it is also a speculative, hypothetical potential, at best. And although it is consistent with the ‘hypothetical’ moment that is foundational to the scientific endeavour, the colonial language of classification, projected potential and management of development, in the context of the capital and status economies matrix, makes the process of transmogrification a specifically colonial moment. In the movement of knowledge around the scientific circuit of culture, combined with the still largely exploratory work in genetic science, the genetic material of people such as the Hagahai and Henrietta Lacks were made available to justifications for
pre-emptory bioprospecting—biopiracy—through the acquisition of intimate biological material.

Adding the grotesque to the analysis of transmogrification further sutures my analysis to the corporeal. Grotesquery, like transmogrification, is a magical or a sublime transformation, which shocks with pretences to affecting the status quo. Wilson Yates, in coming up with a broad definition of the grotesque—with reference to its theorists such as Kuryluk, Bakhtin and Kayser—explains:

... we experience the grotesque as a power *sui generis*, an embodiment of demonic or sublime forces, forces that have a double face of darkness and light depending where we are in the process of appropriating their meaning (in Adams & Yates (eds.) 1997, p. 3).

Its representations are incongruous to the context and understanding of the world that is situated within the normalcy of a European colonialist aesthetic. As highlighted by Moreton-Robinson’s explanation of the seriousness of ‘blackness’ in the hegemonic representations of the Indigenous/non-white body, the marginalised body is one that is intimately grotesque and one discursively infused with the existential crisis inherent in the realm of the grotesque. Pugliese makes similar comments with regard to the anthropometric investigations of the marginalised body whereby, “the further the distance from the normative features embodied by Caucasians, the more primitive and backward the subject” (2004, p. 294).

The inherently grotesque nature encoded into the marginalised body by dominant Western scientific, cultural and religious discourses secured the foundations of an enduring hegemonic relationship over the Indigenous/non-white body. The examples of the fictional Red Peter and the actual human ‘specimens’ taken back to Europe during the voyages of discovery underscore the point I have been exploring throughout this thesis; that even though a religious redemption may help the marginalised body recover some humanity in the context of Western cultures, the civilising of marginalised bodies is always incomplete as the colour of or cosmetic appearance of this humanity can never be erased. Furthermore, the way that grotesque representations of the Indigenous/non-white body have played into the voyeuristic and even gluttonous representations of their bodies, as
“elixirs of life” (Smith 1999, p. 99), exposes a perverse primitivism in scientism whereby the marginal body is deemed as valuable in dismemberment and worthy of inhumation into the white Western body. Only through the transmogrification into an economic body can the marginalised body enter into a purgatorial plane not covered by its religious redemption.

Elaborating on the public autopsies performed on Indigenous and non-white bodies in the “anatomical theatre of Amsterdam” (2004, p. 316) during the Dutch colonial period, Pugliese provides an insightful example of the grotesque transmogrification of the marginal body:

... the non-white body is transposed from its colonial marginality to the commanding position of centre-stage. From this locus, the non-white body becomes legible as spectacle, as the corpse is made to offer itself up to the inquiring gaze of the scientific community. During the process of the public postmortem, the non-white body, as embodied metaphor for the Dark Continent, is penetrated and literally turned inside-out in an analogue of the colonial voyage of discovery. The value of the non-white body within these western epistemic economies is, however, clearly circumscribed. Non-white bodies have supplied the material substratum that has been assiduously mined by western science. As another variation on the colonial role of native informant, the non-white body supplies the lumpen data that is then converted to higher-order knowledge by the western specialist. These non-white bodies function to supply knowledge of the body that enables the production of the corporeal cartographies and atlases used in medical schools, academies, forensic laboratories and so on (2004, p. 316).

“Ad hoc explanations”, given by scientists over time, to excuse this kind of activity include references to their desire to help – their altruism. Altruism is not born outside of privilege, it is always positioned to supplement what the receiver lacks (Pugliese’s circuit of “lack and supplement”), and it is rarely, if ever, a dialogic relationship. Dr Carol Jenkins’ career was marked by altruistic tendencies towards the communities she chose to work in and, as we have seen, many of the ‘improvements’ begun in her time with the Hagahai did not last. Her altruism was a private commodity that could not maintain its momentum without her presence. After working with the Hagahai, Jenkins went on to work with many other disadvantaged communities, such as the HIV and transgender communities in the South East Asia region (‘Obituary’ 2008, pp. 217–218), and in each of these communities it was the marginalised body which was the focus for action.
3.4 Terminalium

In 2009 I went to interview Aroha Te Pareake Mead at Victoria University of Wellington, Aotearoa (New Zealand); I wished to discuss her work on the Hagahai issue and other issues of Indigenous intellectual property rights. The conversation covered the work of Dr Carol Jenkins and Mead spoke of a correspondence that she initiated with Jenkins during 2007, some months before Jenkins’ death in January of 2008. Mead had been a strong critic of Jenkins’ work with the Hagahai and had felt it a professional courtesy to initiate the communication.

Whilst the correspondence continued Jenkins had mentioned that, after her death, she had a codicil placed in her will that her bones should be sent back to the Hagahai to be placed amongst the bones of their elders. This hubristic blind-spot infuriated Mead as she explained that at no point, even though the work of Jenkins and the other stakeholders in the Hagahai case is taught “as a prime example of bad practice” (2009 & 2017 pers. comm.), did Jenkins express regret for her work amongst the Hagahai. Mead reported that Jenkins “couched what she did as an act of desperation to save the Hagahai from extinction” (2017 pers. comm.). I have argued in my thesis by analyzing the historical and cultural conditions of production of scientific discourse that Jenkins’ own work as a scientist was as confined in its practice, authorized by the contemporary episteme, as the production of representations of the Hagahai and Indigenous/non-white Others in general.

At the close of writing this section of my thesis it is unknown if Dr Jenkins’ bones ever made it back to the Hagahai for safe keeping; and given their subsequent responses as to their reticence to working with researchers, it is unknown if the Hagahai would have even accepted them. It is difficult not to read Jenkins’ desire as a literalisation of cargo cult philosophy. In Jarvie’s terms, a reaction formed against contact as part of a colonizing force. Having failed to achieve a positive ongoing presence within the colonized culture as a consequence of her scientific work, it is perhaps reasonable to hypothesise that Jenkins sought to remedy this discrepancy post mortem as ‘cargo’. The next chapter of my thesis will engage with the creative process that was generated out of my research thus far. The exploration of my
creative process surveys the ways in which the Hagahai and other Indigenous/non-white groups have responded to colonization, thereby identifying the multi-generic influences on the writing of my play *In a Lifetime*, and are set in contrast to archetypal representations of religious and scientific justifications for colonization.
Chapter 4

I am outside of history. I wish
I had some peanuts, it
looks hungry there in
its cage.

I am inside of history, its
hungrier than I
thot.

_Dualism: In Ralph Ellison’s Invisible Man_, Ishmael Reed (2000).

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4.1 More personal context

I am a storyteller. For nearly twenty years I have told stories to children from my own, and others’ ethnic heritage. I have told these stories to children in schools, libraries, and at folk festivals. Children are great arbiters of a good story in that they do not possess a ‘polite’ filter. They know when a story is good, they know when a story is bad—and they tell you! They are also appreciative of experimentation, fragmentation, intertextuality, ‘dad jokes’ and absurd endings. They do not understand the generic conventions in the same way as a storyteller might, but they are certainly more capable of tuning in to the story. That is not to say anything goes, but their ability as an audience has not yet been overly colonized by generic conventions. It may well be a ‘fool’s errand’ but generic decolonization, at least in part, is a strong influence in the construction of my play _In a Lifetime_. Decolonization, and colonization, are strong referents in my play and connect deeply with political influences that have motivated storytelling from diverse arenas; whether in the medieval morality plays, such as _Everyman_, to the stylistic approach of the brothers Grimm, to the resistance of gospel blues or the overt politics of Woody Guthrie, stories are as much guides to the ethical compass as they are vehicles of entertainment.

In my play, the social and political realities surrounding the work of multi-national companies, agri-businesses, and most particularly scientists, working in the South Pacific is instrumental to its inception and development. In particular, the
collection and patenting of the DNA of Yokotam Ibeji, a Hagahai man from PNG, stands as a case study in the dubious outcomes of the global economy in not just biological materials but representations of Indigenous/non-white Others as global citizens. They are conveniently assimilated into the global matrix in situations that have potential long-term benefits for the developed world; and as for their own situations, only formerly or in a distant, uncertain future. It is a re-inscription of the old colonial ties that have never really disappeared. The play attempts to maintain the direction of critical attention exemplified in my thesis towards the discursive foundations of the colonial relationship between the Western scientist and missionary, and the Indigenous/non-white Other. To further interrogate the development of my play it is important to acknowledge concerns that I had as a result of my own cultural subjectivity during that process.

4.2 Two South Pacific plays: how I learned to stop worrying and love my play

One of the biggest concerns I had (and in some ways still have) when developing my theatre script In a Lifetime was that of how to manage my complicated cultural context to the subject matter. My response was to explore the ideas that had developed in the thesis and present them in a non-naturalistic style whilst also providing opportunity for community directed interventions, inspired by Augusto Boal’s Forum Theatre, by allowing the communities staging the play to settle on appropriate stage settings and character names for the Indigenous identified characters. As the play began to take shape, I used verbatim sources to build my characters’ dialogue as well as using stories and songs from the oral traditions of several Indigenous cultures to build the Indigenous character’s voices. In due course I will elaborate on some specific examples I have used to build the dialogue in my play but it was the potential for inappropriate use that caused me to seek out further advice.

In 2009 I spoke to Aroha Mead, whose work is an inspiration to this project as a whole, about negotiating this terrain and the advice she gave was to consider “in whose benefit the work was for” (2007; 2009 pers. comm.). bell hooks’ work also
reflects the concern of cultural appropriation in her book *Art on My Mind* (1995). She argues:

Appropriating—taking something for one’s own use—need not be synonymous with exploitation. This is especially true of cultural appropriation. The “use” one makes of what is appropriated is the crucial factor (p. 11).

Mead and hooks’ call for due care when dealing with the stories of Others has, I hope, guided the writing of *In a Lifetime*. However, it is not a guarantee that I will not have transgressed these good intentions. It is always, and necessarily so, difficult terrain to negotiate. The act of translation, whether interpreting linguistic forms or cultural expressions, or whether operating in the storytelling mode of creativity is, as Spivak argues, “an active site of conflict, not an irreducible guarantee” (2005b, p. 105). Translation is an interpretation issue that is contested in manifold ways throughout this thesis: in the classificatory modes of science, in the reading of DNA markers, and in the reading of aesthetics and potential into the Indigenous/non-white Other. In maintaining a focus on the relationships of power, and more explicitly the strategies of resistance, I have attempted to do justice to the difficulties of the terrain rather than flatten them out and in many ways embrace the “active site of conflict” to help propel the action of the play.

