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## What are the Roots of Singaporean Sand?: The Impact of Sand Dredging in Southeast Asia

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## Abstract

This paper gathers inspiration from the 2018 documentary film by Kalvanee Mam, Lost World. This documentary focused on how sand dredging projects by Singaporean companies have destroyed the environment and livelihoods of Cambodians who live and rely on coastal mangroves. This paper argues that the wilful disengagement and selective picking of what constitutes a nation's history and legacy has real, practical repercussions on how the modern state shuns the consequences of its extractive practices that enable its development. This paper aims to unpack how Singapore justifies sand mining to feed continuous development within its national borders, despite the negative repercussions this activity has in the wider region. Kalyanee Mam's film has captured the lack of language afforded to those who are displaced and affected by sand mining- which has been duly authorised and legalised through international, regional, and national political and legal institutions. In particular, Singapore's environmental, social, political, and economic stance internalises and embodies that of its coloniser, enabling this extraction. This has allowed the state to construct itself in the vision of the coloniser. The labour and land extracted and utilised to construct the postcolonial state are necessary yet invisible within the cityscape, mimicking colonial policies. This paper asks what outlets and what power structures can allow for accountability and visibility for what is being hidden? This paper will progress in five parts: a) introducing sand mining; b) analysing Singapore from colony to postcolony; c) unpacking Singapore's version of exceptionalism within the Southeast Asian region; d) introducing racial capitalism as a form of analysis; e) introducing how sand mining has been understood in the region; f) concluding remarks.

**Keywords**: Sand Mining, Land Reclamation, Singapore, Cambodia, Southeast Asia, Colonial Continuities

What kind of world can be built from sterile and lifeless sand and land that has no roots, no history, and no memory, except for the violent extraction from its homeland?
– Kalyanee Mam from her documentary Lost World (Mam 2018).<sup>1</sup>

#### Sand-mining and Sand Dredging

Sand has been a thriving international industry. Gravel and sand are crucial components for building construction. The boom in construction that has been caused by the creation and rise of the middle class in countries such as China and India has meant an increase in demand for construction (UNEP 2014). This has led to higher demand for sand, one of the primary components of cement (Kondolf 2000). The UN Environment Programme found that about fifty billion tons of sand (often measured in aggregate with gravel) is being used annually, in contrast with four billion tons of oil (Khalili 2019). Khalili writes of the interconnected relationship between the commodities sand and oil, rightfully arguing how the modern world rests on the shoulders of these two commodities, and how the trade of these commodities holds 'mirrors to global inequalities and ecological plunder' (Khalili 2019, 211). Countries such as the USA and China have been the largest consumers of both commodities (Khalili 2019). There is increasing concern over sand, as the rate of extraction of sand exceeds its natural renewal, creating a scarce resource (Lamb, Marschke, and Rigg 2019).

#### Singapore from Colony to Postcolony

In Singapore, sand mining is intertwined with land reclamation and construction, which serve as crucial pillars for Singapore's development. In Singapore, you will see the immensity of the oceans being littered with ships from every shoreline. Cargo ships have mapped out the

<sup>&</sup>lt;sup>1</sup> The author would like to sincerely thank Dr. George Jose from NYU Abu Dhabi for giving an opportunity to work as a researcher for the Anthropocene: Urbanism, Environment, and Sustainability Research Project and for offering helpful and encouraging advice and guidance throughout the span of the project. This essay invaluably benefitted from that opportunity and his guidance.

distance of the never-ending sea, reminding us that Singapore still retains its colonial port city image and status. According to the Singapore Land Authority, Singapore has grown from 590 square kilometres to over 720 square kilometres in 2020 (Novak 2020). The Urban Redevelopment Authority has stated that it aims to expand by a further 100 square kilometres before 2030 (ibid). Sand is an untold yet central part to the Singapore Story – deeply linked to 'Singapore's culture of development, modernisation and relentless progress' (Novak 2020, 72). William Jamieson notes how Singapore sees itself as chronically undersized: it sees itself as a large country and works backwards (Jamieson 2017). It projects a future where it stands next to cities such as London and New York. However, Singapore is an island located in the middle of the Nusantara (the Malay world), with a majority ethnic Chinese population – a result of colonial labour migration policies. This would mean that the backward envisioning that Singapore employs rests on the erasure of its past in order to construct its envisioned future.

