

RESEARCH ARTICLES

From Transport Development to Land Reclamation: Contested Spatio-Temporalities along Penang's Littoral, Malaysia

Pierpaolo De Giosa¹  ^a¹ Department of Asian Studies, Palacký University, Olomouc

Keywords: right to the island, right to the sea, Penang, Malaysia, land reclamation, artificial islands

<https://doi.org/10.24043/001c.125847>

Island Studies JournalVol. 19, Issue 2, 2024

“One island is enough” was written on a banner shaped like Penang Island, Malaysia, during a demonstration against the plan to create three artificial islands. The Penang South Reclamation (PSR) project, adopted by the local administration and developers, aims to finance the Penang Transport Master Plan (PTMP). This ambitious plan includes several components, such as monorail and light rapid transit lines. While land reclamation is not new in Penang, this mega-development project has faced unprecedented opposition from a wide range of actors. In dialogue with fishers and activists supporting the Penang Tolak Tambak (Penang Rejects Reclamation) campaign, and through the analysis of government documents, non-governmental reports, news articles, and social media, this paper traces how state, corporate, and civil society actors have shifted their focus from the PTMP to the PSR project. Thus far, scholarly literature on island environmental movements has focused on the right to the island and the right to nature, while claims related to the land-sea interfaces, which so clearly delineate island spatialities, have been somewhat neglected. By exploring the contested spatio-temporalities of this land reclamation project off the south coast of Penang, this paper expands the dialogue of the right to the island to include the right to the sea.

Introduction

“One island is enough” was written on a banner shaped like Penang Island at a demonstration held in 2019 against the Penang South Reclamation (PSR) project. This was just one of many banners carried by people protesting the plan to create three artificial islands off the south coast of Penang Island, Malaysia. The PSR has been proposed as a package to assist in funding the implementation of the Penang Transport Master Plan (PTMP). This ambitious transport development plan involves several components: from highways to monorail, and light rapid transit, among others. So far, the PTMP is considered the most expensive transport infrastructure project in Malaysia. To cover its estimated cost of approximately US\$10 billion (Mustafa & Shakila, 2018, p. 93), the Penang State Government endorsed

^a pierpa.degiosa@zoho.com; corresponding author

a state-private 30:70 joint venture between its representative, the Penang Infrastructure Corporation, and the SRS Consortium to create the artificial islands off the south coast of Penang.

Land reclamation is not new in Penang and structurally intertwined with island transport challenges. As highlighted by the editors of this special section, artificial islands are often proposed in conjunction with transport development plans, either to redress issues related to land scarcity, or to finance ambitious infrastructure projects. But these strategies are not without criticism. From the outset, the PTMP-PSR project has faced strong and unprecedented opposition from a wide range of actors: from the fishing community to civil society at large. The demonstrations, which have been held since 2019, mark the rise of an alliance between several NGOs and the fishing community: Penang Tolak Tambak, literally “Penang Rejects Reclamation.” Initially, when the PSR project was introduced in 2015, the fishers were fighting alone. Local NGOs were occupied primarily with their objections to the PTMP. However, state, corporate, and civil society actors have gradually shifted their focus from the PTMP to the PSR. On the one hand, the state and developers justify the construction of artificial islands as the only way to finance the PTMP. On the other hand, Penang Tolak Tambak representatives see this as a pretext to create more land for the wealthiest members of society. By following the opposition to this specific land reclamation project, this paper explores how activists and fishers joined forces, and retraces the ways Penang Tolak Tambak rearticulated their “right to the island” and visions for “alternative future islands” (see Clark, 2013, p. 128).

Perhaps it is not surprising that these plans have met strong opposition in Penang, and a much more active one compared to protests against other Malaysian land reclamation projects. The NGOs of Penang are considered to be the most vocal in the country, even in comparison to those based in the national capital. Malaysian environmental NGOs and movements became increasingly prominent from the 1970s. As noted by Weiss (2006), “English-speaking, middle-class, urban non-Malays predominate in secular advocacy groups, most of which are small and concentrated in Kuala Lumpur, Penang, and a few other cities” (p. 110). The history of “green” environmental activism in Malaysia is not new, but it remains a “relatively under-explored subject, even though it arguably stands as one of the liveliest in Southeast Asia” (Yew & Azmil T., 2019, pp. 287–288). Furthermore, environmental activism has been mostly concerned about land-based issues. Moving from an environmentalism which has been traditionally green-based and land-biased, the protests against the PSR might mark the emergence of a blue-and-sea-oriented environmentalism in Malaysia.

By juxtaposing the official plans forwarded by state and corporate actors with the rights to the island and the sea as voiced by Penang Tolak Tambak, this paper explores the contested spatio-temporalities of the PTMP-PSR project. When thinking of ambitious infrastructural projects, land

reclamation, and the creation of artificial islands, their contested spatialities naturally come to mind. This paper, however, approaches the PTMP and its PSR component not only in spatial terms, but also temporally: a “spatio-temporal project” or “chronotope” as Appel, Anand, and Gupta (2018, p. 17) would put it, shedding light on the challenges to the linearity of developmental time through the agent-oriented lens of contestation. How, then, did an island-based movement such as Penang Tolak Tambak criticise the spatialities behind the creation of artificial islands? What are the alternative visions at stake for the island? And in what ways did it manage to affect the temporalities of such a massive land reclamation project?

The next section is a literature review on the right to the island and the sea and the ways these concepts have been tackled by scholars. Next, the paper presents a methodological overview and a background of the PTMP-PSR project. The following two sections zoom into the contested spatialities and temporalities at work in the resistance against the land reclamation project, before concluding with some final reflections.

The Right to the Island and the Sea

Inspired by the Lefebvrian concept of the *right to the city*, Clark (2013) has coined the concept of the *right to the island* as a way to move beyond abstract island development models. When Lefebvre (2000) coined the term in the 1960s, he supported the importance of citizens’ “real and active participation” (p. 145) and social justice in the face of inequalities and the dispossession of urban commons. As “a common, rather than a private right” (Clark, 2013, p. 133), the right to the city involves “a social practice of commoning” which treats the urban environment as “both collective and non-commodified” (Harvey, 2012, p. 73). In other words, cities should be “for people, not for profit” (Brenner et al., 2012). “Now,” Clark (2013) writes, “exchange ‘city’ in the lines above with ‘island’” (p. 134). According to him, the right to the island offers a different perspective. This “right to habitat and to inhabit” moves from formulas of uneven island development and dispossession to alternative futures based on “democracy and the de-commodification of space/nature” (Clark, 2013, p. 134). Paralleling the broader concept of the right to the city, the right to the island offers a framework to understand the challenges and aspirations of islanders by advocating their rights to have a say in the governance, development, and use of island spaces towards self-determination, cultural preservation, and sustainable development.

