



ISLAND DYNAMICS

Making Ground, Losing Space: Land Reclamation and Urban Public Space in Island Cities

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Abstract: This article foregrounds urban public space by considering land reclamation in island cities. Land reclamation is nearly ubiquitous in the urban development of coastal cities, and island cities in particular are subject to exceptionally dense urbanisation and thus exceptionally strong conflict over urban space. Drawing upon theories at the intersection of the land and the sea (liquid, archipelago, and aquapelago spatiality), we analyse socially problematic aspects of the creation of new urban space through land reclamation. Land reclamation occurs in island cities such as Bahrain, Copenhagen, Dubai, Hong Kong, Macau, New York City, and Xiamen in order to construct space for urban industrial, residential, and leisure functions while avoiding the social conflict that often accompanies urban renewal efforts. However, whether in the case of publically accessible leisure parks or secessionary island enclaves for the ultra-rich, land reclamation processes serve powerful societal forces and represent the capture of urban space for elite interests. This reduces the prospects for urban public space and limits the horizons for the development of more socially just future cities. The transformation of unclaimed fluid space into solid private space is a relative form of accumulation by dispossession, even if the public has never been aware of what it possessed.

Keywords: Accumulation by dispossession; island cities; land reclamation; public space; urban development; urban space

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1. Theorising between land and sea

This paper explores economic and political drivers of coastal land reclamation as well as land reclamation's impact on urban public space. Focusing on land reclamation in island cities, which tend to be sites of exceptional urban density and thus exceptional spatial competition, I theorise the nature of public space at the intersection of the land and the sea. I ultimately regard land reclamation as a sociopolitical process that entrenches existing power structures while circumventing potentially productive social conflict over the use of urban space. Urban land reclamation functions as "accumulation by dispossession" (Harvey, 2003) by transforming a fluid and abstract resource for future public good into a solid and static elite private asset.

Noting the self-imposed terrestrial limitations of much geographical scholarship, Steinberg and Peters (2015: 250) propose a "wet ontology" that "problematizes accepted notions of time, space, mobility, and materiality." By realising space in terms of the horizontal *and* the vertical, in the manner of Elden (2013), one achieves an oceanic notion of a "dynamic, voluminous materiality" in which "the form of water opens new territories of control and conflict" (Steinberg & Peters, 2015: 252). For Steinberg and Peters (2015: 256), the point of departure for "for thinking with water [is] the concept of the dynamic assemblage, in which mobile human and nonhuman (including molecular) elements and affects are not merely passively consumed but imagined, encountered, and produced." Ultimately:

Attentiveness to the sea as a space of politics can upend received understandings of political possibilities and limitations. The ocean [...] – through its material reformation, mobile churning, and nonlinear temporality – creates the need for new understandings of mapping and representing; living and knowing; governing and resisting. Like the ocean itself, maritime subjects and objects can move across, fold into, and emerge out of water in unrecognised and unanticipated ways (Steinberg & Peters, 2015: 260-261).

This 'thinking with water' approach echoes Pugh's aspiration for 'thinking with the archipelago': "The Caribbean archipelago is a movement that refuses to concede to history. It is a place of Adamic renewal against tragic overdetermination. Its Middle Passage is one of metamorphosis" (Pugh, 2013: 18). As spaces of movement, both the ocean and the archipelago defy static, linear history, "which justifies and explains and expatiates" (Walcott, 1998: 64; qtd. in Pugh, 2013: 18).

Hayward (2015: 84) grapples directly with this intersection of land and sea through his concept of the *aquapelago*, referring to "the integrated marine and terrestrial assemblages generated by human habitation and activity." Such "aquapelagic assemblages" are performed entities "that come into being and wax and wane as climate patterns alter and as human socio-economic

organisations, technologies, and/or the resources and trade systems they rely on, change and develop” (Hayward, 2012: 27). They “necessarily involve humans interacting with other actants,” which “may be animate (living) entities, inanimate ones (such as sand, soil, etc.) or the product of energies (such as individual weather events or larger climatic patterns, such as global warming)” (Hayward, 2015: 84). Inspired by Hayward, Suwa (2012: 14) sees “land and water [...] merging to emerge as a whole,” with islands not being “groups of isolates but rather assemblages concentrated by the waters.” Indeed, an island is less “a piece of land surrounded by water” than “an intense and enduring relationship between land and water” (Stratford et al., 2011: 115).