Land reclamation is a practice that started in Singapore in 1822 under British rule. The construction of parts of Boat Quay were among the first documented cases of land reclamation in Singapore by the British administration throughout the 1800s (Novak 2020). Nearby hills were excavated and poured into the Singapore River (ibid). The Singapore River serves as the most important emblem of Singapore's colonial legacy. It is the epicentre of the financial district – with towering skyscrapers named after international banks. Drawing from Khalili's work, the Singaporean context shows the interconnection between these two commodities in a deeper way. Jurong Island is described as a heap of sand. It is dominated by petrochemical companies (Subramanian 2017) and is the amalgamation of seven smaller offshore islands – the islands of Pulau Ayer Chawan, Pulau Ayer Merbau, Pulau Merlimau, Pulau Pesek, Pulau Pesek Kechil (also called Terumbu Pesek), Pulau Sakra (which was a previous merger of Pulau Sakra and

Pulau Bakau), Pulau Seraya, Pulau Meskol, Pulau Mesemut Laut, Pulau Mesemut Darat and Anak Pulau (Lim 2004). By October 2000, S\$7 billion dollars had been invested into the three reclamation projects for the island (Lim 2004). The communities living in these islands were usually relocated to public housing flats provided for by the national Housing Development Board (Hoe 2019). The history of the displacement of Singaporean indigenous communities is obscured by national historic narratives. There is no mention of the relocation of these indigenous communities in multiple national narratives of the formation of Jurong Island. Jurong Island currently serves as a base for important international oil companies - BASF, AkzoNobel, Exxon Mobil and, Vopak (Subramanian 2017).

During the initial inception of independence in 1960, Dutch economist Albert Wisenmius arrived in Singapore as a consultant to the Singaporean government (Yi-Sheng 2021). He advised Prime Minister Lee Kuan Yew that there were 'two pre-conditions for Singapore's success: first to eliminate the Communists who made any economic progress impossible; and second, not to remove the statue of Sir Stamford Raffles' (Yi-Sheng 2021). Lee Kuan Yew was convinced that celebrating Stamford Raffles would show Western capitalist states that Singapore still welcomed their investments (Yi-Sheng 2021). Nine years later, at the opening exhibition to mark the 15<sup>th</sup> anniversary of the People's Action Party (PAP), S. Rajaratnam said that:

... to pretend that [Raffles] did not found Singapore would be the first sign of a dishonest society...We started off as an anti-colonial party. We have passed that stage – only Raffles remains (Yi-Sheng 2021).

This speech highlights how PAP shifted its foundational motive to eradicate colonialism and started to celebrate its colonial history and attribute the Island's success to it. This commemoration of Stamford Raffles continued for decades. In 1972, the Singapore Tourism Promotion Board (now Singapore Tourism Board) erected a second statue of Raffles, made of

white polymarble, at the landing site on the north bank of the Singapore River, near Boat Quay (Yi-Sheng 2021). Interestingly, Boat Quay was one of the first areas in Singapore that was constructed from land reclamation projects in 1822.

In Singapore today, schools, hospitals, and shopping centres are named after Raffles, who has become an icon devoid of any colonial violence. The relevance of Singapore's celebration of its colonial history works hand-in-hand with the erasure and disenfranchisement of the indigenous communities of Singapore. This erases the colonial violence on indigenous communities and subaltern communities, while highlighting elite communities that did benefit from colonial rule. The state celebrates this colonial icon and distances itself from any discourse surrounding indigeneity. This has meant that the indigenous connection to land has been dismissed with the state serving as the central regulator of relations between the people and the land.

#### **Colonialism and a Version of Exceptionalism Constructed**

Singapore has no land, and so minimal resources, and has an ageing population (Subramanian 2017). In order to retain influence, the Singaporean state constantly re-visits and re-moulds a version of exceptionalism. Simultaneously, the state literally expands its territory, as it has been for decades through land reclamation using imported migrant labour. The recent greening efforts can be traced to the 'Garden City' vision that was introduced by the prominent political party leader, Lee Kuan Yew. Over time, that vision evolved from 'Garden City' to 'City in a Garden' and the current 'City in Nature,' which is part of the larger environmental sustainability Singapore Green Plan 2030 (Seng 2021). This phrase, 'Garden City,' is actually co-opted from colonial frameworks that were developed, as Barnard points out, in the colonial

discourse surrounding constructing a 'green space' that could distract the British administrators 'from the decay of the island due to industrialisation' (Barnard 2016). This space would be called the Botanic Gardens, simultaneously serving as an important space of empire.