Given the strategic premise described above it is necessary to look more closely at some of the relevant creative decisions that I made when crafting *In a Lifetime*. I begin by contextualizing some issues surrounding the difficulties of translation with specific reference to two plays – *Cargo* (1971) by PNG playwright Arthur Jawodimbari and *This Man* (1969) by Solomon Islander playwright Francis Bugotu.

*Cargo* came to my attention early on in the research process for my PhD project. It is a short play produced out of a “creative writing class of the University of Papua and New Guinea” and was first performed in April 1970 (Beier 1972, p. viii). The play is a succinct unravelling of the reality of cargo cult activities and their equivocal outcomes. It was written prior to PNG independence that occurred in 1975. In this scene from the play we can see the act of translation unfold between the Anglican minister MacLaren, the translator Jamba and several villagers:

MACLAREN: Of course, I’ll try to answer any question.
JAMBA: The Tauba will talk.
EWAGE: God, where does he stay?
JAMBA: God lives where?
MACLAREN: God lives in Heaven.
JAMBA: God lives in the sky above us.
EWAGE: Can we see God?
JAMBA: Can we look on God?
MACLAREN: God is invisible but near to his people.
JAMBA: God never see, but stay with us and ...
EWA: God married with children?
JAMBA: God married, wife and children?
MACLAREN: God is not married, but has a Son.
JAMBA: God no wife, but has a Son.
EWA: Who cook for God and his Son?
JAMBA: Someone cook for God and Son?
MACLAREN: God does not need food.
JAMBA: God never hungry (Jawodimbari 1971, pp. 12–13).

In this instance of translation there is an obvious dissonance between inquisitor, translator and interlocutor. The interlocutor, MacLaren, an Anglican priest, is also operating as translator of God’s word to everyone present. It is clear that MacLaren and Jamba are not at cross-purposes but their communication, down to Ewage and Ewa, is nuanced by culture and language. It is also obvious that the translations are close but not easily construed as being ‘exact’ renditions. This melee of translators is ripe for miscommunication and was a strong influence in my decision to include a dramatized version of the Hagahai letter in my script. The metaphor for misunderstanding is rich in both pieces but is also an example of how translations do not necessarily bring about the intended results.
In the play *Cargo*, and indeed this is representative of many examples of colonial evangelism, what is implied is that the perceived ‘weakness’ of Indigenous religious cultural expression, a spiritual *terra nullius*, would be easily overcome by the colonizing religious cultural expression. It is the implied empty space, or misused space—Pugliese’s circuit of “lack and supplement” again—which highlights the standard *modus operandi* of colonialism as I have argued in my thesis. *In a Lifetime* shares these concerns in the stylised recreation of the Hagahai letter as exemplified by this example:

Player 2: We trusted these people in our way. The ancient way, the way we have always trusted.

Sc: *Sicut natura nil facit per saltum ita nec lex* ...

Player 2: But just as nature does nothing by a leap, so neither does the law ... the ancient law or the new law?

Player 1: So, if the money should come from our blood, give the money to our doctors and they will send it to us. Only our doctors know us. They won’t steal our money, they are good people.

Player 2: We trusted them with our life. We trusted them with our blood – our life.

Sc: I have made a connection with these people.

Player 1: We gave as we could and extended the hand of friendship ... we trusted our doctor.

Sc: When I die I have left instructions to send them my head so that it might be put into the cave that honours their ancestors.

*Player 1 and Player 2 take a moment to digest the revelation about the head ... more paroxysms of laughter* (pp. 141-142).

Here I have imagined a much more dialogical relationship between the characters than could be supplied from merely including the letter as verbatim dialogue and I have infused that dialogue with some of the concerns raised in my thesis. The potential slippage in translation comes in on many levels but the Hagahai letter in particular, which was discussed in Chapter 1, as an English translation of a Tok Pisin translation of Yokotam Ibeji and Korowai Gane’s first language, doubles down on the potential for slippage. The English translators, Petty and deKoninck,
do intuit some of the difficulties when they include this qualification to their translation, “[T]hus, aside from distortion through the translator’s glass, this is, as they say, their story” (Ibeji & Gane 1996, p. 33). In Henry Staten’s discussion on the ethics of translation, he argues:

For the translator attempting to render into a hegemonic language a language from the Third World, everything becomes more problematic, more intensely “political” than in anything envisioned by pre-postcolonial translation theory (2005, p. 115).

The use of verbatim sources, such as the Hagahai letter, as much situate the voices in a specific way as they also highlight the wariness of my positioning as a non-Hagahai playwright for the subject matter at hand. Moreover, when the Scientist enunciates dialogue in Latin it is the Indigenous characters that do the interpreting in an attempt to challenge the prevailing hegemony. Cargo, like the Hagahai letter, are rare examples of the Indigenous/non-white Other speaking for themselves within the constraints of the Western generic conventions of theatre and statutory declaration respectively.

In the denouement of Cargo, both capitulation and resistance to the missionary’s efforts to coercively convert the village are creatively represented. Ewage, the village ‘headman’, mournfully evaluates his position with regard to the surrender of some of the villagers under the influence of firearms, he says, “… it is strange with this white man’s stick. All give up without a fight” (Jawodimbari 1971, p.19). However, Ewa, one of the village’s warriors, is prepared to resist:

Ewa: … Tomorrow we will carry out the job of making canoes. Until then go back to your village, and let it be known throughout the Pure people when the work will begin. We will get our cargo (Jawodimbari 1971, p.19).

This conclusion does measure in some respects the reality of the colonization of PNG, but is in the metaphor invoked by the “Pure people” that destabilises the assumptions of racial supremacy.

Whilst much of the dialogue of the characters Player 1 and Player 2 is original, there are portions of the dialogue which come from various verbatim sources. Whether it be from other Indigenous sources from around the Pacific rim, such as
Chief Joseph’s dialogues or commentary made by Dampier and Columbus about Indigenous peoples, their dialogue is designed to question the assumptions made about the Indigenous/non-white other by the Scientist and Missionary characters. Moreover, when Player 1 and Player 2 interrogate and respond to the dialogue of the Scientist and Missionary, as they do when translating the Latin in the above excerpt from *In a Lifetime* or in the many evocations of sovereignty akin to Player 2’s, “If I thought you were sent by the creator, I might be induced to think you had a right to dispose of me” (p. 112), they do so in ways evocative of a Greek Chorus. In an Aristotelean sense, they are intimate players in the action as well as communicating broader concerns of the colonial condition (1920 [330 BCE], pp. 65-66).

At this stage of the play’s development, I made a conscious decision to leave the Indigenous character nameless as earlier attempts to ‘name’ them felt forced and overburdened their existence in the play with a personal agenda that did not fit the general tone of the play. The play, *This Man* (1969), written by Solomon Islander writer Francis Bugotu, has made a similar decision with its protagonist referring to him only as “Man”. The decision for characters to be representations of humankind engaged with issues of existence and their place in the broader world is evocative of the representation of humanity in the medieval morality play *Everyman*. The discursive questioning present in *This Man* and *In a Lifetime* serves to disrupt the univocal religious conclusions drawn in *Everyman* where the protagonist, Everyman, is seen to submit to the only redemption offered, in his surrender to the Christian orthodoxy. Neat conclusions such as these do not pertain here.

*This Man* was a serendipitous discovery whilst researching criticism and commentary of South Pacific theatre. Neither of my chosen plays has elicited much commentary relating their work to the theatrical culture of the South Pacific or their cultures of origin. Indeed, as far as Solomon Islands and Papua New Guinean theatre are concerned, what commentary there is tends towards discussion of theatrical ritual expressions or the oral traditions of folk tales. However, *This Man* also connects deeply with Ishmael Reed’s poem *Dualism* and its themes of struggle between the old culture and the new culture, what it is like to be outside and inside
the new culture, or, what Bhabha described as being “not quite/not white” (1984, p. 132).

Examples of dialogue from This Man highlight this subjective confusion. From the outset, the first section of Bugotu’s play is titled “Who are we?” With the insistent pounding of drums Man sets about contextualizing his existence:

**Man:** We are the ones who do not know;  
But we need to find out soon,  
For tomorrow we have sons to teach (1969, p.3).

And further:

**Man:** O— the library is open  
And I can read and write,  
But what I read is driving me insane! (1969, p.5)

In a similar vein to Bugotu’s and Reed’s ontological turmoil on contending with the colonial expectations of how the Indigenous/non-white Other should comport themselves comes the dialogue from In a Lifetime.

Another consideration when writing my play was deciding on characters’ genders. Part of the colonial experience in PNG, the Solomon Islands, and elsewhere in the Pacific, was the establishment of political power amongst the men. This has had its impact on the levels of political engagement with women of the South Pacific even though there are many examples of extant matrilineal land tenure systems (Huffer (ed.) 2008; Pearson 2010). Whilst the gender issues do not have an overt status in my play, they are important to the complication of the general themes in the play and as such, whilst leaving the Indigenous characters Player 1 and Player 2 open, I have been prescriptive about the Missionary and Scientist. Missionary work is still marked by patriarchal hierarchies reflective of the religious cultures of origin; thus the choice to gender the Missionary as male seemed *apropos*. However, the gendering of the Scientist character as female is less a reflection of the role of women in science but rather a representation of the work of Dr Carol Jenkins.

Whether situated in the gender politics of the West or in the responses to colonialism, both historical yet ever present, the clash of cultures is a cacophony of traditional versus modern cultural expressions. In the final section of This Man
titled “Shall I live?” Bugotu shows us the existential confusion of Man caught between the old and new expressions of culture:

Man:  O here in me they meet, the old and the new!
Two rivers rush together, boiling in the crazy whirlpool of my mind!
(1969 p.7)

This internal, and perhaps irresolvable, tension is also reflected in the final stages of my play. After the second, hopeful retelling of The Leech and the Earthworm story the scene opens out to the Indigenous characters attempting to reassert their connections to the old world that is seemingly being swamped by the new. The repetition by Player 1, with increasing uncertainty, of the line “we belong here” is set alongside Player 2’s repetition of “10,000 years” to the final lines:

Player 2:  10,000 years in our lifetime ...
Player 1:  Mipela bilong ... \(long\) pause) ... where? (p. 149)

Ten Thousand Years in a Lifetime (1968) is the autobiography of PNG pathologist and politician Sir Albert Maori Kiki and is an inspiration to the dialogue, attitude and title of my play. The cultural turmoil to which the title alludes, which in some quarters has become an epithet for PNG society, speaks to the experience of colonized peoples being caught ‘between’ cultures. Bugotu’s response to this turmoil is enacted in the final stage directions of his play:

... from both sides together the Old Dancers and New Dancers come racing in, leaping at Man, who falls to the ground. They leap over him. Music is the rock and roll of New Dance and custom music of Old Dance played simultaneously at full blast. The awful noise is symbolic of the awful confusion of Man’s mind (1969, p. 7).