Spatial justice and the de-commodification of nature have been key elements in the right to the island since the beginning when Clark (2013) introduced the concept of overtaking the divide between urban and rural areas. Scholars have thus suggested that the fight for the right to the island actually involves the *right to nature* from an island perspective (Armas-Díaz et al., 2020, 2023; Armas-Díaz & Sabaté-Bel, 2022; Sabaté-Bel & Armas-Díaz, 2022). Apostolopoulou and Adams (2019) define the latter as “the right to influence and command the processes by which nature–society relationships are made, remade and disrupted by generalized urbanization

and economic development” (p. 6). According to them, many communities fighting against different developments or infrastructure projects in and beyond the city are increasingly employing discourses against the degradation of ecosystems and biodiversity loss bringing together the right to the city and the right to nature (Apostolopoulou & Cortes-Vazquez, 2019, p. 6). Armas-Díaz, Murray, Sabaté-Bel, and Blázquez-Salom (2023, p. 14) argue that the difference between the notions of the right to nature and the right to island are essentially spatial. While the former encompasses the biosphere, the latter is based on a specific island perspective. Their conceptual difference is basically qualitative because, differently from continental areas, territorial limits and boundedness play a crucial role in debates over development projects and environmentalism on islands (Armas-Díaz et al., 2023; Sabaté-Bel & Armas-Díaz, 2022).

In recent years, scholars have started to analyse how islands and their attributes affect urban development, and how urbanization shapes islands (Grydehøj, 2014). By encompassing both the right to the city and the right to nature, studies on the right to the island adds the perspective of environmental movements to urban island studies. The right to the island recognizes island singularities and spatialities (Clark, 2013), and if there is a common element at all that characterizes islandness is water, more particularly the sea (Hay, 2013, p. 211). “The island or coastal city is not just land; it is also water,” Grydehøj (2015, p. 107) writes. Yet, from an urban perspective, islandness and the sea have been somewhat neglected in the literature (Armas-Díaz et al., 2023). Evidently, this also echoes more dominant approaches to the sea as an abstract and empty space (Hadjimichael, 2023), a veritable *mare nullius* (nobody’s sea), to be transformed by large-scale development projects (see also Jackson & della Dora, 2009). This approach is reminiscent of another ancient Latin notion in international law, *mare liberum* (free sea). The latter “shaped the mindset and actions of nations for centuries, subsequently leading to the unregulated exploitation of the environment,” by ignoring “local notions of sovereignty over marine areas and resources” and “dispossessing those who depend most on the sea for their livelihoods” (Roszko, 2021, pp. 321–322). Through coastal and ocean grabbing processes, land reclamation definitely involves dispossession along the littoral and at the sea.

According to Grydehøj (2015), land-sea interfaces constitute “at once the most profound urban space and that which is least defended by arguments of publicness” (p. 110). He compares land reclamation processes at the land-sea interface, situations that bear a strong resemblance to other development projects shaping urban space. While land reclamation “may be superficially superior to the violent ‘renewal’ of existing urban space, it also involves a dangerous avoidance of conflict” (Grydehøj, 2015, p. 110). Controversial urban renewal projects often ignite protests, foster activism, and inspire grassroots movements. In contrast, reclaiming land from the sea, despite being contentious and harmful to coastal communities, “serves to

disenfranchise and make ambiguous non-elite stakeholders, precisely because (...) we lack the conceptual tools for dealing with conflicts over liquid, voluminous space” (Grydehøj, 2015, p. 110). By privatizing and solidifying a once-fluid environment, land reclamation ultimately benefits only some powerful actors. State and corporate actors might approach the littoral and the sea as “a blank slate for development” because it “could be deemed immune from claims of publicness. Yet such an analysis is not politically neutral,” Grydehøj (2015) argues, because deeming “reclaimed land a solid blank slate is to deny its previous fluid spatiality” (p. 107).

The land-sea interfaces that so consistently define islands are approached through land-biased perspectives by state and corporate actors when they apply experiences based on land to territorialize the sea (Hadjimichael, 2023). To challenge such approaches, Penang Tolak Tambak has rearticulated rights to the island and to nature, staking a claim for a specific connection to Penang's land-sea interface and rights to the sea. The latter are a key element in the context of the right to the island. Hadjimichael (2023) has proposed the notion of *the right to the sea*, but primarily as a “provocation” because like the right to the city – as well as the right to the island or nature – “the openness of the notion is welcome” (p. 166) as it can bring together actors who are marginalized by certain development projects. According to her, the right to the sea cannot be universally defined (Hadjimichael, 2023), because it entails a wide range of claims from the fishers and their related community, who depend most on the sea for their livelihoods, and from environmentalists who feel responsible for the preservation of the environment to coastal residents and the broader society, who enjoy freedom to access the sea. Before delving into the two main sections devoted to the analysis of the contested spatio-temporalities at work along Penang's littoral, the next two sections provide a methodological overview and a background to the PTMP-PSR project.

Methodology

Nissological investigations, Hay (2006) writes, concern themselves “with the reality of islands and how it is for islands and islanders in the times that are here and that are emerging” (p. 30). He is pointing, perhaps, toward a more concrete socially and materially grounded exploration of islands beyond fixed metaphors or abstract development models. The material presented here has been collected in this spirit mostly through participant observation, interviews, and the analysis of grey literature: governmental documents, non-governmental reports, news, and social media.

Situated at the intersection of urban anthropology and marine/coastal research, this paper stems from an ongoing larger project on land reclamation in Malaysia over the past two years. The PSR project, and land reclamation in Penang at large, constitutes the main case study of this research. I interviewed a diverse range of interlocutors: from the fishers and activists involved in the Penang Tolak Tambak campaign to other coastal residents and Penangites, including local politicians, PSR's spokespersons, and representatives of

NGOs supporting the project. After numerous conversations with Penangites, I began to realize that most people approach the PTMP-PSR issue in neutral terms. Their views oscillate between dominant developmentalist and environmentalist discourses. Perhaps, there are no better words to explain this neutrality as those clearly stated by one of my interlocutors: “The PSR will probably benefit the economy of Penang but, maybe, it is going to damage the environment.”

For the purpose of this paper focusing on the resistance to the land reclamation component of the PTMP, the data are derived from 33 semi-structured and unstructured interviews. I interviewed 12 activists who lead or support Penang Tolak Tambak: people who are depicted as “anti-development outsiders” by the state and corporations because, according to them, they are not real residents of the south coast of Penang Island. I interviewed 21 fishers from the south coast, or “insiders” as pro-PSR actors would define them, including those who are supporting and those who oppose, as well those who are neutral in respect to the land reclamation project. While, on the one hand, interlocutors involved in the Penang Tolak Tambak are more willing to meet researchers in order to disseminate their plea. On the other hand, approaching institutional or corporate actors is challenging for research purposes. However, I managed to interview key stakeholders representing the state and developers, as well as representatives of pro-government NGOs who support both the PTMP and the PSR project. In this paper, I will reference excerpts from two interviews, one with a Penang State Government representative, and also one with the spokesperson of SRS. While the ethnic identities of my interlocutors mirror the multicultural diversity characterizing Malaysia, most of the interlocutors from the fishing community belong to the Malay-Muslim majority in the country as well as in the southern coast of Penang.

The paper mostly evolves in a dialogue with activists as done in previous studies on the right to the island (e.g. Armas-Díaz et al., 2020, 2023; Armas-Díaz & Sabaté-Bel, 2022; Cortes-Vazquez & Apostolopoulou, 2019; Sabaté-Bel & Armas-Díaz, 2022; Schmelzkopf, 2008). The interview questions for activists and fishers focused on their own views of land reclamation, their perceptions of its impact on the ecosystem and their livelihoods, and their involvement in the movement against the project. Additional interview questions dug into more intimate connections between people and the littoral in the face of land reclamation. The names of my interlocutors have been anonymized throughout the paper in order to protect their identity. But, before presenting their views on the PSR project, the next section will provide a background of the PTMP.