The construction and development of Singapore within this 'Garden City' framework relies on the extraction of land and labour. Both these factors have been cloaked by the modern state. The ruling political party, the People's Action Party (PAP) – which has been in power since independence in 1965 – promotes meritocracy as its guiding principle. This implies that people are afforded equal opportunity regardless of identity markers such as race, religion or gender. Further cementing the notion that those who have made it were afforded success due to their merits alone. This principle of meritocracy is not only projected onto individual citizens and people within Singapore's borders, but is projected onto the wider region in Singapore. Due to the superior economy, it has more access to resources and technologies, hence it is better equipped to tackle imminent threats posed by climate change. Meritocracy cloaks two forms of privilege that are fundamental to understand the deep inequality imbedded in Singapore and the wider region.

Borrowing from Fanon the relationship between inequality and extraction is one where the cause is the consequence:

In the colonies the economic substructure is also a superstructure. The cause is the consequence; you are rich because you are white, yon are white because you are rich (Fanon 1963, 39).

In 2018, Oxfam's Commitment to Reducing Inequality index ranked Singapore 149<sup>th</sup> out of 157 countries, in their index used to measure efforts to tackle the gap between the rich and the poor (LKYSPP 2018). The then Minster of Finance, Indranee Rajah, would reaffirm the government's guiding principle in a public speech in 2019, about how meritocracy is not to be blamed for the

inequality within the country (CNA 2019). This principle was also reaffirmed by the Prime Minister during his National Day (Independence Day) rally in 2019 (Gov.sg. 2019). Within the Southeast Asian region, the UN Environment Emissions Report found that despite only having a population of 6 million, Singapore released 9.1 tonnes of emissions per capita, as compared to Cambodia, with a population of 16 million, which released 1.0 tonnes of emissions per capita (UN Environment 2019). This inequality would mean that countries such as Singapore that contribute a high proportion of carbon emissions in the region, are not held accountable for these contributions. The effects of climate change, such as rising sea levels and irregular rains affect countries such as Cambodia more; however, Singapore is allowed to sand mine due to the framing of land reclamation as a resort for survival. This extraction has immediate impact on coastal communities in Cambodia. As Kathryn Yusoff eloquently states, 'Geology is a mode of accumulation, on one hand, and of dispossession on the other, depending on which side of the geologic colour line you end up on' (Yusoff 2018, 3).

This exceptionalism of Singapore does feed on the racialisation of other Southeast Asians. As Lily Zubaida Rahim points out:

The city-state's economic achievements have contributed to an attitude of regional exceptionalism, triumphalism and ambivalent regional identification. Thompson's 2003-2005 survey of National University of Singapore student perceptions found that Singapore was seen as being apart of rather than a part of Southeast Asia. This 'active ambivalence' has no doubt been encouraged further by the 'pre-eminence of economic developmentalism as a raison d'etre of the nation state of Singapore. This active ambivalence has led to Singaporeans looking more strongly to the 'West' rather than 'East' in imagining a future direction for the country.... While Singapore is described as 'small', 'clean', 'rich', 'multiracial', and 'developed', the Southeast Asian region is described as 'poor', 'underdeveloped', 'developing', 'backward', 'Muslim' and 'big' (Rahim 2009, 42).

In 2019, Prime Minister Lee Hsien Loong characterised land reclamation as a defence mechanism against rising sea levels and water insecurity in the island nation (Ardhanari 2020).

This use of the word defence is very intentional. Sand dredging being described as defence enables the state to include the sand dredging as a necessary defence mechanism against an external threat. The threat of climate change affects both mainland cities and smaller islands of Southeast Asia. However, by constructing this as a threat that the nation state alone can solve by consolidating its borders, the government perpetuates that Singaporean land has to be separated and expanded at the expense of their Southeast Asian neighbours.

The 2014 UN Environment Report also identified loss of biodiversity, land losses, change in water flows, and damage to coastal infrastructure as some negative impacts of sand dredging (UNEP 2014). All of these directly impact how these countries will react to rising sea levels, flooding, irregular rain patterns and other markers of climate change. Singapore's expansion rests on its exceptionalism narrative; this is built on the erasure of many interconnected histories. When understanding climate change and the irreversible loss that might be incurred due to it, scholars from various disciplines look to the preservation of life, history and stories in order to ensure preservation. When interacting with the resilience narrative built on active preservation, the Singaporean narrative built on erasure experiences inherent friction. For example, in Kalyanee Mam's documentary, *Lost World*, emphasis is placed not only on the physical and ecological impact of sand dredging but also on the possible erasure of the coastal community peoples' way of life and connection to environment. At one point, Phally Vy (the protagonist) notes in *Lost World*:

For me and most fisherfolk our identity on this coastal region is dependent upon sand. The ocean needs sand. The mangrove, with its roots, also need land. These identities are interconnected and support one another to be fulfilled (Mam 2018).