Similarly, writing of the archipelago in urban design, Casper (2013: 109) argues that the collected urban nodes and their suspension in a “secondary context” of parks, plazas, and open space “constitute the core elements of archipelago urbanism”:

To design a city at its interfaces focuses design energy where it is most potent – as urban facades, as gateways, as divisions, as icons. For islands, the zone where water meets ground becomes critical then to the reading of the archipelago as such and to the structure of the network’s pieces, both aquatic and land-based. [...] The edge becomes the place where negotiations of publicity and privacy, form and program, and image and experience are manifested.

From this perspective, land and sea are coproduced, and the urban/island whole is narrated, negotiated, and experienced on its edges.

Such aquatic, archipelagic, and aquapelagic approaches – with their emphases on dynamism, metamorphosis, and socially informed spatiality – may be particularly relevant for considering the politics of transformation from water to land, from land to water. We can see, for example, how the actual or predicted loss of land to the sea due to climate change has been politicised in ways that emphasise not those most at risk but instead those most iconically or symbolically at risk, namely small island states – even in instances when such states face more immediate challenges and when communities elsewhere will potentially be more disastrously affected (Baldacchino & Kelman, 2014). The explanation may in part be that an absolute lack of land places terrestrial space at a premium in states like Tuvalu and the Tokelau, regardless of the actual level of threat. But the explanation may in part also be that islands provide so comprehensive an interface between land and water that they represent convenient and “readable” (Baldacchino, 2006: 9) contexts for understanding social and political (rather than just environmental) fluidity. Changes in coastlines and the tug of war between the terrestrial and the marine – whether the manufacturing of land in place of the sea, the destruction of land by rising seas, or the dredging of sand from the seabed in order to create new land elsewhere – are thus ripe for nuanced analyses that appreciate the full scope of fluid politics, spaces, and histories.

Land reclamation, the empirical focus of this paper, epitomises the importance of recognising flux and transformation. *Reclamation*, the most commonly used English-language term for

the construction of ground where water once had been, is in a sense singularly inappropriate: Land reclamation does not typically seek to 'reclaim' lost ground at all but instead to extend solid ground out into new frontiers. Marine spaces often provided the initial rationale for founding human habitations and livelihoods in coastal zones. As a result, terrestrialisation projects – which inevitably alter the nature of adjacent marine spaces, ecosystems, and 'un-reclaimed' shorelines as well as drive subsequent adaptation processes – are far from the straightforward triumphs of material fixity that they first appear or that the 'reclamation' discourse suggests. Flux always begets flux, and the human impetus to construct fixed histories and solid spaces can mask the true consequences of transformative processes.

2. Land reclamation in island cities

Despite its prominence in coastal cities and despite the lively debate on urban public space in general, land reclamation is rarely subject to social science urban development inquiries, and its special implications for public space are rarely discussed. Instead, land reclamation is usually treated as a phase in a specific development project, as a by-product of a particular city's historical trajectory, or as a technical solution (or obstacle) to solving a specific social or environmental problem. Occasionally, researchers analyse land reclamation from a broader perspective, but even here, focus is typically limited to one or a few particular cities (e.g. Lima, 2011; Ng, 2010). Even Hudson's landmark study of land reclamation (Hudson, 1996), thoroughly international in scope and extending from historical motivations to legal developments, devotes little attention to its present-day social and political impacts.

This lack of research is unfortunate, for land reclamation turns out to be near-ubiquitous in the development of coastal cities. I focus here on cities based on islands or archipelagos, where urban space is especially restricted and where the motivations for and impacts of creating new ground are especially pronounced. Although it has only recently been recognised within the scholarly community, islands are strongly associated with urbanisation: A mix of territorial benefits, defence benefits, and trade benefits have historically made small islands ideal sites for basing either seats of government or trading posts (Grydehøj, 2015).