The work of cultural appropriation of the colonized from the colonizer is never a straightforward acceptance of cultural ‘norms’; it is always a negotiation from unequal positions. With reference to the creative choices made for In a Lifetime I was mindful of bell hooks’ argument:

All colonized and subjugated people who, by way of resistance, create an oppositional subculture within the framework of domination recognize that the field of representation [...] is a site of ongoing struggle (1995, p. 57).
However, it can also be a site productive for the colonized culture as they develop new ways of telling their stories. Thomas King, in his book *The Truth About Stories: A Native Narrative*, explains:

> The truth about stories is that that’s all we are. “You can’t understand the world without telling a story,” the Anishinabe writer Gerald Vizenor tells us. “There isn’t any centre to the world but a story” (2003, p. 32).

It is for this reason that I chose to include verbatim examples from oral traditions as part of my script. It is in the oral traditions of storytelling, particularly in folktales and songs, that are capable of adaptation and appropriation to new political realities. The choices that I have made in the use of other verbatim sources helped secure the characterisations of Scientist and Missionary.

### 4.3 Other inclusions and inspirations

As the writing of *In a Lifetime* developed it became obvious this was a play dealing with characterizations of broader ideas rather than personal interactions—the interplay of the nexus of political realities. As such, verbatim sources were important to constructing the tone of voice.

The Scientist’s voice, although in part original, also contains much that has been farmed from sources as diverse as the Hippocratic oath—the ancient declaration of medical ethics—and a statement made by Professor Marie-Clair King to the United States’ National Academy of Science on the “relevance of the Human Genome Diversity Project to biomedical research” (1996). In the dialogue constructed out of the Hagahai letter it is the interplay between the elements of verbatim and original source material that provides the antagonistic element of drama between the Scientist and the Indigenous characters. As Player 1 begins the speech based on the Hagahai letter the Scientist ironically quotes segments of the Hippocratic oath as Player 2 challenges each pronouncement with growing frustration:

**Scientist:** *Primum non nocere* ...

**Player 2:** What is that? Pig Latin? We were educated by Catholics you know!? First do no harm ... pffft! (p. 139)
Professor King’s statement is a less verbatim influence on the dialogue of the Scientist. It is King’s overriding positivist attitude to the value of her work, especially amongst Indigenous communities, that reflected Dr Jenkins’ attitude to the Hagahai, which has informed segments of my dialogue such as, “without our intervention there is no hope ... only extinction ... a slow decay” (p. 134). There is also a play of status reflective of my analysis in the thesis that detaches the Scientist from identifying too closely with the objects of medical care. In the latter stages of the play the Scientist’s head floats in blackness in the moments after her death in a satirical rendering of Jenkins’ desire to send her bones back to the Hagahai.

By comparison, the Missionary has little direct dialogue with the Indigenous characters. There is a univocal direction for the Missionary’s dialogue that is not reflective of the general uptake of religious observance from the Indigenous peoples of the Pacific. However, as I showed in Chapter 1, missionaries of the ilk of Markus Melliger continue to talk of the spiritual outcomes of their Indigenous ‘flock’ in a language that marginalizes them against a strict reading of the articles of faith that the particular missionary is working under. Therefore, the didactic voice informs the tone of the Missionary’s dialogue.

The main verbatim source, which has strongly influenced the dialogue of the Missionary, came from a published sermon from 1998 called, The Great White Throne Judgement (Legge 2011). This recent example of evangelical religious fervour suits the didactic tone I wished to create for the Missionary yet is also redolent in its colour imagery particularly in the line equating ‘whiteness’ with purity:

> Why does God require a white throne and not a black, brown or brindle throne? Because Whiteness is purity ... Whiteness is purity!!! And purity is the strength of God through Jesus who will judge you from the throne – the Great White Throne! (p. 117)

The allegories in the references to colour are also reflected in the other verbatim choices for my script.

_Ezekiel Saw the Wheel_ is a traditional gospel tune that has many adaptations, and is an antecedent to another gospel song – _Dem Bones_. The version of _Ezekiel Saw the
Wheel that I have chosen to include in my play serves as a metaphor for many of the thematic elements of the play such as: the evocative use of colour that connects with such diverse elements such as the obvious purity of white, red for blood, to representations of fascist colour schemes, and as has been discussed in previous chapters, the ‘stain’ of blackness. There is also an association to faith elements imbued in the exploratory work of science, religious entities and their interests in the colonization of the bodies and souls of the Indigenous/non-white peoples of the developing world; and the ‘wheel within a wheel’ is a symbol of the matrix of competing interests in the story of the play.

The colour imagery was conceived to fit in with each segment of the play and includes elements from three versions of the song (including a version by Woody Guthrie). It also has references to the eighteenth-century theory of the “lost tribes of Israel”. In the context of my play the theory, which was expounded by evangelical missionaries to the South Pacific, proffered the idea that the Maori were the descendants of Noah’s son Shem whilst the Papuans and Australian Aborigines were the descendants of Noah’s less favoured son Ham (Kirsch 1997; Howe 2005) which provides a further example of the hierarchy imbued in the taxonomies of the Indigene.

The final verbatim source I wish to engage with is The Leech and the Earthworm, a recent folk tale from Vanuatu that tells the story of colonialism. The Leech convinces the Earthworm to come out of the ground, its usual environment, to join it on the surface. The Earthworm is wary but is eventually seduced by the Leech’s promise that it will “take care of everything”. On arriving at the surface the Earthworm is baked in the glaring sun and dies. This folk tale is a vital expression of engagement with and resistance to the increasing influence of colonizers/colonialism and its impacts. Folk tales and songs are oral traditions that can change over time to match the circumstances of the storytelling. A version of The Leech and the Earthworm, from which my version of the story developed, also appeared in a documentary of the same name (2003) based on the stories of Indigenous/non-white groups dealing with the biopiracy of their DNA, as well as flora and fauna that has traditional uses.
I included the stylized version of the Hagahai letter, as with the gospel blues song, the folk tale, and other verbatim sources because of my wish to do justice to the Indigenous/non-white voice. The Scientist and Missionary characters’ verbatim sources provide a link to a history of colonialist utterances, which are also exemplified in my thesis, and help build an archetypal voice. To bring the play to fruition I expect there to be some fine-tuning of character interactions to help strengthen the interplay of themes and voices. There is still an element of anxiousness that I carry about the representations present In a Lifetime, but I am somewhat mollified by the exclamation of Hamm in Samuel Beckett’s Endgame:

Hamm:       (Pause. Violently) Use your head, can’t you, use your head, you’re on earth, there’s no cure for that! (1986, p. 125)

The colonial condition is still operational in our ‘post’-colonial world and must be continuously interrogated in order to identify the ordinary operations of power so that antagonisms may be brought to bear.

The stories of the Indigenous/non-white Others are out there to be told—and more importantly—to be heard. The contrasts between the Indigenous/non-white voices and the voices of scientists and missionaries are a story in-and-of themselves and provide us with the opportunity to interrogate the circumstances being described. Thomas King ends each chapter of his book with a similar provocation. Asking the reader to take the story of the preceding chapter, and:

Make it yours. Do with it what you will ... But don’t say in the years to come that you would have lived your life differently if only you had heard this story. You’ve heard it now (2003 pp. 29, 60, 89, 119, 151, 167. My edit).

It is an important incitement to the reader to not just hear the story, but to actively listen, to witness—it is a provocation that insists on no innocent bystanders.
In A Lifetime:

Puripuri olosem bulmakau man pekpek

(Magic or bullshit)

A Play by

Lajos Hamers
The West won the world not by the superiority of its ideas or values or religion, but rather by its superiority in applying organized violence. Westerners often forget this fact, non-Westerners never do.

Samuel P Huntington 1993,
*The Clash of Civilizations and the Remaking of World Order.*

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Once upon a time, in some out of the way corner of that universe which is dispersed into numberless twinkling solar systems, there was a star upon which clever beasts invented knowing. That was the most arrogant and mendacious minute of "world history," but nevertheless, it was only a minute. After nature had drawn a few breaths, the star cooled and congealed, and the clever beasts had to die.

Friedrich Nietzsche 1873,
*On Truth & Lies in an Extra-Moral Sense.*
The characterisations, actions and setting in this play are deliberately abstract and non-naturalistic. The intention here is not to undermine the specific geographical, cultural and political circumstances of the various colonised people of the Pacific, or the culture of PNG in particular. I acknowledge and respect the cultures represented in this play—the Indigenous peoples of Australia, the Hagahai and the people of PNG, the peoples of Vanuatu and Aotearoa, Indigenous and African American communities of the United States of America—and their particular relationship to land, language, kinship and culture. Rather, the intention is to challenge the abstract discursive frames used to represent the experience of colonisation and the storytellers whose voices have been historically privileged in that context.

I had initially described the potential setting of the stage as a ‘Tribal Space’. This is a complex and controversial descriptor and was meant to open the space for interpretations of director/dramaturg/actors as is relevant to local conditions of theatrical presentation. This will mean different things to different Indigenous communities whether they be urban, regional or isolated as it will to Indigenous communities in different geographical locations. Taking a cue from community directed theatre, such as Augusto Boal’s Forum Theatre, the ‘tribal space’ is not intended to be generic but open to adaptation and direction of the community mounting the play. Similarly, the names of the Indigenous identified characters should be seen to be fluid and be replaced with appropriately meaningful names depending on locality of performance. Directors are also encouraged to build the ensemble pieces with as much movement and choreography as they see fit.
Main Players:

Player 1: Indigenous Adult (female/male): capable, strong, intelligent has been educated in Western institutions and is an interpreter.

Player 2: Indigenous Adult (female/male): leader, wise, intuitive yet out of their depth in the collision of cultures.

Scientist: (female) Ambitious leader of a medical team sent to help the villagers. Driven by the positive aspects of her medical endeavour.

Missionary: (male) Missionary who has been with the village for 3 years. He talks the fire and brimstone talk but in practice is more softly-softly as an evangelist. Equally driven by the positive aspects of his endeavour as the Scientist.