From the Penang Master Transport Plan to Land Reclamation

Grydehøj and Swaminathan (2018) have proposed two “primary categories” of island cities: the “major population centres of larger island geographies,” and “densely urbanised small islands and archipelagos” (p. 315). Penang is included in the latter, particularly within the sub-category of

“[s]mall islands or archipelagos that are not typically regarded as a single urban zone but that are nonetheless densely urbanised as a whole” (Grydehøj & Swaminathan, 2018, p. 315). While I agree with this categorization, it is nonetheless relevant to spell out some of the particularities of Penang. Although the word Penang most frequently refers to the island itself, Pulau Pinang (which literally means “areca nut island” in Malay) is also one of the states that constitute the federal country of Malaysia. Penang state, also known as Pulau Pinang, however, comprises two parts: Penang Island itself (285 km²) where George Town, the capital city, is located and Seberang Perai (760 km²) on the Malay Peninsula (Khoo et al., 2015). Notwithstanding its limited size, Penang Island “is one of the fastest-growing and most densely populated places in the world” (Chee et al., 2017, p. 83). Penang’s population has risen from 808,600 in 1970 to 1.8 million: 805,200 people on the island and 966,300 in Seberang Perai (Penang Institute, 2023).

The island and the mainland are connected by two bridges: the first one being the 13.3km-long Penang Bridge inaugurated in 1985, and Penang Second Bridge (the Sultan Abdul Halim Muadzam Shah Bridge), officially opened to traffic in 2014. Therefore, according to the classification of “island community connectivity” developed by Leung, Tanko, Burke and Shui (2017, p. 67), Penang can be considered a “fully-infrastructure connected island” (p. 68): meaning that Penangites have access to diverse modes of transportation (e.g. ferry, bus, or car) and that the island is connected to the mainland through fixed links. However, on the island itself, the current state of the public transport system relies only on a bus service. Most Penangites are reluctant to use public transport because the bus routes do not connect all the areas which results in poor reliability and limited capacity, increasing the use of private vehicles (Oon & Khoo, 2014). The high dependency on private vehicles exacerbates traffic congestion during peak hours and public holidays, especially on the Tun Dr Lim Chong Eu Expressway stretching along the east coast: the major backbone connecting George Town, its UNESCO World Heritage site and seaport, the two bridges, the Bayan Lepas Free Industrial Zone, and the airport, together with the university and other neighbourhoods.

For these reasons, in 2009 local civil society groups asked the Penang State Government to develop a master transport plan aiming at reducing traffic congestion and increasing the use of public transport (Connolly, 2019; Penang Forum, 2016). In 2011, the Penang State Government appointed AJC Planning Consultants, in association with Singapore Cruise Centre and Halcrow, an international engineering consultancy company with expertise in transport and infrastructure development, to conduct a study for a transport master plan. Based on the motto of “moving people not cars,” the Halcrow project proposed the improvement of existing roads and transport networks, such as bus service, and the implementation of tram lines, at the cost of approximately US\$5 billion (27 billion Malaysian ringgit) (see Penang State Government, 2012). In 2014, the Penang State Government requested



Figure 1. The PTMP and the PSR project as displayed at the Project Delivery Partner's office (SRS) of Permatang Damar Laut. Author's photo, August 2023.

proposals from project delivery partners to develop the Halcrow project and selected the SRS Consortium for an alternative project to also build monorail and LRT (light-rail transit) systems. It was then that the PSR project and the creation of three artificial islands to cover the escalating costs of the PTMP came into the picture (see [Figure 1](#)).

For the PTMP in particular, the Penang Forum – a coalition of NGOs that advocates for progressive development, equitable economic policies and environmental protection – produced an alternative plan documented in their “Better, Cheaper, Faster Penang Transport Master Plan” report. This plan challenged the PTMP proposed by SRS on the grounds of having “too many and poorly integrated modes of public transport” (Penang Forum, 2016, p. 9). The forum advised the administration to follow the original Halcrow recommendations as an initial blueprint, as well as its “holistic approach,” aiming at “moving people not cars” (Penang Forum, 2016, p. 4). According to the report, the SRS's focus on LRT and monorail systems was at least twice as expensive compared to the original Halcrow proposal (Penang Forum, 2016). The Penang Forum was of the opinion that the development of a tram system and the implementation of the bus-based public transport system was better because it was more accessible to residents and visitors, environment-friendly, cheaper to operate and maintain, and faster to expand to the mainland without waiting for long-term land reclamation works



Figure 2. Artist impression of BiodiverCity as displayed at the Project Delivery Partner's office (SRS) of Permatang Damar Laut. Author's photo, August 2023.

(Penang Forum, 2016). Finally, the alternative PTMP provided by the Penang Forum (2016) stated that land reclamation should be considered only as a “policy of last resort,” and that it “should be minimized, not maximized, because of irreversible environmental impact” (p. 21). Those I interviewed opposing the project are of the opinion that the financial need for land reclamation to support the PTMP is just an excuse to reclaim more land for the private interests of developers.

In 2019, the Penang State Government called for an international masterplan design competition for the PSR project. A lilypad-shaped BiodiverCity proposed by the Danish Bjarke Ingels Group was selected. The only information currently available is a topside development plan which includes a high-tech park, digital technology infrastructure, business process outsourcing facilities, a commercial centre called HOTI (the “Heart of the Island”) (see Tan, 2023).

The PSR project intends to create “artificial islands,” another typology of “island community connectivity” which are themselves “fully-infrastructure connected” (Leung et al., 2017, pp. 67–69) to Penang Island in order to finance the PTMP. This has become a crucial point of contention between the state and the increasing opposition from civil society, as we will see in the next two sections.

Contested Island Spatialities along the Littoral

Land reclamation is not new in Penang, and dates back to the British times at least, especially in relation to the development of transport infrastructure. The Weld Quay area, for example, was reclaimed by the British in the 19th Century in order to create more land for the port of George Town. Other land reclamation works linked to transport development were carried out after independence: highways and fixed links to solve traffic congestion and to ease connectivity along the most urbanised backbone of the island on the east coast. Since the 1990s, land reclamation in Malaysia has also been adopted as an ideal development option to create new land for industrial areas, which are mostly located near the coast, as well as prime land for the rising urban population (70% of the population lives along the littoral) (Nor Hisham M. G., 2006). Penang has been one of the most active Malaysian land reclaiming states, especially on the island, with an increase of reclaimed land from 0.4 km² in 1960 to 9.5 km² in 2015 (Chee et al., 2017). Upon the completion of five proposed artificial islands the total amount of reclaimed land around Penang Island is expected to be 32.3 km², 18.21 km² of which from the PSR project (Chee et al., 2017).