One reason why the tendency for major cities to be based on small islands has been overlooked is that the use of land reclamation to extend urban space is extremely old: Because former islands have been connected to the mainland through land reclamation, we often fail to recognise island cities for what they are (Grydehøj *et al.*, 2015). Examples abound, including Dubrovnik, Manila, Mexico City, Tyre, and the former almost-island of Boston. Yet there are still many major island cities that have expanded significantly through land reclamation but around which the waters have not completely receded, such as Abidjan, Amsterdam, Lagos, St Petersburg, Singapore, Stockholm, and Venice. Even here, however, close proximity (whether anthropogenic or otherwise) to the mainland means that the city's island status is frequently missed, and its coastlines blur from view, though not necessarily from significance: Even if it goes unnoticed, island spatiality may have major impacts on urbanisation patterns (Steyn, 2015).

The tendency to define islands by their coastlines (Baldacchino, 2005) is no mere quirk of the human imagination. The meeting of land and water – minimising distances between production and transport, import and consumption – is frequently what brought island cities to prominence to begin with. If a place's status as an aquapelagic assemblage (Hayward, 2012) is to be sustained, then the living, social connection between land and water must be maintained. Yet the things we do with our coastlines change, and economic circumstances may argue for the creation of new coastlines to serve new uses – for new users.

The Copenhagen archipelago is an instructive case. Copenhagen's castle island, Slotsholmen, is now nestled in the city centre but was once located considerably offshore. Slotsholmen's 12th Century re-engineering and fortification were performed in the service of the city's dominant political force: The island both protected the harbour from incursion and provided a seat from which political power was projected into the city itself. Changing economies and changing forms of political control, however, meant that a distant, exclusive castle island was no longer the ideal seat of power. New phases of urban development instead privileged the city's commercial, industrial, and administrative functions. Over the course of the 16th and 17th Centuries, land reclamation projects saw the city rush out to meet Slotsholmen from the west and encapsulate it in a crescent of artificial islands to the east. Much of this reclaimed land is now open to and used by the public, though its heavily managed nature (*cf.* Carmona, 2010) to some degree limits the potential for grassroots development in the use of space.



Figure 1: Map of Copenhagen, mid-19th Century. Source: https://commons.wikimedia.org/wiki/File:Copenhagen_circa_1850.jpg

Over the centuries, Copenhagen's growth continued. Today's capitalist urbanism grants value to empty coastlines: Yesterday's coasts hold less value than tomorrow's. Thus, even in island cities, which are intrinsically blessed with extensive coastlines, new waterfront property is manufactured in front of old waterfront property. Since property values are frequently highest near the city centre, maritime industries are pushed ever farther from the urban core (Daamen & Vries, 2013), sometimes occasioning successive waves of land reclamation and urban renewal. The seeping away of industry from Copenhagen's reclaimed Sydhavn (South Harbour) in the 1990s opened the area to residential and business development in the 2000s, resulting in ever-expanding Amsterdam-style archipelagos of artificial islands separated by canals (Heggland, 2014). Once developers have reaped the profits from selling residences with an attractive view, they are incentivised to create even more property, regardless of how this affects users and residents of the existing new coastline. Low-value industrial actors, meanwhile, are kept constantly on the move: In the mid-1990s, industrial redevelopment pushed the old fishing harbour in inner Nordhavn (North Harbour) out to the extremity of this artificial peninsula. Nevertheless, grand plans for Nordhavn as one of Copenhagen's new business and residential centres may see the fishing harbour either displaced entirely or be granted a token continued existence encircled by new development, as has occurred with the fishing harbour in Sydhavn (Rubow, 2014). As the existing Nordhavn is being filled, the peninsula is also being expanded by a third (1 km²) using earth excavated for the new Metro rail line (By & Havn, n.d.). Subterranean rail transport thus literally provides the grounds for new high-value business, residential, and industrial life: Major infrastructural projects can be mutually justifying, requiring ever-more extensive urban interventions.

Island cities have led the way in these processes. New York City accrued complete new shorelines during its 18th- and 19th-Century booms. Manhattan, which had grown to prominence in large part due to its estuarine environment and the booming oyster industry, turned in on itself and lost its marine orientation as the overexploited oyster industry failed and as the shoreline was engineered for new purposes: The city became enclosed, de-aquapelagised, centred on a park instead of the sea (Hayward, 2015: 86), the mirror image of Austria's residentially enclosed artificial lakes described by Andexlinger (2015).