Ensemble: (female and male ensemble of 4 – 8 players for other named roles)
IN A LIFETIME – A PLAY

Player 1: We belong here,
The voices of our timeless land
Taking and using with care
The land that nurtured our lives for generations

Player 2: I am the voice beyond,
Our sisters and brothers from lands afar
Entwined histories, communion and fear
Protecting what has nurtured our lives for generations

Missionary: I am man’s voice of god,
The savage man’s soul, to save and to heal
To show them god’s intelligent design
To bring them into the light of modernity

Scientist: I, the voice of the world,
Discoveries that progress and heal
To show them the right path for their evolution
To bring them into the light of modernity

Player 1: Listen to what they said ...

Missionary: There is a judgement to behold, of us all, sinners before the Lord God almighty!

Scientist: Weigh benefit against cost and the ends always justify the means to the saved.

Player 2: Perhaps you think the Creator sent you here to dispose of us as you see fit ...

Missionary and Scientist dress as if for a wrestling/boxing match with only one or two symbolic props or costume items to represent their characters. They are preparing to match themselves against
each other as this section of dialogue continues and Player 1 & Player 2 shape up as trainers for Scientist and Missionary respectively.

Missionary: The message here is clear, clear as the mission bell and I pray my friends that we find the power in the word of God to change us. I pray that the power of the word is incisive, it pierces us like the spear into Jesus’ side, to awaken us to our inadequacies, awaken us to our weaknesses in the blood of Christ ... I pray my friends for those of you who have never seen Christ and his saving grace that you will be awakened to him tonight, to be released from your savage ways and come into the light of life. God’s revelation speaks of The Great White Throne of Judgment ... and the results of this judgment are clear. The results will be HELL!

Scientist: Relief of suffering, relief from pain, relief from death ...

I do it because I know I can help others, I can see the endgame of our progress ...

Progress is inevitable and beneficial ...

My job is to provide the means to secure an end, the means of a cure ... Criticisms come, do not ask me to describe the processes of distribution and the place of the developing world when children die of preventable disease.

Criticisms come, but do not ask me to defend the cruelty of research to animals when children die of preventable disease.

Player 1: The Great Myth is: If we are contacted, we can have the benefits of ‘their’ way of life. But, we won’t get the chance.

The reality, the future offered by settler society is to ‘join’ at the lowest possible level – often as beggars and prostitutes. History proves that tribal peoples usually end up in a far
worse state after contact, often dead ... Listen to what they said ...

Player 2: If I thought you were sent by the creator,
I might be induced to think you had a right to dispose of me.
Do not misunderstand me,
But understand me fully with reference to my affection for the land.
I never said the land was mine to do with as I choose,
The one who has a right to dispose of it is the one who has created it.
I claim a right to live on my land,
And accord you the privilege to return to yours.

Missionary: Be released from your savage ways and come into the light of life!

Player 2: When wild in woods the noble savage ran.

Scientist: Discovery doesn’t necessarily lead to cure but knowledge is power ...

Player 1: Indians are worse than animals. They’re not even good to eat.

Missionary: And I saw a Great White Throne, and him that sat on it, from whose face the earth and the heaven fled away ... I saw the dead, small and great, stand before God ... and the dead were judged, according to their works from the book of Life. And the sea gave up the dead which were in it; and death and hell delivered up the dead which were in them: and they were judged, every man, according to their works. And death and hell were cast into the lake of fire. This is the second death. And whosoever was not found written in the book of life was cast into the lake of fire.
Scientist: Knowledge is good, is the only good, the truth of life, the more we have to say about a topic the fuller we can describe it and flesh out the organ of the trouble.

Each rabbit I sacrificed to the research I said a prayer to Apollo the Physician and AsclePlayer 2, Hygieia and Panacea.

Work hard and enough success will improve your lot, your working conditions, your reputation amongst colleagues ... your fellow man!

Trying to find a cure for cancer, diabetes, tinea – I wanted to find a way to help my grandfather dying of his blood cancer ... my sister suffering from asthma ... my rabbit Bellamy’s fleas. I have been trained well. Knowledge is never a burden. I discovered that this knowledge could indeed fulfill my childhood dream of helping others ...

Player 1: Christopher Columbus, 1492 – “All the inhabitants could be taken away or held as slaves, for with 50 men we could overpower them all and make them do whatever we wished. If I was in authority, I would exterminate the brutes. I would leave one alive to exhibit to the public in a zoo.”

Player 2: In the treaty councils the commissioners have claimed that our country, our food, our bodies have been sold to the Government ... *(Shakes head in disbelief)* ... Suppose a white man should come to me and say, 'I like your horses, and I want to buy them.' I say to him, 'No, my horses suit me, I will not sell them.'

Then he goes to my wantok, my neighbour, my gavman and says to them: 'He, over there, has some good horses. I want to buy them, but he refuses to sell.' And someone else answers, 'Pay me the money, and I will sell you their horses.'
The white man returns to me and says, ‘I have bought your horses, and you must let me have them.’ If we sold our country, our food or our bodies to the gavman, this is the way they were bought.

Missionary:  
My words fly up but my thoughts remain below,  
Words without thoughts never to heaven flow.

Player 2:  
Brother we have listened to your talk ...

Scientist:  
I held his hand, cold, with the last flicker of light ebbing and flowing from his hand.

Player 1:  
This is not the truth ...

Scientist:  
I stood by his bed the day before he died, while the adults stood plastered to the walls afraid to come too close to the bed ... I watched it ravage his body, rusting him from the inside out ... I would soon feel the sting of illness and death even closer ...

I was so distraught when our ... (thoughtfully clicks fingers 3 times) ... had died that I exhumed its body from the early morning grave ... I breathed my desire for life into its mouth ... Breathe life ... Restore its vitality ... This moved me ... That I could change the world around me, protect it from death.

Player 1:  
William Dampier, 1697 – “The inhabitants of this country are the miserablest people in the world. The Hodmadods of Monomatapa, though a nasty people, yet for wealth are gentlemen to these; who have no houses and skin garments, sheep, poultry, and fruits of the earth, nor ostrich eggs, as the Hodmadods have; and setting aside their human shape, they differ but little from brutes. For they all of them have the most unpleasant looks and the worst features of any people
that ever I saw, though I have seen a great variety of savages...

Missionary: The place of the final judgment is the Great White Throne; but why is it white? Why does God require a white throne and not a black, brown or brindle throne? Because Whiteness is purity. Whiteness is purity!!! And purity is the strength of God through Jesus who will judge you from the throne – the Great White Throne! And you, you who have not heard of God before today, you who have not accepted that this is the God over all mankind should beware of the one who will judge you.

Player 2: This goes out to our father, the great White Chief...
My people have called upon me to reply to you
And in the winds which pass through these aged pines
We hear the moanings of their departed ghosts
And if the voice of our people could have been heard
That act would never have been done.
But alas, though they stood around, they could neither be seen or heard;
Their tears fell like drops of rain.
I hear my voice in the depths of the forest,
But no answering voice comes back to me.
All is silent around me,
My words must therefore be few,
I can now say no more ...

Player 1: We must tell this story ...

Missionary: In the name of the father and the son and the holy ghost ...

Scientist: There was a dream I had as a child ...

Player 2: He is silent for he has nothing to answer when the sun goes down ...
This section should build in intensity ... The fight! The dialogue should crash and stumble together with some choreography to match the style of combat. The bell tolls for the match to begin.

*SFX - Ding! Ding!*

**Missionary:** People! Today I wish to talk about our judgment ...

**Scientist:** There was a dream I had as a child ...

**Player 1:** We – we will set the record straight ...

**Scientist:** I can change the world around me – protect it from death ...

**Missionary:** It’s the judgment of all of us sinners before the Lord God almighty ...

**Player 1:** We – we will give the honest account.

**Scientist:** Often a stray animal came – I wanted to save it!

**Player 1:** We are far removed from your concerns ...

**Missionary:** The message is clear – clear as the mission bell!

**Scientist:** Breathe life ... Restore its vitality – save it!

**Player 2:** No man has more contempt than I, of breath;
But when will you give me death?

*SFX - Ding! Ding!*

*End of round, back to corners ... prepare for bell.*

**Scientist:** I was so distraught when our old ... *(looks at fingers and clicks them 3 times)* ... had died that I exhumed its body, I applied cardiac massage, I brushed the dirt from its mouth and breathed my desire for life into its mouth.
Missionary: The judgment was made clear through the Bible and the revelation of God to John the Apostle while he was in exile on the island of Patmos. You might think he was on a grand holiday on this Mediterranean island ...

Player 2: \textit{(delivered into the ear of Missionary as a trainer would)}
Obeyed as sovereign by thy subjects be;
But know that I alone am king of me.

Player 1: \textit{(Into Scientist's ear ...)}
We could tell our own story, but now the World needs us to be for them ...

Player 2: I am as free as nature first made man,
Ere the base laws of servitude began,
When wild in woods the noble savage ran.

Player 1: This is not the truth ...

\textit{SFX - Ding! Ding! (Next round)}

Scientist: I would soon feel the sting of illness and death even closer ...

Missionary: The power of the word is incisive! It pierces us like the spear into Jesus’ side and awakens us in the blood of Christ!

Player 1: The doctor could be a good person ...

Scientist: I watched my Grandfather rust from the inside out!

Player 1: The doctor who came to help us, took our blood and left, never to return ...

Missionary: I pray my friends for you who have never seen Christ will be released from your savage ways and come into the light of life ...

Scientist: I wanted to help my grandfather dying of his blood cancer ...
my sister suffering from asthma ... my rabbit Bellamy’s fleas ...

Player 1: Doctors came and took our blood because they worried about diseases – bugs! Binitang! Waitpela diseases!

Missionary: God’s revelation to John speaks of The Great White Throne of Judgment. The results will be HELL!

Player 2: They take our blood to look at it ... blood is life ... not for money ... no way ... what is hell?

Scientist: I have been trained well and knowledge is never a burden!

Missionary: Hell is not so fashionable in sermons today, we’re encouraged to preach the love of God and the redemption of forgiveness but what is lost? The results of not seeking redemption in forgiveness – the results of not awakening into the healing blood of the Lord Jesus Christ ...

Player 2: Indians are worse than animals. They’re not even good to eat.

SFX - Ding! Ding!

Scientist and Missionary retreat back to corners and prepare for next round.

Scientist: Discovery doesn’t necessarily equal cure but knowledge is power ...

Missionary: The only way to be saved is to be born again ...

Player 2: (Into Missionary’s ear ...)

In the treaty councils the commissioners have claimed that our country, our food and our bodies have been sold to the gavman.
Player 1: *(Into Scientist’s ear …)*

We do not belong to the gavman – no way!