According to law, the foreshore up to three nautical miles seaward falls under the jurisdiction of the Malaysian sub-national authorities, not the federal government. Consequently, there has been a boom in land reclamation projects, where sub-national governments engage with the business of land-banking, create new state revenues, and expands their territories (Ng, 2020). Grydehøj's (2015) assertion that land-sea interfaces are the least well defended by civic and public claims holds particularly true in this context. However, the Penang Tolak Tambak experience shows that even those land-sea interfaces can be claimed back by society. As I was told by an activist, Penang Tolak Tambak, has created a notable precedent, one that could set an example for other protests opposing land reclamation. The shorelines of Penang Island have become contested spaces: "geographic locations where conflicts in the form of opposition, confrontation, subversion, and/or resistance engage actors whose social positions are defined by differential control of resources and access to power" (Low & Lawrence-Zúñiga, 2003, p. 18). In the following section I present two major ways the project has been contested in spatial terms along the lines of the right to the island and the sea.

The first spatial contention is closely related to the right to the island and "island-mainland" (Baldacchino, 2006, p. 10) dialectics in the context of issues of island boundedness and land scarcity. Representatives of the Penang State Government argue that the project is greatly needed because of lack of land on the island. As the Penang State Government executive councilor (EXCO) for the portfolios of infrastructure and transportation since 2018 stated:

We are an island state. (...) Unlike many other states in the country we are not blessed with a lot of land. (...) We are unable to cut our hills. (...) Like other island states in the world, reclamation is of course the natural thing to do. (Astro Awani, 2023)

He also pointed to the fact that the Penang State Government has little power on the mainland, because most land is private and difficult to acquire. He added: "The same groups that are protesting against land reclamation are the same groups that also protested against the first bridge and second bridge." He concluded by saying that "We wouldn't even have the two bridges we have today" if the state listened to the protest groups (Astro Awani, 2023). I repeatedly heard these same words from my interlocutors among the NGOs who support the project.

Conversely, those who oppose the PSR project are of the opinion that there is enough space on the mainland, and that new developments can be carried out there rather than in the sea, because Penang is not just an island state. As I was told by an environmentalist attached to Penang Tolak Tambak: "We, Penang, are not only an island [*pulau*]. We also have mainland [*tanah besar*]." To this debate on islandness, it should be added that the PTMP tries to emulate island states, such as Singapore (see Connolly, 2019; Penang Forum, 2016). According to another Penang Tolak Tambak activist, projects such as the PSR are targeting foreign investors who are not interested in living on the mainland:

Because they want to be like Singapore, they want to be like Hong Kong. And that's where they are marketing most of the properties. You know? (...) So when they market, they don't talk about Penang State they talk about Penang Island, and the people in Hong Kong and Singapore only want to live on the island, they don't want to live in the mainland. So this is a marketing line!

According to this activist, even Penangites, are not interested in Seberang Perai. "It looks so far away, nobody wants to live there," she said. According to her, people prefer to live on the island.

The second spatial contention is more specifically connected to Penang's land-sea interface and claims to the sea through a series of contrasting views on the PSR project and its socio-ecological implications for the southern littoral, a hilly and forested area where different fishing settlements have grown especially around accessible coastal areas. Four fishers' units (*unit nelayan*) are located along the south coast: Permatang Tepi Laut, Sungai Batu, Teluk Kumbar, and Gertak Sanggul. There are approximately 500 officially licensed inshore fishers registered at these four fishing units (interview with a spokesperson of SRS). They are categorised as Zone A fishers, meaning that they are allowed to operate within eight nautical miles

from the coast. They use small outboard-powered boats. The shallow coastal waters off the south coast are considered a rich fishing ground, and their catch mostly consists of prawns, crabs, and other coastal pelagic or demersal fish species. Thus, they do not need to go so far from shore. Inshore fishers represent a vital segment of Malaysia's fishing industry, but they are the most vulnerable when land reclamation comes.

In the context of artificial islands in Hong Kong, Toland (2017) writes that they are seen by government as a better option compared with land reclamation along the coast: a way to circumvent conflicts with coastal residents who would otherwise be deprived of their sea views. The Penang State Government and developers might have expected such a form of resistance by coastal property owners, or anticipated calls for the protection of the ecosystem by environmental NGOs. Yet, they have underestimated the importance of the sea for the fishing community.

The secondary role the sea and the fishing community holds in the visions of interlocutors directly connected to the implementation of the PSR project emerged during interviews. According to a politician representing the Penang State Government, there is no beauty in the sea waters of Penang which are not comparable to other touristic seaside destinations in neighbouring countries, such as Thailand or Indonesia. "Honestly [if] you ask me, do you consider mud water a natural pristine environment that we should conserve? (...) Would you swim in muddy water?" He rhetorically asked me while referring to the intertidal zone off the south coast. But, perhaps, the words of a spokesperson of SRS better exemplifies the current approach to the sea as *mare nullius*. According to her, it is more sustainable to reclaim new land from the sea than developing Penang's forests and hills: "It's the sea that we're reclaiming. Generally, the sea does not belong to the fishermen. It's an open sea, right? (...) It's not that when we reclaim, then there is no more sea." By recalling the bigger and faster boats fishers who sign the compensation package under the PSR project will receive, she added: "We're just asking them to fish further." The PSR project is promoted as a game changer that will bring more than 300,000 jobs and improve the life of fishers by reducing their income inequality with average Penangites (Woo, 2020).

The view of the fishers is quite different. There are still many fishers who would just like to continue their activities in the sea and who are not interested in other job opportunities. According to a fisherman, it seems that the state does not want inshore fishers in the future and, as he told me "we will disappear in twenty years or so." For most fishers, the shallow waters off the south coast are the primary and most efficient source of livelihood. Perhaps there are no better words than those expressing emic perspectives as emerged during interviews. The sea for them is the most important space they navigate in order to *cari makan*, a Malay colloquial term, which, translated literally, means "looking for food" and means in practice "making a living." The sea represents a source of *rezeki* (sustenance), which according to many of my interlocutors among fishers is closely intertwined with the blessings

from Allah. In more religious terms, fishers consider themselves to be blessed with the sea and believe the rich marine life comes from God, a creation which should not be disturbed. The fishers who most vocally support the opposition to land reclamation also expand this understanding of *cari makan* and *rezeki* to society at large, and present the issue in terms of food security:

This area [the one to be reclaimed] is very strategic for fishers because it is a breeding ground for prawns. Our sea here is very rich in terms of marine life. It gives us *rezeki* to support our families. But it is also a source of proteins for many other people. A source of proteins from fresh seafood every day! From the past to the present, that is what we need. It ensures food security. Every day we [fishers] are ready to sacrifice our life at sea to ensure food security for the entire society. We do not need compensation or new boats. Why shall we go further deep sea and add more costs and risks to our lives without any certainty over the catch? We already have everything we need here.

A slogan displayed on their protest banners has become very popular in their discourse against the PSR project: “Don’t pour sand into the fishers’ rice bowl” (*Jangan taburkan pasir dalam periuk nasi nelayan*). The latter clearly points to the damages to their livelihoods, however, sand, as a metaphor for land reclamation, will also affect the larger community on the island. As one leader of the fishing community told me: “They are pouring sand in our rice bowl but, without fresh seafood, what they [Penangites] are going to eat? Sand?”