Manhattan's experience has recently been mirrored on the Chinese island of Xiamen, the land area of which has grown alongside its surging port and manufacturing economy. An important port city for trade with the West since the mid-16th Century, Xiamen's population has undergone a recent explosion, rising from 639,000 in 1990 to 2,207,000 in 2010 (UN-Habitat, 2013). Over the past two decades, urbanisation has overtaken the old forests and farms, and land reclamation has simplified the island's coastline into a more perfectly circular shape (Hua *et al.*, 2010). Like Manhattan, Xiamen has turned away from the sea, as is strikingly exemplified by the case of Yundang Lake: This former harbour (10 km²) was enclosed by a sea wall and land reclamation, transforming the bay into a heavily polluted lake system. In 1988, however, the government initiated an expensive "integrated treatment project" aimed at Yundang's "restoration"

and “rehabilitation.” The project is in the process of re-transforming this body of water into an urban leisure, business, and tourism zone (1.7 km²) (Ye *et al.*, 2014), and the lake has become Xiamen’s “money magnet,” a site of intensive gentrification (Tsai & Chiang, 2014: 73).

Yet Xiamen’s transformation has been nothing compared with some other Asian island cities. Nearly 250 km² of Tokyo have been constructed through an ambitious series of drainage and land reclamation projects, primarily since the 1950s. Even ancient Tokyo (formerly “Edo”, i.e. *estuary*) had been subject to politically motivated wetland reclamation activities, and the city’s historical core is composed of numerous interconnected islands. In the 1960s and 1970s, the Japanese government supported – sometimes in the absence of compelling demand – the construction of industrially focused yet mixed-use islands offshore cities like Tokyo, Osaka, and Kobe. These urban islands, designed to optimise port function efficiency while providing residential and recreational space, profoundly influenced wider Japanese urban planning and architectural philosophy (Pernice, 2007; Shiozaki & Malone, 1996).

The world hub for land reclamation is, however, China’s Pearl River Delta. The ancient island port city of Guangzhou (formerly known as Canton) encouraged the urbanisation and expansion of numerous islands farther downstream in the delta. Although no longer popularly associated with islands, the Pearl River Delta’s archipelagic nature was evident to observers well into the 20th Century (see Figure 2 below). In 1557, the island of Macau (and later the islands of Coloane and Taipa) came under Portuguese control, only returning to China as a Special Administrative Region in 1999. The Portuguese expanded their territory through land reclamation, which has increased Macau’s land area from 10.28 km² in the late-19th Century to 15.5 km² in 1984 to 31.3 km² today (Yu, 2008). With a population of around 631,000, Macau is the most densely populated territory in the world. It is also the world’s most profitable gambling destination, with casino tourism centred on the so-called Cotai Strip of reclaimed land connecting Coloane and Taipa (Simpson, 2014). Macau’s form and function have developed side-by-side, with changes in the city-state’s economy and industrial composition prompting changes to its urban fabric (Feng *et al.*, 2012; Tieben, 2009). The tightly clustered residences, temples, and small businesses of old Macau (much of it itself reclaimed centuries ago) contrast markedly with the towering casinos and purpose-built leisure districts that have risen up on Macau’s new land. Remarkably, even in this tiniest of territories, Macau’s newest land is only problematically accessible by foot, cut off from old Macau by transport infrastructure designed for the taxi and tourist coach. An economy that seeks to shield tourists from distraction from lucrative gambling and high-end shopping expenditure (with the grudging addition of spatially limited value-added heritage tourism zones) has succeeded in turning Macau away from the sea: Access to and interest in the waterfront is highly restricted.

In Hong Kong, on the opposite side of the Pearl River Delta, density imposed by island spatiality likewise incentivises land reclamation. The location of the original British settlement was selected in 1841 due to its suitability for land reclamation (Hudson, 1996:

51-52). The territory's core – Hong Kong Island and the Kowloon peninsula – continue to expand, yet so too do Hong Kong's outlying islands. On the island of Lantau, the upmarket Discovery Bay residential district and Hong Kong Disney Resort have been built on reclaimed land: In today's capitalist urbanism, the coast is a place where both dreams and land come true – assuming one can afford them.