There is a strong reliance on memory for people who are on the verge of this crisis. They want to hold onto that which inhabits their memories. Singapore's developmental model causes friction,

as it cannot co-exist around those who choose to invoke memory. Singapore is not built to be remembered, but rather to be noticed. Singapore's version of exceptionalism rests on the reclusion from the rest of the region. This means that the history of indigenous communities that inhabited the numerous islands and coastal regions of the country have been erased and instead all these indigenous communities are subsumed and recognised as one ethnic group: Malay. The state is the overarching mechanism that polices how citizens connect to the land. This is evident from the laws that came into force following The Land Acquisition Ordinance of 1920, which was repealed by the Land Acquisition Act in 1966 so as to give the government the power of compulsory land acquisition for public development. The act regulated the amount of compensation to be given to landowners who had their properties acquired by the government, while enforcing that the state had complete control over the entire land mass (*The Straits Times* 1963, 1967).

## **Racial Capitalism**

Racial Capitalism is an important analysis in understanding how environmental damage will acutely affect some rather than others. International law, international relations, and the Anthropocene approach seem to have a collective amnesia about the race-making that built the modern world order. Countries that choose to align themselves with the West, such as Singapore, readily engage in this amnesia as well. Race is crucial in understanding the foundations of extraction of land and labour that the land reclamation projects in Singapore rest on. Using racial capitalism as a lens makes clear the distinction between decoloniality and postcoloniality. The latter is an event that has occurred, while the former is a choice that has to be made (Tlostanova 2019).

The colonial project constructed race in relation to class. This has meant that the global South should not be looked at as a monolith, and different racialisation regimes operate internally that spill over onto which country is deserving of being protected from climate change, and which country is not. Singapore has aligned itself with the global North, due to its access to resources and technologies. The Anthropocene proclaims the language of species life through a universalist geologic common, by conveniently erasing histories of racism that were protected by the regulatory structure of geologic relations (Yusoff 2018, 2). As Kathryn Yusoff rightfully argues, it cannot be overlooked that the inception of the extraction of the earth via colonialism formed the foundation for the racial categorization of blackness (Yusoff 2018, 2). The construction of blackness, the displacement and murder of indigenous peoples 'get caught and defined in the ontological wake of geology' (Yusoff 2018, 2). As Yusoff explains the 'development of these historic geologic relations and geo-logics span across continents and are not limited to North America' (Yusoff 2018, 3). In the context of Singapore's sand dredging projects, the labouring bodies that work on the sand mines in Singapore are racialised, with their agency and personhood being reduced to labour. Migrant workers require a work permit, which is the accepted visa for foreign workers to work in Singapore, usually for a period of two years (Dharani 2021). The work permit system ensures that labouring bodies do not break away from the production/construction sites. Similarly, sand that belonged to the coasts of Southeast Asian countries, is reduced to a consumable commodity that has been defined by geologic properties as a material that needs to be extracted and processed for it to be beneficial. There is a need to take into account historical responsibilities in understanding how these logics have been co-opted by countries such as Singapore, to ensure that this sort of plundering is not framed as a 'new' condition that forgets its histories of oppression and dispossession (Yusoff 2018, 3). The

descriptive qualities of geology's nomenclature produce what Saidiya Hartman calls a 'cultivated silence' about the normalcy of these extractive modes as deracialised (Yusoff 2018, 4).

As Anibal Quijano explains:

If we observe the main lines of exploitation and social domination on a global scale, the main lines of world power today, and the distribution of resources and work among the world population, it is very clear that the large majority of the exploited, the dominated, the discriminated against, are precisely the members of the 'races', 'ethnies', or 'nations' into which the colonized populations, were categorized in the formative process of that world power, from the conquest of America and onward (Quijano 2007, 168).

As the protagonist in *Lost World*, Phally Vy mentions that one woman from every household has to migrate for livelihood, following the degradation of the river and mangroves (Mam 2018). Singapore is an important destination country for migrant labour within the region. However, the legal and political systems that govern migrant labour and the permitted discourse on the matter do not afford migrant labourers their full humanity. With the COVID-19 crisis, many migrant workers were constructed to be threats that had to be under close surveillance. In national discourse, the undermining of the right to mobility of migrant workers is justified when balanced with the national safety of the country. This led to the passing of regulations that made it mandatory for migrant workers to seek permission of their employer when wanting to leave their living quarters (Dharani 2021).