By making more vocal the plight of the fishing community, the NGOs supporting Penang Tolak Tambak have highlighted the struggle against land reclamation beyond the damages to the environment and the ecosystem. Most interviewers criticised the PSR project as a veritable coastal and ocean grab at work through greenwashing tactics, not little different from other massive land reclamation examples in the country, such as the islands reclaimed off the state of Johor under the name of Forest City, another project promoted as a futuristic model of green urbanism at the sea (see Moser & Avery, 2021). According to activists, it is not enough to provide designs of high-tech luxurious lifestyles and greener and smarter environments for the wealthiest citizens, if land reclamation destroys the ecosystem and disenfranchise the larger population. As noted by Teh (2019), “the trend for the intended use of reclaimed land in Penang has evolved with the passage of time – from providing land for ports and the manufacturing industry (...), to luxury real estate development for the affluent” (n.p.). Such an approach is often described by activists and fishers as “reclaim and sell” (*tambak dan jual*) in Penang. Taking examples from past and ongoing projects along the east coast, and other gentrifying real estate projects along



Figure 3. A map mocking the PTMP as Penang Reclamation Master Plan (*Penang Tambak Master Plan*) displayed at the Fishers' Unit of Sungai Batu. Author's photo, August 2023.

the north coast, Penang Tolak Tambak supporters have raised concerns about the sealing off of the coastline for exclusive enclaves, at the expense of fishers and other beachgoers.

In spatial terms, alternative visions for Penang's littoral were summarised in a manifesto that was presented during a press conference organised by Penang Tolak Tambak and leaders of Pen Mutiara (the association representing the fishing community) before the Penang State Government elections in August 2023 (see [Figure 4](#)). They were asking electoral candidates to explore more sustainable alternatives that would not sacrifice the marine ecosystem and the livelihoods of the fishing community. One example called for adopting a "Blue Economy" strategy that would ensure the conservation of the oceans. Along these lines, the manifesto also proposed more sustainable approaches vis-à-vis the state-cum-developers' mantra of bringing development to the south, such as ecotourism through homestay programs and fishing activities for visitors, among others. Most importantly, the manifesto called for the recognition of fishing heritage villages, to preserve not only the coastline but also the fishing community and its traditions.

Toland (2017) argues that because land reclamation “proposals are attempts to create artificial “natures,” they are doubly artificial” (p. 102). He continues: “at least for the time being until they are physically constructed, they involve artifice in the sense of being imaginary, projective, rhetorical—embodied only in the discourses, reports, diagrams, drawings and renderings used to make the case for them as a future reality” (Toland, 2017, p. 102). Together with the contested spatialities explored in this section, the PTMP and its PSR component advances at a multitemporal pace. The latter oscillates between two tempos, to borrow from musical terminology: from the *Allegro*-like (fast and bright) rush to reclaim for the PTMP-PSR project to the *Adagio*-like (slow, but with great expression) “buying time” strategies of the actors opposing the project. The next section explores these two contrasting temporalities.

Tempos: The Rush to Reclaim and “Buying Time”

Scholars have been interested in the temporalities such mega-projects involve. However, as emphasised by Carse and Kneas (2019), infrastructural projects have been approached more as “socio-material artifacts” rather than taking into consideration their “temporal transformation” (p. 23). By drawing on a growing literature “that troubles the linear, stagewise development timelines of planning imaginaries (e.g., plan, budget, procure, construct, complete),” Carse and Kneas (2019) argue that “we should not accept the project timelines presented by funders, builders, and boosters at face value” because “[b]udgets evaporate, political winds shift, markets fluctuate, protests gain traction, and paradigms fall out of fashion” (p. 10). Many projects just do not follow planners’ maps, as Appel, Anand, and Gupta (2018) write, “because, as they are implemented, social and political pressures force alterations in their design and in their function” (p. 17-18).

Regarding the temporalities of the PTMP-PSR project as approached by state, corporate, and civil society actors, we run into two competing temporalities. A tense state of time pressure characterises the approach of state and corporate actors. First, small states and states less rich in natural resources, such as Penang, know that costly infrastructural projects may need financial support from the federal government. Second, they know that a federal administration in the hands of a different ruling coalition may make necessary federal approvals and authorisation more difficult to obtain. In the Malaysian case, therefore, time pressure is not only financial, but also subject to political configurations, especially in connection to national politics that shape the complex relations between Penang and federal authorities. The lawmakers and developers involved might disagree with interpretations highlighting time pressure and the rush to start the land reclamation works. As I was asked rhetorically by a politician representing the Penang State Government: “Are seven years of preparation and engagement with the public not enough? How many years more should we take?” He was referring to the lengthy time the project took to start, the long period of planning, including work on Environmental Impact Assessments (EIAs), and negotiations with

the fishing community for compensation schemes. Yet, the timeline of approvals, or rejections of EIAs (see below), shows that political configurations influence the temporalities of development projects. It is not so much about one political coalition or another supporting or opposing land reclamation per se, since every major coalition in Malaysia has endorsed such development strategy. Instead, it is the political alignment or friction between federal and sub-national administrations that play a major role in the definition of developmental time.

In order to “buy time” (*beli masa* in Malay, a term several of my interlocutors have referred to during interviews) to stop, or at least postpone the PTMP-PSR project, its opponents have been able to exploit the political frictions between the Penang State Government and the federal government. For instance, the PTMP-PSR project emerged under the first Penang State Government in history led by Pakatan Harapan (The Alliance of Hope) (2013-2018), a coalition that has been fighting the longstanding administration of Barisan Nasional (National Front), in power at the federal level since independence. As soon as the PSR was proposed, fishers started to rally in defence of their community, source of income, and the ecosystem. During a demonstration held in Sungai Batu in December 2015, the leaders of Pen Mutiara clarified that the fishing community has never opposed development projects, but this specific project was going to hit the fishing community hard. At the end of the demonstration, fishers burnt a fishing net to symbolise the death of their community (Malaysian Insider, 2015). The discontent of the fishing community was also manifested in other venues, such as, one year later, during the public briefing of the Detailed Environmental Impact Assessment report. At this stage, it was not easy to ignore the plea of the fishing community for the opposing coalition ruling at the federal level. As affirmed by the Minister of Natural Resources and Environment, Wan Junaidi Tuanku Jaafar (2015-2018) from Barisan Nasional, he has always been against the project because the EIA prediction of irreversible damage to the ecosystem and, consequently, to the livelihood of the fishing community (Krishnan, 2021).

The promise of the PTMP-PSR project seemed to become brighter for the Penang State Government and SRS in 2018, when Pakatan Harapan won the federal elections for the first time in history. The Department of Environment in charge of evaluations of EIAs under the renamed Ministry of Energy, Science, Technology, Environment and Climate Change approved the EIA of the PSR project in 2019. Meanwhile, opposition to the project grew stronger with the launch of the Penang Tolak Tambak campaign in the same year. By that time, the fishing community was not fighting alone. It received the support of more than 40 NGOs both based on the island and the mainland. The alliance between the fishing community and civil society at large led to more vocal protests in Penang and also one held in Kuala Lumpur in July 2019, where more than 300 fishers marched to the national parliament to

hand over a memorandum against the project. Fishers from the state of Perak joined too, since the EIA reported their seabed would be one of the sources for the sand to be mined for the PSR project.