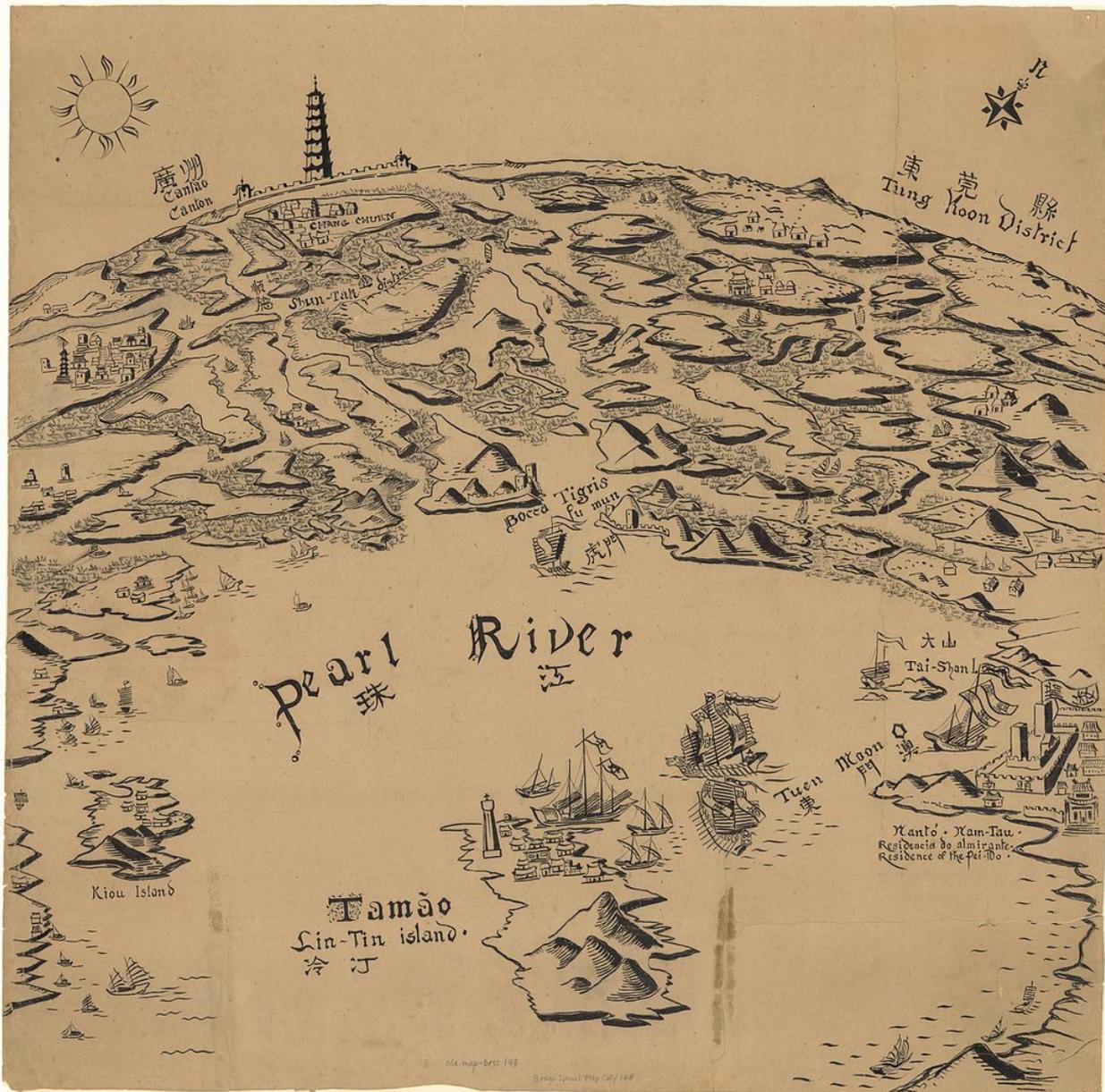


Figure 2: 'Entrance to the Pearl River, on the Way to Canton' by Baron von Reichenau, 1940. Source: https://commons.wikimedia.org/wiki/File:Pearl_River_Entrance_1940.jpg

Some artificial island ground – such as port and industrial zones – is hardly open to the public at all. In other cases, however, as with the residential islands of Copenhagen and the leisure areas around Xiamen's Yundang Lake, residents and users of artificial island spaces literally buy into an illusion of public space. This is an illusion precisely because the use and prospects

of these spaces are conditional upon the desires of the state and corporate actors that enabled and undertook the creation of the space – even when the processes that served to territorialise unclaimed space have been undertaken in the name of the public good. Even in ancient cities, newly manufactured ground has been privatised or enclosed from conception, resistant to public repurposing or appeal.