*SFX - Ding! Ding!*

Scientist: Criticisms come, don’t ask me to justify when children die of preventable disease …

Player 2: Perhaps you think the Creator sent you here to dispose of us as you see fit …

Scientist: Each rabbit I sacrificed to the research I said the prayer to Apollo, AsclePlayer 2, Hygieia – Panacea!

Player 2: If I thought you were sent by the creator, I might be induced to think you had a right to dispose of me …

Missionary: It’s clear that our judgment will matter for nothing in front of the Great White Throne!

Scientist: Knowledge is good, is the only good – the truth of life!

Missionary: The place of the final judgment is the Great White Throne.

Scientist: Criticisms come, but do not ask me to defend the cruelty of research to animals when children die of preventable disease …

Player 2: I claim a right to live on my land, And accord you the privilege to return to yours …

Missionary: Why does God require a white throne and not a black, brown or brindle throne?

Scientist: Progress is inevitable and beneficial …

Missionary: Whiteness is purity!

Player 1: Kill the brutes! Or exhibit them in a zoo …
Player 2: And my people have called upon me to reply to you ...

*SFX - Ding! Ding!*

*(Back to corners)*

More actors enter the stage taking up positions at outer edge of stage...
When actors are settled, each actor starts keening in turn, building in intensity, overlapping the dialogue as Scientist and Missionary hurl their lines, like abuse, across the space.

Scientist: My job is to provide the means to secure and end, the means of a cure ...

Player 2: And in the winds which pass through these aged pines, We hear the moanings of their departed ghosts ...

Missionary: You will be burnt up by the fire like the dry dead leaves on the forest floor if you shy away from the light of right in Jesus' name; in Jesus' blood ...

Player 1: No man has more contempt than I, of blah blah blah, But when do you have the right to give me death?

Scientist: I do it because I know I can help others, I can see the endgame of our progress.

*Keening reaches crescendo then stops abruptly ... beat as Missionary and Scientist calm themselves ... Sounds of nature begin to rise.*

Player 2: And if the voice of our people could have been heard, That act would never have been done ... But alas though they stood around they could neither be seen or heard, Their tears fell like drops of rain! I hear my voice in the depths of the forest ...
Missionary: My words fly up but my thoughts remain below,
Words without thoughts never to heaven flow ...

Scientist: Relief of suffering, relief from pain, relief from death ...
Weigh benefit against cost and the ends always justify the means to the saved ...

Missionary: *(as he leaves the stage)*

There is a judgment to behold, of us all, sinners before the Lord God almighty!

*Scientist shakes head and leaves the stage ... Player 1 & Player 2 join the crowd at the edges of the stage.*

Player 2: But no answering voice comes back to me,
All is silent around me ...
My words must therefore be few,
I can now say no more ...

Player 1: These are our thoughts ...

Player 2: He is silent for he has nothing to answer when the sun goes down ...

*The actors continue murmuring amongst themselves like a breeze in the trees, they are impish and full of life ... Missionary enters the stage ... Squinting and looking about ... during the opening scene the ensemble actors provides ghostly voice effects from the margins of the stage.*

Missionary: Hello? ... Hello? ... Is there anyone out there? ... Mi pater ... Mi telatela ... Mi bilong toktok ... *(pause)* ... God, it's so quiet

Ensemble: *(whispering)* No ken mekim nois ... shhhhhhh

Missionary: What was that!? Who's there? ... Anyone? ... *(looking out into the audience)* ... Why is it so black out there? ... *(mumbles to
himself shuffling uneasily around the dimly lit stage) ... God, how long has it been? Take the path up the mountain side they said, the village is right at the end of the path they said (squinting into the audience worriedly) ... it's so black out there –

Ensemble: (ghostly/spooky) Blapkela, waitpela, tambuna ...

Missionary: Shit! (under his breath and looking around frenziedly) Who is out there!!! Why is it so black? Why me? Why not a nice country parish? Why this god forsaken patch of savage Eden?

(Throwing himself to the ground – Pantomime of Gethsemane)

Please God ... Is there nothing to be done?

Two Ensemble actors come out from the margins of the stage whilst the Missionary is in the throes of prayer ... Speaking for the benefit of the audience.

Player 1: Oh, this is ponderous!

Player 2: They all begin this way, knees a quiver and praying to gutpela god.

Player 1: Time has shown us many versions of the same man. They came with a pioneering spirit fuelled by the fervour for their gutpela god.

Player 2: Ha! Remember the ones who came with swetpela! Lollies and switbiskits for our souls!

Player 1 & Player 2 look wistfully out into the audience ... look at each other and burst into laughter.

Player 2: As if our souls were for sale for such a cheap price!

Player 1: (to audience) Gutpela meris and gutpela mans we are here to guide you through a story ...
Player 2: Well, a series of stories …

Player 1: It speaks of an experience with time.


Player 1: With our Indigenous bratasusa around the world ... Manmeri! Wantok! Wanples, wanlain, wanlotu …

Player 1 & Player 2: (singling out first singer) Sing sing!

As Player 1 & Player 2 encourage the Ensemble to fill the stage and save the Missionary from his agony in the garden as the musical/a cappella intro begins ... The Ensemble guide M off-stage.

(Single voice)

Ezekiel saw the wheel of time
Wheel in the middle of a wheel
Every spoke was human kind
Way up in the middle of a wheel

Way up yonder on the mountain top
Wheel in the middle of a wheel
Come and see where the lost tribes stopped
Way up in the middle of a wheel (whistles off)

Player 1: Now. Before we tell you our story …

Player 2: We’d like to show you the stori of waitpela man and his coming to our shores … Don’t worry, it’s mercifully brief.

Player 1: Gentlemen … (Three actors, a bizarre English, German & Australian version of The Three Stooges, present forward) … may we introduce good Burgher Jemeni from Germany –

BJ: Danke, hallo (waves to the audience)

Player 2: … and Master Inglis from England
MI: Many thanks, hello (*waves to the audience*)

Player 1: And for later on – Master Strelia

MS: G’day!

Player 1: *(to Player 2)* Shall we give them the floor?

Player 2: Numba wan … *(thumbs up)*

*The following is a brief, and reasonably accurate, pantomime of colonization in the South Pacific. Master Strelia is on the outskirts of the action looking for the place to insert himself into the action.*

BJ: Burgher Jemeni

MI: and Master Inglis

Decided one day to set sail

BJ: For Burgher Jemeni –

MI: and Master Inglis

BJ & MI: Our regent’s bidding we were hailed

BJ: Setting forth to the South Pacific El Dorado

We sailed as fast as we could

MI: For all sorts of treasures, rattles and cargo

And some quality wood *(winks at audience and makes a crude gesture)*

Player 1 & Player 2: Ahem! *(MI mouths ‘sorry’ towards them)*

BJ: After setting our stores for many years

MI: Storm clouds gathered on the horizon

BJ: Burgher Jemeni and
MI: Master Inglis
Set their sails back to Saxon –

BJ: And Albion!

MI: No wait I’m Albion!

BJ: So you are – apologies ... But now, Burgher Jemeni

MI: And Master Inglis
Agreed to have a battle

_Bj, MI & MS act out a brief pantomime to represent WW1 & WW2 ... Ensemble are on the margins of the stage and amused._

BJ: (sadly) Burgher Jemeni lost

Player 1 & Player 2: Twice!

MI: Master Inglis now owns the rattle

Player 1 & Player 2: But, Master Inglis couldn’t come and play anymore

MS: So Master Strelia came and shook the rattle

Player 1 & Player 2: He shoots for black-birds in El Dorado.

_MS aims at Player 1 & Player 2, shoots at them Player 1 & Player 2 duck._

MS: Bugger, get ya next time ... _to the audience_
As black, as black as a tar barrel.

Player 1: All right then, back to your places!

_MS, BJ & MI gather together in a self-congratulatory huddle with impro self-congratulatory dialogue getting louder as it goes on._
Player 1: Gentlemen ... Gentlemen! GENTLEMEN!!

MS, BJ & MI stop their disruption.

Back to your places please ...

Player 1 & Player 2 exchange a glance, roll eyes and sigh.

Player 2: And that was just the beginning – kirapim.

Now, we have a story to tell ... Let us tell it from our shores as they sailed in.

Player 1: Now we'll give way to our ancestors – our tambuna.

The ensemble acts out the folk tale The Leech & the Earthworm – the main allegory of the play. This version is the traditional version of the story ... The Missionary should play the role of the Leech in this version of the story.

Narrator: Listen! For now we must speak;
We are translated you see and we deserve our space to speak.
There is an ancient story told by our ancestors ...
In their comfort underground
A Leech and an Earthworm meet each other ...
The Earthworm was surprised to see such an elegant creature as the Leech;
The Earthworm had never seen such a creature as the Leech before.
The Earthworm looked the Leech up and down before saying ...

EW: The old ones tell strange tales of the Leech,
But they are old stories that make no sense any more.
So, welcome to my comfort ... is there anything that you need?
N'tor: The Leech smiled ... The Leech smiled an enormous smile.

LCH: I am all well and you are very hospitable. I am happy to share your comfort with you.

N'tor: Curious now, The Earthworm replied ... 

EW: Where are you from? The old ones tell stories about you. The old ones tell stories about the Leech. But they are old stories and make no sense anymore.

N'tor: The Leech, he just smiled ... The Leech just smiled an enormous smile.

LCH: I come from above. I come from the forest floor. I live in the open air.

EW: Above in the open air! Where the sun shines so bright!? Where we should never dare! I am amazed at you!

LCH: It is no wonder for amazement ... 

N'tor: Said the Leech ... with an enormous smile.

LCH: It is a comfort to me and mine as your domain is to you and yours. I should like it so much if you could see my comfort. Come with me to the open air.

EW: But follow you I cannot do.

N'tor: Spoke The Earthworm with a hint of fear ... 

EW: The sun shines so bright up above in the open air. The stories tell us to beware. We are not used to the heat and light. We have no use for that comfort up above.

N'tor: But the Leech smiled an enormous smile ...
LCH: But all is well. You are my friend. On the forest floor the sun is so soft. Mottled by the cooling leaves of the tallest trees. And rain keeps our forest alive and is a daily blessing. Trust me, I will take care of you. Trust me, I will take care of everything.

Ntor: The Earthworm paused for thought; and then replied ...

EW: You are my friend and you speak true. Take the lead my friend and I’ll follow you.

Ntor: The Leech just smiled and began to lead the way. With the Leech in the lead the Earthworm could not see the surface up above. The Leech’s shadow sheltered the Earthworm’s path until – as sudden as the awareness after the moment of the Earthworm’s birth, the Earthworm breached the surface and shrieked in the glare. The Earthworm shrieked and the ancestors’ voices filled the air.