Since then, Penang Tolak Tambak has organised other protests and activities. Two petitions on the international platforms [Change.org](https://change.org) and [Rainforestrescue.au.org](https://rainforestrescue.au.org) have been launched. A total of 250,000 indications of support were registered in 2020 and a memorandum has been submitted to the National Human Rights Commission of Malaysia (Aliran, 2020). In addition to demonstrations and petitions, Penang Tolak Tambak has resorted to more creative strategies in order to raise awareness about the negative effects of the PSR project with the public at large, such as a film documentary and other image-based documentations, including a photo exhibition on Penang's fishing community. More visual arts-related activities are in the pipeline. Penang Tolak Tambak also facilitates study trips for Malaysian and foreign universities, reaching students who are interested in knowing more about the fishing traditions and their related communities. The Penang Tolak Tambak campaign has also enabled the struggle against this specific land reclamation project to “jump scale” as other movements pointing to the right to the island have done (Schmelzkopf, 2008). “Networks of resistance” have been able to transcend national boundaries, taking the lead in the petition “Stop Stealing our Seas” on the World Fisheries day in 2019, in conjunction with other concerned groups in Malaysia and Indonesia (Arnez, 2020).

The major benefit of an alliance between NGOs and the fishing community is constrained within the provisional tactics of “buying time,” in this case through a formal legal challenge to the approval of the EIA. This has been possible in part due to political instability in Malaysia, when four different coalitions have, in turn, ruled at the federal level in a six year period. As a spokesperson of an environmentalist NGO attached to Penang Tolak Tambak told me: “We can't be involved in politics, but we take any opportunity stemming from political clashes to stop the project.” According to him, as well as other interlocutors, to have different governing coalitions at federal and state levels can ensure more “transparency” in approvals processes.

In 2019, through the support of environmentalist lawyers and experts supporting Penang Tolak Tambak, Zakaria Ismail, former deputy chairman of Pen Mutiara and head of Sungai Batu's Fishers' Unit, submitted a formal objection for the approval of the EIA to the Appeal Board of the Department of Environment as provided under the Environmental Quality Act. In the meantime, the first Pakatan Harapan-led federal government collapsed, and two other coalitions have been in power: the brand-new Perikatan Nasional (The National Alliance) (2020-2021) and Barisan Nasional again (2021-2022). In 2021, the Minister of Environment and Water, Tuan Ibrahim Tuan Man from Perikatan Nasional, stopped the EIA's approval. The fishing community and the broader Penang Tolak Tambak movement



Figure 4. A press conference held at the Fishers' Unit of Sungai Batu against the PSR project. Author's photo, August 2023.

won the appeal because the EIA was relying on the Penang Structure Plan 2030, which was only a draft and not legally effective according to law (see CAP, 2021).

My key interlocutors from Penang Tolak Tambak often told me how relieved they were when the first Pakatan Harapan-led federal government collapsed, because they managed to win the appeal. Meanwhile, a new EIA was submitted and by the end of 2022 Pakatan Harapan secured the lead of a new political majority at the federal level with Anwar Ibrahim as the new Prime Minister. Once a fisher showed me a video of Anwar Ibrahim who visited the area in 2019. At that time, he clearly expressed solidarity with the fishing community fighting the land reclamation project. The leaders of Pen Mutiara were therefore still hoping for his solidarity (see Dermawan, 2022). However, pending the approval of the second EIA and probably to appease civil society, the Malaysian Prime Minister promised financial support for the LRT and, in exchange, the Penang State Government has agreed to scale down the PSR project from three islands to one. The renamed Silicon Island (see island A on the right in Figures 1 and 2) is planned to be reclaimed for new commercial, residential, tourist attractions, and especially for industrial purposes as the emphasis on the Green Tech Park development suggests (Lo, 2024), a way to expand the Penang's reputation in tech industry as "Silicon Valley of the East" further in the sea. What remains of the connection

between this reduced land reclamation project and the PMTP seems to be only projections of the LRT depot to be built on Silicon Island or an eventual foreshore extension of the airport (see Dr. Nik & Associates, 2022).

In 2023 the Department of Environment of the renamed Ministry of Natural Resources, Environment and Climate Change under the Pakatan Harapan-led federal administration approved the EIA for the PSR project. While the opposers filed notices to the Appeal Board again, the Silicon Island's reclamation works started in September 2023, bringing the developmental time of the PSR project back to the rush to reclaim approach of state and corporate actors. Silicon Island is planned for completion in 2032, but the Penang State Government is already looking for investors in the Green Tech Park and anticipates that the first factory will be established by 2027 (Ong, 2024).

Those of my interlocutors who played a more active role in the appeals were disappointed by this move. According to them, the Penang State Government should have waited for the Appeal Board to hand down its decision before starting the work. To date, nine applicants, including seven fishers and two environmental NGOs, SAM and JEDI (Friends of Earth Malaysia and Network for Ecology and Climate, respectively), have filed an application for a judicial review at the Penang High Court to challenge the planning permission given by the Penang State Town and Country Planning body. They requested that the state and the project delivery partner to restore the area where the land reclamation works have been started back to its original state, and to pay damages to the loss of fishers' income (CAP, 2024). One of the main concerns was that there should be a new EIA, since the project had been scaled down to one island, and the EIA was based on a study for three islands. However, their application for judicial review has been dismissed because "the Penang State Government had only merely 'shelved' Islands B and C temporarily and had not limited the PSR Project to only Island A" (SAM, 2024).

Final Remarks

While, at the time of writing, Silicon Island is being reclaimed and the Penang Tolak Tambak struggle seems to be waning, the backbone of the movement continues to fight, legally challenging the state and the corporations involved. Whether the reclamation involves three islands or one, their struggle remains ongoing.

Land reclamation projects aimed at creating space for port extensions and new real estate or industrial areas are proliferating worldwide, particularly in Asia (Sengupta, et al., 2023). By the time the sea is reclaimed, it is often too late for opposition (Grydehøj, 2015). Yet, this case study demonstrates that the liquid and fluid space defining islands' littorals can also be claimed back as civic space for the people and the ecosystem, rather than merely a playground for state or corporate interests. Moving from a traditionally "land-based" green movement, the protests against the PSR project signals the emergence of a "blue" or sea-oriented environmentalism in Malaysia. While

Penang's NGOs are playing a crucial role, the right to the island and the sea might have remained more abstract without the direct involvement of the fishing community. After all, fishers, more than most, are familiar with the fluid spatiality that characterises the land-sea interface, which they call home and rely on for their livelihoods.

This paper began with a review of the literature on the right to the island and how this concept has expanded to encompass broader rights to nature. However, studies on island environmental movements have often overlooked the land-sea interfaces that clearly define island spatialities. As Hadjimichael (2023) writes, "The first step to reclaim the sea is the deconstruction of the reasons behind its appropriation" (p. 169). This case study highlights two major ways in which a specific land reclamation project has been spatially contested by its opponents. First, Penang Tolak Tambak has challenged the long-standing narrative of island boundedness and land scarcity, which state and corporate actors have used to justify further land reclamation from the sea. Second, Penang Tolak Tambak has proposed alternative models of island development that emphasise the importance of the sea and coastal environments, both in environmental and socio-cultural terms. By expanding the right to the island to include claims to the sea, this case study sheds light on the contentious environmental politics of land-sea interfaces. As other studies on environmental struggles related to the right to the island and to nature have shown, scaling up contestation from local to national and international levels can be beneficial (Cortes-Vazquez & Apostolopoulou, 2019). At the national level, Penang Tolak Tambak has managed to delay the PSR project by exploiting political frictions between the coalitions in power at the sub-national and federal levels. Most importantly, Penang Tolak Tambak has transcended socio-cultural divisions, bringing together multicultural, middle-class, urban-based NGOs and the predominantly Malay traditional fishing community around trans-ethnic and trans-class concerns about the island and its land-sea interface.