Land reclamation is today popularly associated with a particular kind of economic activity, namely the manufacturing of island paradises by property developers. The idea of the paradisaical island city is nothing new, and the dream of the island as a perfect space – secluded from danger yet well-placed for the projection of influence into the wider world – is both ancient and widespread (Pigou-Dennis & Grydehøj, 2014a; Baldacchino, 2008). Today's paradise islands are being manufactured on vast scales. These ideal islands may still be dreamed into being by visionaries, yet they are constructed primarily for the sake of paying residents and businesses: The creation of ground is an economic end in itself.

The artificial islands of Miami Beach date back to the early 1900s, yet land reclamation destined for high-end residences has entered a new phase in the past few decades. Such land reclamation is perhaps most striking in the Gulf state of Dubai, where the creation of new land has assumed fetishistic proportions. Despite the region's considerable land availability, there has been a rush to engineer a series of artificial islands (including the Palm Islands, the World, the Universe, and the Waterfront projects) designed to maximise both real estate value and iconic impact from the serenely distant gaze of Google Earth (Hewitt & Graham, 2015).

Dubai may have become obsessed with urban "gigantism" (Gupta, 2015), but it is not alone. Around the globe, iconic skyscrapers and iconic artificial islands are presented as hallmarks of 'world city' status yet are simultaneously associated with privatism, exclusion, and hyper-inequality. Indeed, in the most comprehensively designed of such secessionary networked spaces (Graham & Marvin, 2001), manufactured islands and monumental towers often coincide, with Dubai's Burj Al Arab and Atlantis hotels, the casinos of Macau's Cotai, and Singapore's Marina Bay being just a few spectacular examples. The combination of reclaimed land and monumental architecture is partly practical, for island-conditioned urban densification is a driver of both land reclamation and vertical urbanism. This is a form of voluminous, three-dimensional space, but it is also an attempt to lay claim to and render static that which once was fluid. Such island city paradises are strongly symbolic, branded from birth, the grotesque epitome of what Pugh (2013: 18) decries as "overdetermination."

Despite attempts at universal iconicism, most such island paradises have been designed as residential or holiday enclaves and are grounded in a deeply troubling social exclusivity: Wealth is the determinant of admittance, services are provided by immigrant labourers, and everything – from roads to elevators to labour camps – serves to maintain the separation and segregation of welcome from unwelcome guests (Selke, 2010).

Unlike Dubai, Bahrain does not even lack coastline *per se*, but this Gulf island state has acquired around 70 km² of new ground, the vast majority since 1965 and most in the past decade. This stupendous reshaping of the Bahrain archipelago is rooted in a desire not only to proliferate valuable land with sea views but to do so in already densely built-up areas (*cf.* Hudson, 1996): The ideal island is simultaneously an oasis of exclusivity and well-placed for deriving urban proximity benefits. That is, even when (potentially egalitarian) sprawl is possible, extraordinarily expensive and socially suspect processes of land reclamation may be preferred precisely because there is more profit to be made in exclusivity than in inclusivity. Bahrain possesses a Dubai-style fantasy land, Durrat Al Bahrain, yet more significantly, its northern cities have extended tentacles out into the Gulf. The public has been displaced as Bahrain's ancient fishing and agricultural industries have ceded terrain, both old and new, to the seafront real-estate market – to the residential, finance, and shipping functions that cannibalise their own enormity and subsist off the ever-more fragile illusion of infinite wealth-creating processes. Despite the immense expansion of its shoreline, only 3%-8% of Bahrain's coast is publically accessible (Al Ansari, 2009: 2). Nothing is so emblematic of the transformed value of island land as the case of Jiddah. This small island off of Bahrain's northwest coast was formerly the site of a prison, but the prisoners have been cleared away to make space for a palace and leisure complex belonging to the prime minister (Saleh, 2013). And here, a short distance offshore from Jiddah's palace, a tiny new archipelago has been constructed – in the shape of Bahrain itself.