The sun baked down on the stunned Earthworm and the last thing the Earthworm saw before the ancestors came for their soul was the Leech smiling. The Leech was smiling an enormous smile … And through the teeth of the treacherous grin, the Earthworm could hear the Leech sing.

LCH: Trust me I’ll take care of everything ...

Player 1: (mimicry) Trust me, I’ll take care of everything ...

Player 2: (as above) Trust me, I’ll take care of everything ...

Player 1: Waitpela man had a plan ...

Player 2: Trust me, I’ll take care of everything ...

Player 1: And some of us did trust him, waitpela man had a plan ...

Player 2: He came with gifts and lolis and talk of Jisus man and gutpela god … Places everyone!
Ensemble prepare for the return to the stage of the Missionary, Player 1 & Player 2 nominate the next singers.

(2 voices)

And the big wheel run by Faith, good Lordy
And the little wheel run by the Grace of God
In the wheel in the wheel in the wheel good Lordy
Way up in the middle of the air.

Who’s that yonder dressed in white?
Way up, way up in the middle of the air.
Must be the lost children of the Israelites
Way up in the middle of the air.

And the big wheel run by Faith, good Lordy
And the little wheel run by the Grace of God
In the wheel in the wheel in the wheel good Lordy
Way up in the middle of the air.

Player 1: Whiteness … it came like an earthquake - a guria …
Player 2: And god’s white throne … It swept over us like a tsunami …
Missionary: (Interrupting) I am here to save souls people! Your souls!

Today I wish to talk about judgement, the judgement of all sinners before the Lord Jesus Christ. The judgement of all of us sinners before the Lord God almighty!

The message here is about what we will be saved from if we give up our old lives and give them up to the Lord.

The message here is clear, clear as the mission bell and I pray my friends that we find the power in the word to change us. I pray that the power of the word is incisive, it pierces us like
the spear into Jesus’ side, to awaken us to our inadequacies, awaken us to our weaknesses in the blood of Christ. I pray my friends for you who have never seen Christ and his saving grace that you will be awakened to him tonight, to be released from your savage ways and come into the light of life.

And you, you who have not heard of God before today, you who have not accepted that this is the God over all mankind should beware of the one who will judge you. For seated upon the Great White Throne of judgement Jesus’ eyes will be filled with the fire, the fire of everlasting damnation, they will shine over you who do not accept him as your lord and saviour. You will be burnt up by the fire like the dry dead leaves on the forest floor if you shy away from the light of right in Jesus’ name; in Jesus’ blood. You cannot just say the words, you cannot just go through the motions ... You cannot fake it or give it lip service you must give up your heart and ask for forgiveness before the judgment of the White Throne is meted out on you!

Player 1: And how many ‘white’ thrones we have had to deal with ...

Player 2: Some chiefs made pragmatic decisions to accept the words of the waitepela man and his gutpela god ... Kind people, the waitpelas offered their labour and supplied useful things.

Player 1: This was the way of the world they explained ... The way the big wheel turned. They explained our place in the world of the big wheel and how, as cogs, as little wheels, we paved the way.

Player 2: Do as we ‘suggest’ and the world will open for you ...

Player 1: They promised the wealth of the world and we got next to nothing ...
Player 2: We did our best to squeeze 10,000 years of change into a lifetime ...

Player 1: And there are times when confusion still reigns ...

*Player 1 & Player 2 give way to the next vocal chorus ...*

*(2 voices)*

And the big wheel run by Faith, good Lordy  
And the little wheel run by the Grace of God  
In the wheel in the wheel in the wheel good Lordy  
Way up in the middle of the air.

Who's that yonder dressed in red?  
Way up (Way up) in the middle of the air.  
It must be the lost children Moses led  
Way up in the middle of the air.

And the big wheel run by Faith, good Lordy  
And the little wheel run by the Grace of God  
In the wheel in the wheel in the wheel good Lordy  
Way up in the middle of the air.

Player 1: The scientists, did they come all dressed in red?

Player 2: Well, more obsessed with red ...

Player 1: That's true ...

Player 2: And sometimes green ...

Player 1: That's true too ... Just ask the kiap man or the gavman man ...

Player 2: And so we see the story continues from age to age ...

Player 1: Generation to generation ...

Scientist: *(In the style of the Missionary)*
To manage the modernisation of their biology!

That's my mission here. Without our intervention there is no hope ... only extinction ... a slow decay. Yes it is true that our germs have done the damage but now we must exert our responsibility ... They have no knowledge of our science but we can guide their healing ... help develop their physical wealth potential. Immunisation, health care, continued research opportunities for further assistance. With government assistance we can play our part in their economic evolution as well, with good health and untapped potential we can bring the Tribe on-line with the modern economy ... we can assist in evolution’s already fine work that gives this Tribe certain gifts we can harvest to help our own people – quid pro quo. It’s a simple equation.

(2 voices)

And the big wheel run by Faith, good Lordy
And the little wheel run by the Grace of God
In the wheel in the wheel in the wheel good Lordy
Way up in the middle of the air.

Who's that yonder dressed in black?
Way up, way up in the middle of the air.
It must be the children runnin' back
Way up in the middle of the air.

And the big wheel run by Faith, good Lordy
And the little wheel run by the Grace of God
In the wheel in the wheel in the wheel good Lordy
Way up in the middle of the air.
Player 1: We are who we are ...

Player 2: Sometimes black, or red, or the many shades in-between – blackpela, waitpela, tambuna

Player 1: We are in total fusion with the world around us.

Player 2: We are who we are – not because of a curse ...

Player 1: We are who we are because we are drops of sun in simpatico with the earth.

Player 2: We are who we are ... No curse.

Scientist, and others, wear white coats – Scientist (doctor on rounds), Player 1 (Patient), Player 2 (visitor) during rounds the ‘doctor’ goes through the motions during Player 1 & Player 2’s preceding dialogue then with great ceremony ‘doctor’ and others assemble in a meaningful tableau.

Scientist (et al): I will respect the hard-won scientific gains of those physicians in whose steps I walk, and gladly share such knowledge as is mine with those who are to follow.

I will apply, for the benefit of the sick, all measures [that] are required, avoiding those twin traps of overtreatment and therapeutic nihilism.

I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug.

I will not be ashamed to say "I know not," nor will I fail to call in my colleagues when the skills of another are needed for a patient's recovery.

I will respect the privacy of my patients, for their problems are not disclosed to me that the world may know. Most
especially must I tread with care in matters of life and death. If it is given to me to save a life, all thanks. But it may also be within my power to take a life; this awesome responsibility must be faced with great humbleness and awareness of my own frailty. Above all, I must not play at God.

I will remember that I do not treat a fever chart, a cancerous growth, but a sick human being, whose illness may affect the person's family and economic stability, economic stability – ability. My responsibility includes these related problems, if I am to care adequately for the sick.

I will prevent disease whenever I can, for prevention is preferable to cure.

I will remember that I remain a member of society, with special obligations to all my fellow human beings, those sound of mind and body as well as the infirm.

If I do not violate this oath, may I enjoy life and art, respected while I live and remembered with affection thereafter. May I always act so as to preserve the finest traditions of my calling and may I long experience the joy of healing those who seek my help.

Player 1: Are we sick?
Player 2: Are we dying?
Player 1: Is this a trick?
Player 2: Are they lying?
Player 1: Oh wait, it looks as if it wants to speak ... The monster, it speaks!
Player 1 & Player 2 giggle. (Improvisation: place to insert argument between scientist and missionary – wait! What about me? You’ve been speaking for a long time … Doctor responds by saying the age of superstition is past … Missionary could use sections of the Hippocratic oath against the scientist)

Scientist: With the eye of faith I can see the potential in these people …

Missionary: (interrupting) You are kidding me?

Scientist: I’m not speaking in a finite here. I have to pursue this thing if I’m to prove it and use it.

Missionary: But what you’ve just proven is that you are as moved by faith as any religious man!

Scientist: But not in the same way you are. You stop with faith and don’t seek further information –

Missionary: What twaddle! Faith must be tested in doubt. And we have history and culture on our side

Scientist: But your faith, your institution is a political pawn to be moved and used to establish and re-establish the colonial rule! You treat them like children and expect them to bow to your greater gods …

Missionary: Bullshit! (pause) You’re as much a part of the system in operation here as we might be … you promise them a cure but then infect them with a new disease – not deliberately, but here we are! And the things you can do without their informed consent. Before suggesting we take the splinter out of our own eye how about attending to the log in your own!

Scientist: We are both here to “modernise” them. To bring them out of darkness into the light, so to speak, but we can offer material help. Their diseases can be cured.
(Missionary goes to argue)

Scientist: Do you mind?

(Missionary motions in the affirmative and the Scientist takes on a presentational tone)

In our research projects thus far, many families choose to participate in our projects; others decline ... it is to be expected that some communities would participate and others decline. It is obvious to me that individuals, families, and communities have the wisdom and intelligence to make these decisions for themselves, and the right to be provided with information that is useful for doing so ...

Having said this, I would like to introduce one of the participants in our project to stem the horrendous effects of malaria and filariasis in the Papua New Guinea Highlands ... Esteemed members of the academy, I’d like to introduce the object of our blood study ...

Loud applause from the Ensemble, playing as audience, then stops abruptly. Player 1 is telling the story told in the Hagahai letter, this should alter their dialogue into a more presentational tone.

Player 1: We must tell this story ... I cannot write so I tell this story to a friend who can translate and they send it to friends who can make it representable ...

Sc: Please tell our audience about our interaction ...

Player 1: We trusted our friends and this tells our story ... We come from a place far removed from our friend’s home ... We are the people who give this account in honesty and friendship that we have seen. This is our story ...

Sc: It wasn’t always easy ...
Player 1: We have heard stories of the doctor who came to help us ... taking our blood and leaving, never to return ...

Sc: Criticisms come and go ... there is a greater good here

Player 1: This is not (this was not) the truth ... the doctor is a good person and looks after us well, they have taken care of many a thing.

Player 2: Well, they brought us lollies and toys remember ... Oh! And they brought us a fridge!

Sc: There was much to do ...

Player 1: Community health people come after doctors come first time and an aid post was set up so the doctor could send us medicines, solar refrigerators and lots and lots of other things. They take care of us and our families.

Player 2: To be fair we did see the gavman men for a time. They took care ... for a time.

Sc: Primum non nocere ...?  

Player 2: What is that? Pig Latin? We were educated by Catholics you know!? First do no harm ... pffft!

Player 1: Doctors came and took our blood because they worried about diseases from other areas infecting us. They take our blood to look at it ... not to sell it ... not for money ... no way.

Player 2: Not for money. (Sarcastically) Well, not for us, no way.

Sc: Criticisms come and go ... Cura te ipsum.  