## **Discourse on Sand Mining**

Land reclamation by Singapore is legal, just as many land grabs around the world are done 'legally.' However, international legal and political instruments fail to capture those that need it the most. For example, key international legal mechanisms such as the Refugee Convention 1950 does not recognise environmental refugees, internally displaced peoples or economic migrants. In 2010, Global Witness released a report titled 'Shifting Sands' which

exposed the corrupt practices of the Cambodian government and how Singapore was buying and unsustainably dredging from the rivers in the Koh Kong Province in Cambodia (Global Witness 2010). It shed light on the corruptive networks and practices that allowed Singaporean sand mining projects to operate in Cambodia for a prolonged time, despite local resistance and disapproval. This report was crucial in understanding how the public and private sector was controlled by a small group of elite people that sanctioned such sand-mining projects (Global Witness 2010). However, the report was quickly rejected and denounced by both the Singaporean and Cambodian government. However, this report was useful in providing context about the state relations between Cambodia and Singapore that allowed for the sand mining projects in Cambodia to materialise.

In reaction, the Singaporean Ministry heavily relied on the fact that these sand mining projects were legally sanctioned, while avoiding any liability to the consequences that these projects had on the region (Abdullah and Tat 2012). The Global Witness report that highlighted the under-the-table handlings of sand-mining was quickly dismissed as inaccurate by the Cambodian government (Abdullah and Tat 2012). However, it should be noted that report tended to blame the Cambodian government disproportionately for the adverse effects of sand mining in Cambodia. Incompetence and corruption within the Cambodian government were central to the report, while the Singaporean state was found to be efficient and more committed to sustainable means of sandmining. These reports give us insight into the black market of sand mining in Southeast Asia and Singapore's complicity in the region's corruptive practices. In recent events, Singapore's complicity in fuelling other corrupt Southeast Asian governments has been exposed by social activism. For example, more recently, activists from Myanmar were calling for a

boycott of Singaporean brands, such as Tiger Beer, due to their connections with the military in Myanmar (Yeo 2021).

The Global Witness Report highlighted how rampant corruption was and how little transparency is offered to the masses on these dealings (Global Witness 2010). The global sand mining markets are obscure. Despite Singapore claiming that proper checks and balances are in place to assure that sand mining is done ethically, this does not seem to be the case. In the regional and international legal context, there are limited binding laws or treaties that facilitate or limit the practice. In fact, the Association of Southeast Asian countries (ASEAN) has encouraged the practice of the principle of non-intervention in the internal affairs of states, as well as, in the business relations between ASEAN states. There is limited literature that explores the terms and conditions of the agreements that states sign in administering sand mining projects. National discourse in Singapore about sand mining has been limited, and state officials have maintained that sand that is being mined from its Southeast neighbours is done sustainably on the rare occasion that the topic is discussed in political discourse. For example, in 2021 when the Minister of National Development was asked if the environmental studies informing whether sand mining conducted by Singapore was sustainable could be made public, the minister responded that:

The environmental studies guide the planning of the reclamation, including measures to mitigate the impact on the environment, where necessary. The environmental study reports are made publicly available, unless there are overriding security considerations that require us to maintain confidentiality (MND 2021).

There was no mention of what these standards are and no further explanation as to what constitutes 'overriding security considerations,' as these environmental standards are largely not accessible to the public. In turn, the state relies on instruments of legality that endorse and legalise extractions. Closer inspection of the language used to facilitate sand dredging projects

highlights the wilful erasure of race. Many unethical and exploitative extractive practises continue operating due to the legality subscribed by international law. This highlights how legal language alone cannot be the gauge that regulates, listens to, and administers accountability. As Achille Mumbe notes, 'law and legal apparati served as an instrument that codified race, with the production of the Black Codes (the Codes Noirs)' (Mbembe 2021). The sparse information available through conventional instruments such as parliamentary debate, allows us to look elsewhere for more substantial contributions. The state regulates and conducts itself in a paternalistic manner when approaching the public. This has been further codified with relation to reclaimed land and ownership rights, as prescribed in the Foreshores Act:

---(1) The President may, by proclamation published in the Gazette, declare any lands formed by the reclamation of any part of the foreshore of Singapore, or any areas of land reclaimed from the sea to be State land, and thereupon that land shall immediately vest in the State freed and discharged from all public and private rights which may have existed or been claimed over the foreshore or the sea-bed before the same were so reclaimed.(Singapore Government) (Leow 2020, 9).