The combination of incredible wealth and incredible density in Singapore, meanwhile, has encouraged the construction of a cross-border paradise. Batam Island in Indonesia's Riau Archipelago has long since industrialised and undergone economic integration with Singapore across the water (Kumar & Siddique, 2013), but those desirous of urban proximity and (the illusion of) paradisaical nature need look no further than the Fantasy Island resort lying between the two archipelagos. Although billed as “the world's largest eco-resort” (Defterios, 2014), these previously pristine islands (3.28 km²) have undergone massive earthworks and extensions into the sea, and Fantasy Island will soon host thousands of residential and tourism housing units, not to mention entertainment and leisure zones (Fantasy Island, 2014).

As this section has shown, land reclamation is a significant process in urban development both past and present. I have highlighted some troubling aspects of land reclamation in island cities above, but next I will consider the phenomenon in relation to urban public space in particular.

3. Grounding public space

As the number and percentage of urban-dwellers grows worldwide, the issue of urban public space increases in importance. Carmona (2010) notes that there is nothing new in the idea that public space is precarious and that either over-management or under-management of public space is leading to its “decline” or possibly even its “end” (e.g. Sorkin, 1992). Although it is commonly asserted that public space is under threat (Low & Smith, 2006), Paddison and

Sharp (2007: 88-89) argue that research emphasis on iconic projects and “spectacular examples of urban transformation” at the city scale risks overlooking local spaces of social interaction. Such a focus could indeed lead well-intentioned researchers to inadvertently read the city out of the prayer book of corporate and state interests, for if the true heart of the city is the showcase central plaza, monumental skyscraper, or glittering shopping centre, then ordinary community members have already lost the battle to define public space. We must bear this warning in mind when considering land reclamation, for even if the facilities constructed on new ground are relatively banal, the land reclamation process is by nature elite. Our argument here is not that elite urban development is the only kind of development that matters but rather that it is problematic when entire (seaward) scopes, directions, and horizons for urban development are accessible only to elite actors.

That said, it is also important to note that different sections of society possess different conceptions of public space: There is a difference between highly regulated “open space” on the one hand and “political public spaces” for civic engagement and interaction among people from all levels of society on the other (Mitchell, 1995), and one must beware of creating a stark public/private binary when the reality is much more complex (Madden, 2010). Clashes over access to space frequently take the form of conflicting conceptualisations of ‘the public’. In addition, changing societies may reduce the extent to which “urban public space is a site of political formation and human recognition,” even if “it remains an important site of civic becoming” (Amin, 2008: 22).

Although public space is conceptually problematic, it can nevertheless prove a worthwhile lens for considering developments in urban space. I attempt here to reflect value upon public space by considering its antithesis: space that was never public, that is private by design. The fact that public space activism is particularly visible as a reaction to ‘urban renewal’ initiatives (where there is concern that corporate and state actors are seeking to enclose previously public space) should make us wary of instances in which these same powerful actors are able to capture space without raising the hackles of defenders of public access and ownership.

Land has historically been a “determinant of power” and possesses a political-economic aspect: It is both “the site and stake of struggle” since it is a “scarce resource” that cannot be created (Elden, 2010: 806). Or rather, there is a societal presumption that land cannot be created even though, in actuality, there has scarcely been a time in human history when new land has not been created (Hudson, 1996). For Gaffikin, McEldowney, and Sterrett (2010: 494), because cities are subject to “limited spatial scope for development, whether through natural topography and/or statutory designation of settlement patterns, [...] all cities are ‘contested’ in the sense that such containment generates intrinsic dispute about how to use and allocate scarce ground resources.” In highly dense cities in which spatial scope is exceptionally constrained (such as island cities, bounded by water), we might expect such contestation to be exceptionally heated. The values of both public and private space will

increase relative to their overall availability. I argue that the openness – or publicness – of such contestation is vital to the just development of the city. It is when conflicts over resources are not resolved but simply submerged and when spatial privilege becomes a *fait accompli* that urban society is prevented not merely from progressing but also from striving toward progress.