Player 2: Cura te ipsum: take care of your own self.

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7 Primum non nocere is a Latin phrase that means "First, do no harm."
8 Cura te ipsum ("Take care of your own self!") is a Latin injunction, urging physicians to care for and heal themselves first, before dealing with patients.
Player 1: They took our blood because they were concerned about big
diseases, from other areas, coming here and we are happy
they did this. Now we hear the big doctors have found a
binitang (a bug ... a virus) in our blood and they have made a
map of it.

Player 2: I don't believe it?

Player 1: Don't believe what?

Player 2: Don't believe in the 'map'!

Player 1: What!?

Player 2: Just a stupid bunch of cartographers!

Player 1: (long pause) What is the collective term for cartographers?

Player 2: Hmmm, a compendium of cartographers?

Player 1: Hmmm, no, not right?

Player 2: A cartel ... Maybe?

Player 1: I've got it - A conspiracy!!

They both burst into paroxysms of laughter.

Sc: (Oblivious) Memento mori ...

Player 2: Well that's nice isn't it. Memento mori ... Remember, death is
... inevitable.

Player 1: We trust what they do as our doctors tell us step-by-step
what they do.

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9 Figuratively "be mindful of dying" or "remember your mortality", and also more
literally rendered as "remember to die", though in English this ironically misses the
original intent. An object (such as a skull) or phrase intended to remind people of the
inevitability of death.
Player 2: They tell us they have a paper to sign so that if the big doctors find a vaccine from the virus in our blood, the big doctors and our doctors will share with us any money that comes from this discovery from our blood.

An absurd physical pantomime should accompany Player 2’s description – A re-enactment of the Scientist explaining the process of genetic testing.

Sc: Of course we can’t name them on the patent application … there is no mechanism for this to happen.

Player 1: (Becoming more embittered) We were happy that our doctors had this paper and we wanted them to sign for us.

Player 2: There was no signature.

Sc: I have made a personal promise to share a share of my share of any royalties.

Player 2: (more insistent) There was no signature.

Player 1: This money does not belong to the government – no way! Why should they get any money when they get money and never think about us, in our place. They didn’t find the binitang in our blood! Our doctors found the virus! So, if the money comes from the big doctors, half will go to them and half will come to us – not the government, no way!

Player 2: We trusted these people in our way. The ancient way, the way we have always trusted.

Sc: Sicut natura nil facit per saltum ita nec lex … 10

Player 2: But just as nature does nothing by a leap, so neither does the law … the ancient law or the new law?

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10 sicut natura nil facit per saltum ita nec lex … (just as nature does nothing by a leap, so neither does the law), referring to both nature and the legal system moving gradually.
Player 1: So, if the money should come from our blood, give the money to our doctors and they will send it to us. Only our doctors know us. They won’t steal our money, they are good people.

Player 2: We trusted them with our life. We trusted them with our blood – our life.

Sc: I have made a connection with these people.

Player 1: We gave as we could and extended the hand of friendship ... we trusted our doctor.

Sc: When I die I have left instructions to send them my head so that it might be put into the cave that honours their ancestors.

*Player 1 and Player 2 take a moment to digest the revelation about the head ... more paroxysms of laughter ... Segue into music / a cappella introduction to the show-stopping rendition of Ezekiel saw the Wheel:*

*(Ensemble voices)*

Ezekiel saw the wheel
Way up, way up in the middle of the air.
Now Ezekiel saw the wheel in a wheel
Way up in the middle of the air.

And the big wheel run by Faith, good Lordy
And the little wheel run by the Grace of God
In the wheel in the wheel in the wheel good Lordy
Way up in the middle of the air.

Who's that yonder dressed in **white**?
Way up, way up in the middle of the air.
Must be the lost children of the Israelites
Way up in the middle of the air.
And the big wheel run by Faith, good Lordy
And the little wheel run by the Grace of God
In the wheel in the wheel in the wheel good Lordy
Way up in the middle of the air.

Who's that yonder dressed in red?
Way up, way up in the middle of the air.
It must be the lost children Moses led
Way up in the middle of the air.

And the big wheel run by Faith, good Lordy
And the little wheel run by the Grace of God
In the wheel in the wheel in the wheel good Lordy
Way up in the middle of the air.

Who's that yonder dressed in black?
Way up, way up in the middle of the air.
It must be the children runnin' back
Way up in the middle of the air.

And the big wheel run by Faith, good Lordy
And the little wheel run by the Grace of God
In the wheel in the wheel in the wheel good Lordy
Way up in the middle of the air
Way up in the middle of the air.

Segue to 1 eerie/ghostly voice ... This is sung as ensemble retreat to the outer edges of the stage.

Ezekiel saw the wheel of time
Wheel in the middle of a wheel
Every spoke was human kind
Way up in the middle of a wheel
Way up yonder on the mountain top
Wheel in the middle of a wheel
Come and see where the lost tribes stopped
Way up in the middle of a wheel

*The stage is almost dark, a dim light allowed, with a spot light front and centre. The spotlight is too illuminate the Scientist’s head ... the Scientist appears.*

Scientist: Hello!? Hello!?
What’s happening? Am I here? What’s going on?
Can anybody hear me?
Am I here?
(Concerned) What is happening?
Why is it so quiet? Am I dead?
A quantum coherence? Worm food? A head in a cave?
Where am I!!!
(looking out into the audience)
Why is it so black out there?
(Pause)
(Worriedly) What is going on!?
(Pause)
It’s too quiet ... Answer me damn it!!!
AM – I – DEAD!
(Long pause)
Wait ... wait ... wait!
Am I here? Is this the cave?
Lascaux? Wave rock? Plato?
(light on face increases in intensity briefly)
That makes no sense ... This makes no sense!
Wait ... wait ... wait!
Think ... think.
Applied thinking is what’s necessary here.
Right, what happened before I was here ... white walls ... the glaring light off white walls ... concerned faces ... concerned faces plastered against the walls ... tears ... the sound of tears ... formaldehyde ... the smell of formaldehyde ... blood ... the taste for blood ... tunnel vision ... I am a prospector? ... At the end of the tunnel, or am I? ... Prospective? ... A vision awakening? ... awakening here ...

faces, black faces, blood, gold, blood, golden blood, black faces, white light, at the end of the tunnel, no dog, no good, no god, good god, more blood ... (more agitated) ... faces, black faces, blood, gold, blood, golden blood, black faces, white light, at the end of the tunnel, no dog, no good, no god, good god, more blood ... (clicks fingers three times and becomes even more agitated) ... faces, black faces, blood, gold, blood, golden blood, black faces, white light, at the end of the tunnel, no dog, no good, no god, good god, more blood!

Player 1 appears from the gloom at the edges of the stage and caresses Scientist's head.

Player 1: Shhhhh, calm now ... belisi, belisi ...

This is our story to tell ...

Scientist to become Leech in the retelling of L & the EW.

The characters, as before, physicalize this retelling of the story with a twist in the tail.

N'tor: There is an ancient story told by our ancestors ... In their comfort underground ...

A Leech and an Earthworm meet each other ... The Earthworm was surprised to see such an elegant creature as the Leech;

The Earthworm had never seen such a creature as the Leech before.
The Earthworm looked the Leech up and down before saying ...

EW: The old ones tell strange tales of the Leech, But they are old stories that make no sense any more. So, welcome to my comfort ... is there anything that you need?

N’tor: The Leech smiled ... The Leech smiled an enormous smile.

LCH: I am all well and you are very hospitable. I am happy to share your comfort with you.

N’tor: Curious now, The Earthworm replied ...

EW: Where are you from? The old ones tell stories about you. The old ones tell stories about the Leech. But they are old stories and make no sense anymore.

N’tor: The Leech, he just smiled ... The Leech just smiled an enormous smile.

LCH: I come from above. I come from the forest floor. I live in the open air.

EW: Above in the open air! Where the sun shines so bright!? Where we should never dare! I am amazed at you!

LCH: It is no wonder for amazement ...

N’tor: Said the Leech ... with an enormous smile.

LCH: It is a comfort to me and mine as your domain is to you and yours. I should like it so much if you could see my comfort. Come with me to the open air.

EW: But follow you I cannot do.

N’tor: Spoke The Earthworm with a hint of fear ...
The sun shines so bright up above in the open air. The stories tell us to beware. We are not used to the heat and light. We have no use for that comfort up above.

But the Leech smiled an enormous smile ...

But all is well. You are my friend. On the forest floor the sun is so soft. Mottled by the cooling leaves of the tallest trees. And rain keeps our forest alive and is a daily blessing. Trust me, I will take care of you. Trust me, I will take care of everything.

The Earthworm paused for thought; and then replied ...

You are my friend and you speak true. Take the lead my friend and I’ll follow you.

The Leech just smiled and began to lead the way. With the Leech in the lead the Earthworm could not see the surface up above. The Leech’s shadow sheltered the Earthworm’s path until – as sudden as the awareness after the moment of the Earthworm’s birth ...

As The Earthworm breached the surface next to the Leech, a huge shriek erupted in the open air! For as swiftly as the Leech had broken the surface, Kotare, the Sacred Kingfisher’s eyes narrowed and spied its prey.

The feathers were as swift as a blade and the bird’s aim was true ...

The Earthworm took in the surrounding scene and, with its dappled light and soft rain anointing the ground, the voices of the old ones sang a hopeful song. The Earthworm knew this world was safe for now and would come again when the conditions were fair but with the old ones’ voices guiding the way
At the end of this re-telling of the folk-tale there is a pause and the ensemble begin to act out actions from busy modern lives ... Snippets of conversations from mobile phones, business meetings, arguments over parking spaces, etc as the next dialogue begins Player 1 & Player 2 find the centre of the stage.

Player 1: We belong here,
The voices of our timeless land
Taking and using with care
The land that nurtured our lives for generations

Player 2: We belong here,
With our sisters and brothers from lands afar
Entwined histories, communion and fear
Protecting what has nurtured our lives for generations

Player 1 & Player 2 look confused by the action surrounding them ... they try again.

Player 1: We belong here,
The voices of our timeless land
Taking and using with care
The land that nurtured our lives for generations

Player 2: We belong here,
Our sisters and brothers from lands afar
Entwined histories, communion and fear
Protecting what has nurtured our lives for generations

Player 1: We belong here ...

Player 2: 10,000 years ...

Player 1: We belong here ...?

Player 2: 10,000 years ...

Player 1: Mipela bilong hia ...
Player 2: 10,000 years in our lifetime ...

Player 1: Mipela bilong ... *(long pause)* ... where?

*Ensemble conversation and sfx of traffic etc swells as light fades.*
Afterword

*C.J. Cregg*: How do you keep fighting the smaller injustices, when they’re all from the mother of injustices?