Moreover, ASEAN utilises the principle of non-interference to absolve accountability. The principle of non-interference was first mentioned by Fidel Castro in the Havana Declaration of 1979 as to ensure 'the national independence, sovereignty, territorial integrity and security of non-aligned countries' in their 'struggle against imperialism, colonialism, neo-colonialism, racism, and all forms of foreign aggression, occupation, domination, interference or hegemony as well as against great power and bloc politics' (Castro 1979). ASEAN has steadfastly observed this principle by not stepping in about the repercussions of sand mining within the region. This has meant that state officials have co-opted the principle of non-interference to mean that countries should be allowed to act as they wish – owing no responsibility to the wider region.

Ultimately, the limited potential that conventional mechanisms hold allow us to explore other avenues in order to gain a more insightful perspective. There are important creative works that do explore sand mining in the region, which need to be analysed.

#### **Review of Documentary** – Lost World

*Lost World* is a documentary directed by Kalyanee Mam, which follows Phalla Vy, a young Cambodian woman who serves as guide for what is happening to her home of Koh Sralau, an island in the Koh Kong Province of Cambodia (Mam 2018). In the beginning, the following sentence is flashed to the audience: 'Since 2007, Singapore has exported over 80 million tonnes of sand from Cambodia.' This is followed by drone footage of a large ship dredging sand off the mangrove shores of the Koh Kong Province. The documentary introduces us to Phalla Vy and her community, whose lives are dependent on the mangrove forests and the river for sustenance. The documentary introduces us to the disdain and powerlessness with which local communities look at these sand dredging ships. Their way of life, their fishing practices, and their employment have all been heavily impacted following the sand dredging projects. Relatives and friends of Phalla Vy share how houses along the river are empty, as many women have left to find jobs elsewhere. The community is erased on many levels: the land has disappeared, the waters have become polluted, and the community has dispersed.

The film progresses to show Phalla Vy outside a sand-mining site in Singapore. She walks along the large sand dunes. She notes how a large part of Cambodia has probably ended up in this construction site. Many of these construction sites are located in the secluded hinterlands of Singapore. The film goes on to show Phalla Vy at the Garden Domes in the Gardens by the Bay in Marina Bay area, in downtown Singapore. Marina Bay is one of the areas that has grown

significantly from national land reclamation projects. The Garden Domes in Marina Bay boast the ability to change the internal environment of the Dome to accommodate a variety of plants. However, as Phally Vy quickly notices while walking around this popular tourist destination/man-made feat, it is all artificial.

Phally Vy highlights how the land, the sea, and shores are important for the culture and survival of her community. There are local songs that praise the mangrove forests and the river. In comparison, the reason for requiring land reclamation in Singaporean national discourse is not as historic or cultural. Sand mining and land reclamation is sometimes framed as essential for economic growth, other times crucial for survival and the increasing sea levels due to climate change, or to accommodate for the increasing population of the country. Singapore's requirement for sand seems to draw from the acquiring of power, while those affected by land reclamation projects such as Phally Vy assert their rights over sand for survival.

## **Speculative Fiction**

There is a branch of speculative fiction and petro-horror that provides an interesting insight, borrowing from Amitav Ghosh's petrofiction genre (Tulsi 2020). The Anthropocene and climate change invite speculative fiction on the environmental degradation that awaits us. Alvin Li and Junyuan Feng introduce us to a possible glimpse of Singapore in 2030. This story explores a potential controversy following a leak of documents that expose Singapore's expansionist motive which has disastrous consequences for other countries. It is interesting to note that even speculatively, a dooming version of the future of Singapore is a version where the consequences of its real present actions are exposed.