There are, of course, limitations to this study. In addition to the relatively small sample of interlocutors interviewed, other key actors, such as beachgoers and fishers' patrons, are absent. However, the main limitation may lie in the hesitation to make policy-oriented recommendations, as these go beyond the scope of this research. Nevertheless, I believe that ethnographies of campaigns like Penang Tolak Tambak can contribute by amplifying voices that are often neglected in official island development planning. As Sabaté-Bel and Armas-Díaz (2022) argue, such protests "can also be considered to uphold the population's right to the island, acknowledging the right of those who inhabit them to control urban development processes" (p. 228). Clark (2013, p. 134) urges both researchers and policymakers to consider the right to the island perspective in order to shed light on alternative island futures by listening to the people, rather than imposing abstract development models or plans on habitats they know intimately. In this spirit, this paper has presented the contested spatio-temporalities of a specific project, not with

the aim of proposing an exhaustive approach but rather to provide space for those advocating for alternative futures. By exploring alternative ideas of island development as they are rearticulated by island-based movements, future studies around the world can highlight the relevance of ethnographic insights and local knowledge for policy-oriented practices and urban planning in their own right.

.....

Acknowledgements

The author would like to thank the editors of the journal and the three anonymous reviewers for their insightful comments. This work was supported by the European Union's Horizon Europe MSCA Postdoctoral Fellowship (HORIZON-MSCA-2021-PF-01) MaReLand [grant number 101062825]. Views and opinions expressed are, however, those of the author only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

Submitted: March 13, 2024 CST. Accepted: October 30, 2024 CST. Published: November 20, 2024 CST.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CCBY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.

References

- Aliran. (2020, January 26). *Reclamation – a travesty of environmental justice for vulnerable coastal Communities*. <https://m.aliran.com/civil-society-voices/reclamation-a-travesty-of-environmental-justice-for-vulnerable-coastal-communities>
- Apostolopoulou, E., & Cortes-Vazquez, J. A. (2019). Introduction: Neoliberalism and environmental movements across the world after the 2008 financial crash: Defending the right to nature. In E. Apostolopoulou & J. A. Cortes-Vazquez (Eds.), *The right to nature: Social movements, environmental, justice and neoliberal natures* (pp. 1–13). Routledge.
- Appel, H., Anand, N., & Gupta, A. (2018). Introduction: Temporality, politics, and the promise of infrastructure. In N. Anand, A. Gupta, & H. Appel (Eds.), *The promise of infrastructure* (pp. 1–38). Duke University.
- Armas-Díaz, A., Murray, I., Sabaté-Bel, F., & Blázquez-Salom, M. (2023). Environmental struggles and insularity: The right to nature in Mallorca and Tenerife. *Environment and Planning C: Politics and Space*, 42(4), 639–657. <https://doi.org/10.1177/23996544231212294>
- Armas-Díaz, A., & Sabaté-Bel, F. (2022). Struggles on the port of Granadilla: Defending the right to nature. *Territory, Politics, Governance*, 10(2), 256–276. <https://doi.org/10.1080/21622671.2020.1773918>
- Armas-Díaz, A., Sabaté-Bel, F., Murray, I., & Blázquez-Salom, M. (2020). Beyond the right to the island: Exploring protests against the neoliberalization of nature in Tenerife. *Erdkunde*, 74(4), 249–262. <https://doi.org/10.3112/erdkunde.2020.04.02>
- Arnez, M. (2020). *Reclaiming the sea from the Melaka Gateway*. New Mandala. <https://www.newmandala.org/reclaiming-the-sea-from-the-melaka-gateway/>
- Astro Awani. (2023, May 2). *Consider this: Penang reclamation | At what cost?* <https://www.youtube.com/watch?v=6uxkbuI-lBg&t=112s>
- Baldacchino, G. (2006). Island studies, *Island Studies Journal*. *Island Studies Journal*, 1(1), 3–18. <https://doi.org/10.24043/isj.185>
- Brenner, N., Marcuse, P., & Mayer, M. (2012). *Cities for people, not for profit: Critical urban theory and the right to the city*. Routledge.
- CAP. (2021, September 8). *Victory for fishermen in Penang South Reclamation project*. <https://consumer.org.my/victory-for-fishermen-in-penang-south-reclamation-project/>
- CAP. (2024, February 14). *Fishermen and environmental organisations file action against the PSR project*. <https://consumer.org.my/fishermen-and-environmental-organisations-file-action-against-the-psr-project/>
- Carse, A., & Kneas, D. (2019). Unbuilt and unfinished: The temporalities of infrastructure. *Environment and Society*, 10, 9–28. <https://doi.org/10.3167/ares.2019.100102>
- Chee, S. Y., Abdul, G. O., Sim, Y. K., & Nabilah, A. (2017). Land reclamation and artificial islands: Walking the tightrope between development and conservation. *Global Ecology and Conservation*, 12(C), 80–95. <https://doi.org/10.1016/j.gecco.2017.08.005>
- Clark, E. (2013). Financialization, sustainability and the right to the island: A critique of acronym models of island development. *Journal of Marine and Island Cultures*, 2, 128–136. <https://doi.org/10.1016/j.imic.2013.10.001>
- Connolly, C. (2019). Worlding cities through transportation infrastructure. *Environment and Planning A: Economy and Space*, 51(3), 617–635. <https://doi.org/10.1177/0308518X18801020>