*Maggie Morningstar-Charles*: What’s the alternative?

*The West Wing, S 3 Ep 8: ‘The Indians in the Lobby’.*

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As I am writing this Afterword there are reports, via international media sources (Darlington 2017), of the killing of up to ten members of an uncontacted tribe from the Brazilian Amazon by illegal miners in the “Javari Valley – the second largest Indigenous reserve in Brazil” (Darlington 2017). Uncontacted peoples are Indigenous groups who have varying levels of contact with the ‘outside’ world. These Indigenous groups and their advocates are fighting to maintain traditional ways of living by resisting contemporary colonization, the violent accession of their lands and the unwanted interference with their lives and culture. It does not mean they are hermetically sealed into a so-called ‘primitive’ lifestyle but that they wish to exert a political power to self-determination. Some tribes have accepted modern medical intervention for the treatment of introduced diseases that have followed on from contact but wish to choose the level of contact beyond immediate medical attention.

These most recent reports, again, highlights the continuous colonial thrust and exercise of biopower exemplified in my thesis. The Hagahai were recently in the position to seek help for introduced diseases that were affecting their peoples. Not only did this contact highlight the ways in which the doors to colonization/civilization could be pried open but also the ways in which the language of the West came to ensnare their existence within the global colonial capitalist market place. Religion, consumer goods and scientific/academic curiosity immediately assumed that the desire for civilization would be uniform as the language of the commodification of the humans in this story, the Hagahai, turned from self-determination to how their present existence could be inhibited
by diseases that were considered impediments to development (see Chapter 1, p. 16).

Resonating with the plain language of Césaire's (2000) criticisms of colonialism comes corroboration of the exercise of biopower as a colonizing process with respect to uncontacted Indigenous peoples:

> It seems that these last human beings are soon to face everywhere their brutal transformation into commodities. ‘Our’ civilization is driven by an expansionist imperative which is consequently ethnocidal. Only ethnocide, the systematic killing, *however it is done*, of non-civilized culture, can bring global homogeneity (Brim & Harrison 2015, p. 6).

The seriousness of this issue is exactly what was implied in Jenkins’ statements about the dire liminal status of the Hagahai and so justified the broad health and cultural interventions by scientist and missionary alike.

In Beckett’s *Endgame*, Hamm advises: “use your head, can’t you, use your head, you’re on earth, there’s no cure for that!” (1986, p. 125). There is a haunting pessimism in the academic and creative analysis I have presented in my PhD project that seems to have become infused by Hamm’s earthly bind. The open question of whether there is a ‘cure’ for being on earth is salutary in its invocation of the overwhelming and continuing disruption to Indigenous/non-white lives of the colonial capitalist project which highlights the ways in which the Indigenous/non-white Other are represented and how the control of those representations have impacted on the material experiences living within the nexus of colonialist and capitalist discourses.

The collision of incommensurable cultural systems has allowed for the “antagonism of strategies” (Foucault 2000, p. 329) to be exercised by Indigenous/non-white communities, however, examples of these moments of discursive reversal are inevitably short lived and usually follow the subjugation of traditional cultures once the gates are significantly opened to Western culture. An apt metaphor for the contemporary material circumstances Indigenous/non-white Others find themselves in is that of the relationship of weather to climate.
The important difference between weather and climate is the measure of time. Weather is the measure of atmospheric behaviour on a short timeline—“minutes to months” (NASA 2017)—and climate is the long-term measure of weather in a particular place. The examples of legacy, reversals of discourse, or advocacy are as local weather patterns are to climate: they are interesting artefacts of local conditions but not representative of the larger system of power relations, which is a continuing and identifiable climate of arcane representations, and exercising of power over what are usually small communities. Controversies over the Human Genome Diversity Project, climate change activism, the Dakota Access Pipeline, United Nations’ commentary on Australia’s progress on ‘Closing the Gap’ of disadvantage for our Indigenous communities, combined with the struggles of the uncontacted tribes around the world and it is clear that a colonial climate maintains its influence over the local conditions of Indigenous/non-white existence. However, acknowledgement of this reality does not mean the strategic struggle against the climate of colonialism will abate. There is no other alternative but to continue the fight for survival – even in the face of an uncertain future.
Appendix A

The Hagahai Letter

The following statement was written by the Hagahai on the request of Dr. Carol Jenkins to secure their opinion about the patenting of a virus from a cell line of one of their members. Although Dr. Jenkins made the original request, she had no further involvement in the writing of this statement.

This statement was written entirely by two members of the Hagahai people, Yokotam Ibeji and Korowai Gane. Yokotam Ibeji is the man from whom the cell line that contains the virus was taken. He is a leader of the Ginam people. Korowai Gane has received the most formal education of the Hagahai and was indispensable both for his comprehension of these complex issues and for his ability to read and write in both English and Melanesian Tok Pisin, the lingua franca of Papua New Guinea.

This statement was written in Tok Pisin and subsequently translated into English by us. Korowai was consulted as to the accuracy of the translation. Thus, aside from distortion through the translator's glass, this is, as they say, their story.

Statement in Tok Pisin

Hagahai em wumpele rima eria bilong Mading Province, Papua New Guinea. Yokotam wantaim Korowai i medim dispele stori.

Sori bilong mipelina em olorn, mipela i borim olorn Dr. Carol Jenkins em i save i kam na kizin blut bling mipela na i go na ino lukak blong mipela, dispele em ino tru. Carol em gupela meri, em save lukakimis mipela gus tru. Em save helpimis mipelina long planti samting tru, kain olorn em save helpimis mipela long patim na nipela C.H.W., na em helpimis mipela log episi, i patim manai, kizin i olak frig, na ol arapela planti samting tu. Em i gupela meri.

Carol em i kam long mipela na kizin blut bling mipela biksu em i tingting planti olorn nogot i kizin sambela hap shum na istap in em ting olorn na kizin blut bilong mipela. Izo long in i go salin na kizin mani, nogot, em kizin blut biksu nogot ol kain siki olom siki AIDS o aspela siki nakuna, no em kizin blut bilong mipela.

Na mipela i get bikpele humamasa long dispele Carol ikan na kizin blut long mipela Na man sorina o haren olorn i NIH i bin panaiwumpele mak bling virus long blut bilong mipela ol Hagahai na ol i bin mekik map long em. Na ol NIH i bin givim wumpele pepa long Carol Jenkins na ol i bin hokim en olorn. Sapos al NIH tru ol i panaiw dispela virusi na ol i ken mekik tana na tur long dispele. Sapos mani i kan long dispele bai hap mani i go long NIH na hap i kan long mipela i. So ol i bin givim pepa long Carol long saimit dispela pepa. Dispele pepa em mipela Hagahai em dispela i humamasa long Carol i saimit dispela pepa. Ipo bilong PNG gavman i kizin hap. Em bai nogot tru. Wai saimit PNG gavman i kizin mani i no save tingimis mipela ol Hagahai. Nogot tru. Na tu ol gavman ino panaiw dispela virusi em i Carol na ol man bilong NIH. Na saimit tru sampele mani i kan long dispela blut bilong mipela ol Hagahai em bai hui iyo long NIH na hui long dispela ol Hagahai stree, ino long PNG gavman.

Sapos dispela mani i kan; hap mani bilong dispela mani i kan long Dr. Carol Jenkins. Carol em saimit i save long dispela. Nokem tinek em bai stil, nogot, em gupela meri.

Em bikpele tingting bilong mipela ol Hagahai.

Terkya.

Translation

The Hagahai (territory) is a remote area in inland Madang Province, Papua New Guinea. Yokotam and Korowai wrote this account.

This is our story, we have heard it said that Dr. Carol Jenkins came and took our blood and left again, and does not come here to see us any more. This is not true.

Carol is a good person and she looks after our interests well. She helps us with many things. For example, she helps us find our community health workers (CHW) and she helps with our aid post. She sends us medicine, helped us get a solar refrigerator, and many other things. She is a good person.

Carol came here and took our blood because she worried about diseases from other areas infecting us, so she took our blood to look at it. It was not to sell it and get money, no. She took our blood because she was concerned about AIDS or other diseases coming here, that is why she took our blood, and we are very happy that she came to do this.

Now we have heard that the NIH (National Institute of Health) has found a virus in our blood and has made a map of it! (Note: although it is doubtful they fully know what the NIH is and does, they do know of the NIH as the group in America that worked with their blood). The NIH people have also given a paper to Carol Jenkins and told her that in the event that they find this virus and make a vaccine from it, any money that comes will be shared between the NIH and us all. So, they gave this paper to Carol for her to sign. We Hagahai are happy that she signed this paper.

Part of (this money) does not belong to the PNG government, no way. Why? (should they get the money) when they get money and do not think about us, the Hagahai? No way. Also, the government did not find this virus, it was Carol and the people in NIH (who found it). They (the government) just think about themselves. So, if indeed some money comes from our blood, half will go to the NIH and half straight to us, the Hagahai, not to the PNG government.

If this money should come, our part of the money must go to Dr. Carol Jenkins, and she can send it to us. Only Carol knows us. You should not think that she will steal, she is a good person.

These are our thoughts, we, the Hagahai.

Thank you.
**Bibliography**


Bhabha, HK 1983, ‘The other question . . . Homi K. Bhabha reconsiders the stereotype and colonial discourse’, *Screen*, 24.6, pp. 18-36.


Dampier, W 1729 [1703], *A Voyage to New Holland etc: In the Year 1699*, viewed 26 June 2011, http://www.gutenberg.org/files/15675/15675-h/15675-h.htm#ch3


Genet, J 1960, The Blacks, Faber and Faber, London.


Gilroy, P 2003, Race and the Right to be Human, Treaty of Utrecht Chair, Utrecht University.

Gilroy, P 2004a, After Empire: Melancholia or Convivial Culture?, Routledge, London.


Gilroy, P 2013, “... We got to get over before we go under ...’: fragments for a history of black vernacular neoliberalism’, New Formations, Issue 80/81, pp. 23-38.


Pugliese, J 2002a, 'Race as category crisis: whiteness and the topical assignation of race', *Social Semiotics*, 12:2, pp. 149-168.


Sandoval, C 2000, Methodology of the Oppressed, University of Minnesota Press, Minneapolis.


*The Leech & The Earthworm* 2003, Documentary Film, A Yeast Directions and an Indigenous Peoples Council on Biocolonialism Production, produced by Debra Harry.


van Klinken AS 2013, ‘God’s world is not an animal farm – or is it? The catachrestic translation of gender equality in African Pentecostalism’, *Religion & Gender*, 3 (2), pp. 240-258.