## Review of Film - A Land Imagined by Yeo Siew Hua

A Land Imagined shows the dark shadows of the bright and dazzling first-world version of Singapore. The film avoids the usual backdrop of Singaporean films: high-rise buildings, spotless streets and high-end shopping centres. The close ties between the renowned 'clean and green' image and the sand mining and oil-refining industries are shown to us. This film is set in a sand-reclamation site in Singapore, by the Southern coast of the island. The story follows two policemen who are searching for Wang, a Chinese foreign worker who has gone missing in a sand reclamation site in Singapore. There are a few scenes of intimate dialogue that stay with you from this film. One such scene is between Wang and Ajit, a Bangladeshi worker that he befriends. In the midst of the conversation at the corridors of their dormitory, Wang is standing crouched over the metal bars. Ajit notices that Wang has not slept well and massages his neck. Wang's replies to Ajit start shifting between English and Mandarin, before asking Ajit if he dreams. Ajit replies that they (all the workers) dream all the time here, but they are not themselves. We are offered scenes of Ajit and Wang dancing and singing with their peers. These scenes show the creation of a reality and community that those who are huddled together as 'workers' in these dormitories and sites have constructed for themselves. Although, Yeo Siew Hua makes it a point to not romanticise this community. He also makes it a point to convey the nuances and fractures that persist in the racial plane of Singapore, as in a prior scene another Chinese foreign worker refers to the Bangladeshis workers as 'blackies' when questioned by the two policemen. The director shows that the relations within the dormitories are also prone to power and racial structures that resemble the wider social categories imposed on the wider Singaporean society.

Another notable character is a Chinese national, Mindy, who works at the internet café right outside Wang's dormitory. Wang and Mindy are drawn to each other. In one scene, Mindy and Wang are speaking on the shores of the beach, presumably in East Coast Park. It is late at night, and the shores are lit with the lights of cargo ships. Mindy and Wang discuss how the Southern borders of Singapore form a straight line, due to the use of reclaimed sand. They wonder, if they are sitting on Cambodia, Vietnam, or Malaysia. Mindy notes how they are travellers even without passports. This scene gives insight into another bitter reality that foreign workers are subjected to - the prevalent practice where those who are on work permits or nonprofessional employment visas have to give their passports and important documents to their employers for 'safekeeping.'

Sand mining and land reclamation projects are hyper-visible, yet hidden from the eyes of Singaporeans. The information on the acquiring of sand is not available, however the benefits of land reclamation is publicised widely. The Prime Minister Lee Hsien Leong highlights the importance of land reclamation to the survival of the island during several of his national day rally speeches. The importance of land reclamation is deeply embedded in the citizen's mind, however, the means used to acquire this land is hidden. Due to this, the people to whom this land belonged to before are hidden. Their lives and stories are hidden. The people who serve as labour in order for this extracted sand to become Singaporean land are also hidden. However, the buildings built on this extracted land are incredibly visible. *A Land Imagined* is the story of a person that Singapore has tried to keep hidden.

#### Review of HumanxNature Exhibition at National Library

In comparison to the aforementioned works, the *HumanxNature* exhibition stands in an opposing end. This *HumanxNature* exhibition ran at the National Library in Singapore from

9 April to 26 September 2021. The exhibition focused on the environmental history of Singapore from the 19<sup>th</sup> century onwards, which focused on the impact of colonialism on the island. The exhibition highlighted how important sources on environmental history in the region were written through Western perspectives by British explorers. However, these studies were informed by the knowledge and experience of indigenous peoples. Due to the timeframe in focus, the exhibition ran through from colonial to postcolonial times. There were brief pockets of information on indigenous communities and knowledge of the island. There were short video and audio clips available for listening throughout the presentation. In one such video clip, descendants of the Orang Laut (indigenous) community in Singapore share knowledge about the different kinds of fish that has been passed down by family members. One part of the exhibition introduced the Pulau Semakau island, located approximately 8 kilometres off Singapore's southern coast. Pulau Semakau was home to the Orang Laut community whose ancestry can be traced to the Riau Islands. The residents of this island were relocated to the mainland in the 1970s and were not allowed access to the island again after the 1990s. This island was combined with Pulau Sakeng and converted into a landfill. It is currently Singapore's only remaining landfill. It is ironic that this exhibition was hosted in the National Library located in the town area called Bugis. A place named after an ethnic group indigenous to South Selawasi, an island of Indonesia not too far from Singapore. The presence and impact of indigenous communities in Singapore is both visible and erased from the nation's narratives.

Following this, there was a large tiger taxidermized in the middle of the next room of the exhibition. This room highlighted the dangerous side of nature that man had to curb, to control the jungles of early Singapore. The surrounding exhibitions in this room mapped out the hunting and eventual extinction of the tiger in Singapore. The exhibition quickly turned to colonial

advertisements of commodities that were grown on Singaporean land, specifically commodities such as rubber and pineapples. These histories highlight a forgotten colonial economy that existed on Singaporean land – the plantations. However, there is less information about the labourers who worked on these plantations as compared to the background of the British and local enterprisers that ran these plantations.