- Cortes-Vazquez, J. A., & Apostolopoulou, E. (2019). Afterword: The right to nature: Lessons learned and future directions. In E. Apostolopoulou & J. A. Cortes-Vazquez (Eds.), *The right to nature: Social movements, environmental, justice and neoliberal natures* (pp. 303–313). Routledge. <https://doi.org/10.4324/9780429427145-23>
- Dermawan, A. (2022, November 29). Fishermen's association hopes Anwar will scrap Penang reclamation project. *New Straits Times*. <https://www.nst.com.my/news/nation/2022/11/855951/fishermens-association-hopes-anwar-will-scrap-penang-reclamation-project>
- Dr. Nik & Associates. (2022). *EIA for the proposed reclamation & dredging works for the Penang South Reclamation (PSR), Penang*.
- Grydehøj, A. (2014). Guest editorial introduction: Understanding island cities. *Island Studies Journal*, 9(2), 183–190. <https://doi.org/10.24043/isj.300>
- Grydehøj, A. (2015). Making ground, losing space: land reclamation and urban public space in island cities. *Urban Island Studies*, 1, 96–117. <https://doi.org/10.20958/uis.2015.6>
- Grydehøj, A., & Swaminathan, R. (2018). Cities and urbanisation. In G. Baldacchino (Ed.), *The Routledge international handbook of island studies: A world of islands* (pp. 312–323). Routledge. <https://doi.org/10.4324/9781315556642-14>
- Hadjimichael, M. (2023). (De)Growth: The right to the sea. In K. Peters (Ed.), *The Routledge handbook of ocean space* (pp. 161–172). Routledge.
- Harvey, D. (2012). *Rebel cities: From the right to the city to the urban revolution*. Verso.
- Hay, P. (2006). A phenomenology of islands. *Island Studies Journal*, 1(1), 19–42. <https://doi.org/10.24043/isj.186>
- Hay, P. (2013). What the sea portends: A reconsideration of contested island tropes. *Island Studies Journal*, 8(2), 209–232. <https://doi.org/10.24043/isj.283>
- Jackson, M., & della Dora, V. (2009). Dreams so big only the sea can hold them”: Man-made islands as anxious spaces, cultural icons, and travelling visions. *Environment and Planning A*, 41(9), 2086–2104. <https://doi.org/10.1068/a41237>
- Khoo, S. L., Narimah, S., Nurwati, B., & Sharifah, R. S. (2015). The promise and perils of the island city of George Town (Penang) as a creative city. *Urban Island Studies*, 1(1), 20–34. <https://doi.org/10.20958/uis.2015.2>
- Krishnan, D. B. (2021, June 3). Wan Junaidi calls for cancellation of PSR project. *New Straits Times*. <https://www.nst.com.my/news/nation/2021/06/695540/wan-junaidi-calls-cancellation-psr-project>
- Lefebvre, H. (2000). *Writings on cities* (E. Kofman & E. Lebas, Trans.). Blackwell Publishers.
- Leung, A., Tanko, M., Burke, M., & Shui, C. S. (2017). Bridges, tunnels, and ferries: Connectivity, transport, and the future of Hong Kong's outlying islands. *Island Studies Journal*, 12(2), 61–82. <https://doi.org/10.24043/isj.24>
- Lo, T. C. (2024, May 29). *Big prospects for Silicon Island*. The Star. <https://www.thestar.com.my/news/nation/2024/05/29/big-prospects-for-silicon-island>
- Low, S., & Lawrence-Zúñiga, D. (2003). Locating culture. In S. Low & D. Lawrence-Zúñiga (Eds.), *The anthropology of space and place: Locating culture* (pp. 1–47). Blackwell.
- Malaysian Insider. (2015, December 13). *Death of our community, fishermen say of southern Penang reclamation plan*.
- Moser, S., & Avery, E. (2021). The multi-scalar politics of urban greening in Forest Cit. *Urban Forestry & Urban Greening*, 60, 1–5. <https://doi.org/10.1016/j.ufug.2021.127068>

- Mustafa, K. A., & Shakila, A. M. (2018). Making the difference: Communicating campaigns for sustainable development in the opposition state of Penang, Malaysia. In K. Prasad (Ed.), *Communication, culture and ecology: Rethinking sustainable development in Asia* (pp. 85–99). Springer Nature.
- Ng, K. K. (2020). *Creating land in the sea: the quest for greater state autonomy in Malaysia*. New Mandala. <https://www.newmandala.org/creating-land-in-the-sea-the-quest-for-greater-state-autonomy-in-malaysia/>
- Nor Hisham M. G. (2006). Coastal erosion and reclamation in Malaysia. *Aquatic Ecosystem Health & Management*, 9(2), 237–247. <https://doi.org/10.1080/14634980600721474>
- Ong, K. H. (2024, August 9). *First factory expected on Silicon Island by 2027*. Buletin Mutiara. <https://www.buletinmutiara.com/first-factory-expected-on-silicon-island-by-2027/>
- Oon, K. E. C., & Khoo, S. L. (2014). Issues and challenges of a liveable and creative city: The case of Penang, Malaysia. *Geografia*, 10(3), 33–43.
- Penang Forum. (2016). *Better Cheaper Faster Penang Transport Master Plan*. https://bettercheaperfaster.penangforum.net/wp-content/uploads/2020/06/BCFreport_ENG_full.pdf
- Penang Institute. (2023). *Penang: Population and demographics*. <https://penanginstitute.org/resources/key-penang-statistics/visualisations-of-key-indicators/penang-population-and-demographics/>
- Penang State Government. (2012). *The recommended Transport Master Plan strategy*. In association with AJC Planning, Halcrow, and Singapore Cruise Centre. https://bettercheaperfaster.penangforum.net/wp-content/uploads/docs/The_Recommended_Transport_Master_Plan_Strategy_29-09-12-Draft.pdf
- Roszkó, E. (2021). Maritime anthropology. In L. Pedersen & L. Cliggett (Eds.), *The Sage handbook of cultural anthropology* (pp. 311–329). Sage Publications. <https://doi.org/10.4135/9781529756449.n18>
- Sabaté-Bel, F., & Armas-Díaz, A. (2022). Commodification or the right to the island: The struggle against the construction of a hotel in La Tejita (Tenerife). *Island Studies Journal*, 17(2), 214–234. <https://doi.org/10.24043/isj.386>
- SAM. (2024, July 11). *Fisher folks and NGOs dismayed with outcome of PSR case*. <https://foe-malaysia.org/articles/fisher-folks-and-ngos-dismayed-with-outcome-of-psr-case/>
- Schmelzkopf, K. (2008). Scale and narrative in the struggle for environment and livelihood in Vieques, Puerto Rico. In M. Goodman, M. Boykoff, & K. Evered (Eds.), *Contentious Geographies* (pp. 131–145). Ashgate.
- Sengupta, et al. (2023). Mapping 21st Century global coastal land reclamation. *Earth Future*, 11(2), 1–13. <https://doi.org/10.1029/2022EF002927>
- Tan, C. (2023, May 3). *Silicon Island: An exciting future for high-tech and sustainable development*. Buletin Mutiara. <https://www.buletinmutiara.com/silicon-island-an-exciting-future-for-high-tech-and-sustainable-development/>
- Teh, E. (2019). *Redefining development and the hidden cost of land reclamation in Penang*. Heinrich-Böll-Stiftung Southeast Asia. <https://th.boell.org/en/2019/12/01/redefining-development-and-hidden-cost-land-reclamation-penang>
- Toland, A. (2017). Hong Kong's artificial anti-archipelago and the unnaturing of the natural. In A. Rademacher & K. Sivaramakrishnan (Eds.), *Places of nature in ecologies of urbanism* (pp. 87–107). Hong Kong University Press. <https://doi.org/10.5790/hongkong/9789888390595.003.0005>

- Weiss, M. L. (2006). *Protest and possibilities: Civil society and coalitions for political change in Malaysia*. Stanford University Press.
- Woo, J. (2020). Evaluating the Penang South Reclamation (PSR) project according to the United Nations' Sustainable Development Goals. *Penang Institute ISSUES*. <https://penanginstitute.org/publications/issues/evaluating-the-penang-south-reclamation-psr-project-according-to-the-united-nations-sustainable-development-goals/>
- Yew, W. L. & Azmil T. (2019). Malaysia's green movement: Old continuities and new possibilities. In S. Lemiere (Ed.), *Illusions of democracy: Malaysian politics and people* (pp. 287–304). Amsterdam University Press.