In the next room we were introduced to the 'Garden City' initiative following Singapore's independence. This side of the room showed the initiatives that were introduced by the People's Action Party (PAP) and the efforts of local nature-loving collectives to preserve the few remaining nature trails and natural shores of Singapore. What is interesting is that the strong invocation of the word 'garden' to describe conservation projects, despite gardens being artificial constructed spaces. Especially in the context of Singapore where it was a tool of Empire to cultivate, control and manipulate flora and fauna in the region (Barnard 2016). However, growth, preservation, and conservation have only been imagined through these lenses. The exhibition ended on a general positive note. It planted the thought that Singapore has adapted well in balancing a healthy relationship between humans and nature, given its circumstances and requirement to prioritise urbanisation and development. This exhibition focused solely on the relationship between the land within Singapore's borders and Singaporeans. It left out the land around Singapore, the waters between these lands, and migrant bodies that often make that passage across to this city.

Singapore's version of exceptionalism which distances itself from the rest of Southeast Asia means that local histories of displacement have been erased. These local stories of displacement – such as the clearing of Pulau Ubin community and Orang Laut community from islands surrounding Singapore are erased from local historical narratives – allowing for

indigeneity be completely absent from the Singaporean local discourse. Indigenous communities only serve as reminder to Singapore's connection to the Malay world. This has meant the curbing of indigenous modes of knowledge that could potentially allow for a different relationship with the land to develop and flourish. This has allowed Singapore to acquire land, through legal and political agreements that allow and 'legalise' such undertakings. For example, many political, economic, and social structures that the postcolonial state was condemned for were co-opted from colonial governance. The Housing Development Board which provides housing for about 80% of the population in Singapore was modified from the Singapore Improvement Trust (SIT) set up by the colonial government in 1927 (Hoe 2019, 6). Discussions on land reclamation projects are obscured by lack of transparency on the international and national level, as mentioned above with how both the Cambodian and Singaporean governments reacted to the 2010 Global Witness Report.

Similarly, in the Singaporean state narrative, land reclamation, the botanic garden, and infrastructure projects that are attributed to sound British policy, do not mention labourers who carried out this work. The first land reclamation project in Singapore in 1822 was carried out by convict labourers. Coming mainly from India, but also from Hong Kong and Burma, their early tasks included transporting soil from Pearl's Hill and Bras Basah as landfill for the marshy area that would become the commercial hub of Singapore (Tan 2015). Raffles supported the idea of penal labour being a more effective and useful method, as opposed to using slaves. Just as Singapore's Green Imperial stance feeds into its modern sand dredging projects, the colonial use of convict labour to construct infrastructure has had to be retained in order for Singapore to continue development at a rapid pace. Many unethical and exploitative extractive practises continue operating due to the legality subscribed by international law, or the persistent silence of

international law. In the Southeast Asian context, racialisation operated differently. Syed Alatas has impressively argued about how rebellion and resistance by Southeast Asian communities in Malaysia, Indonesia, and the Philippines was constructed to be laziness (Alatas 2010). This has allowed for displacement, dispossession, and oppressive practices to be cloaked as developmentalism.

## Conclusion

Coastal communities along the Salween River in Myanmar are facing similar issues that people in the Koh Kong Province such as Phally Vy were facing in 2017. Singapore's sand dredging projects in the regions have been identified as the cause of land erosion and land loss by local communities (McPherson 2020). However, these accusations are yet to garner any affirmative action. In 2021, Singapore decided to venture to Australia for sourcing sand, as the quality of sand in the country's midwestern region has been identified to be of high quality (Mann 2020). This new development between Perth-based Australasian Sands International (ASI) and CRG Contractors Pte Ltd, which has a supply contract with Singapore's Housing and Development Board, is celebrated as a full-proof sustainable solution to Singapore's demand for sand (Mann 2020). Interestingly, August 2021 was recorded to be the wettest August in Singaporean history. The country saw flash floods in specific regions of the island, and surprisingly less frequent flash floods reported in the Northern region of the island, which has been untouched by land reclamation due to its close proximity to the Malaysian borders (Zheng 2021). It leads one to think if only extraction should be assessed through a sustainability lens; what about acquiring – should this not be subjected to sustainability assessments as well. The

land that has been reclaimed is not able to sustain itself, due to the unsustainability of the mode of extraction involved in its creation.

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