Land reclamation has become a favoured strategy for coastal and island city development in part because it is a means by which elite actors can create new urban spaces while bypassing many of the tensions and contestations that result from attempting to claim a portion of the existing urban space for new purposes. Since reclaimed land quite concretely represents a blank slate for development, it could be deemed immune from claims of publicness. Yet such an analysis is not politically neutral: To deem reclaimed land a solid blank slate is to deny its previous fluid spatiality.

4. The capture of unclaimed space

Water physically and symbolically both connects islands to and separates them from other places (Picornell, 2014). Small island societies frequently use this state of in-betweenness to their economic and political advantage (Baldacchino, 2010), and the precise dynamics of separation and connectedness occasioned by different patterns of land-water spatiality can profoundly affect island urbanisation processes (Pons *et al.*, 2014; McElroy & Lucas, 2014; Grydehøj & Hayward, 2014). Furthermore, as White (2013: 83) notes:

In any collection of islands, it is the oceanic body and the space between islands that often determines the sense of what is or is not included in an archipelagic collection. It is the sea that determines boundaries and collectives. The sea as a continuous self-similar surface between differentiated land bodies is essential to the identity of the collection of islands, as well as each island itself.

The island or coastal city is not just land; it is also water. The interface between land and water is crucial to islandness and archipelagicity, to the identification of space. If this “edge becomes the place where negotiations of publicity and privacy, form and program, and image and experience are manifested” (Casper, 2013: 109), then it is a matter of great import which societal actors are capable of claiming and shaping this urban edge.

There is a tension inherent in how island spatiality prompts both urbanisation and land scarcity, resulting in extreme urban densification. These processes are compounded as agglomeration economies favour the spatially dense networks of industry, infrastructure, and knowledge that tend to arise in island cities in particular (Grydehøj, 2015: 433). This increases land value and hence the demand for manufacturing ground where water once had been. Land reclamation can thus seem to be an inevitability: As island cities grow in population and economic and political importance, they grow out into the water too. Mainland cities also expand in size, but the ease of urbanising adjacent land – relative to urbanising adjacent water – means that island cities tend to exhibit distinctive patterns of expansion. Insofar as the city remains

substantially restricted to the island or the archipelago, land scarcity mitigates against sprawl, favouring instead piecemeal accretions to the existing urban fabric or the decisive establishment of dense satellite cities on nearby land masses. As we have seen, however, cities that are usually considered merely coastal are also frequently insular, with major port cities around the world developing in a manner that is influenced by their island status.

Given the complex effects of island spatiality and the ways in which land and water are foregrounded in island spaces, the creating of new ground is of existential significance for island cities. Land reclamation is associated with a number of interrelated factors on the city scale, such as population growth, policy choice, traffic congestion, waste dumping, economic orientation, industrial change, and lack of hinterlands or adjacent land into which the city can expand (Chen, 2009; de Lange, 2014; Hudson, 1996; Li et al., 2011; Lima, 2011; Ng, 2010). Yet regardless of the precise motivation for creating ground, land reclamation processes reflect reigning power structures and competing societal interests. Coastal and island cities may by nature demand land, yet demand itself is not enough: New ground cannot be created in the absence of pre-existing economic resources or a supply of labour capable of producing it.

Both the weak and the powerful may benefit from acquiring additional urban space, but since it is the powerful who can best afford or achieve reclamation projects, there is a tendency for new ground to reflect the motivations and ideals of the dominant societal forces. Thus, for example, we have seen Bahrain's artisanal fishing cultures destroyed by needless land reclamation (where sprawl would have sufficed). We have seen Manhattan turn its back on marine industries. We have seen Copenhagen surrender to the vicious logic of technological successionism, with each land reclamation project necessitating the next. We have seen corporate and state interests first enclose and ruin and then claim and financialise the waters of Xiamen. We have seen Indonesian archipelagic nature zones urbanised in the name of ecology. Again and again, we have seen land reclamation favour the strong. Though socially exclusive 'paradise islands' may be more grossly offensive in an immediate sense, there remains an element of social regressiveness in the creation of new ground for industrial and semi-public leisure purposes as well.

Urban sprawl is not a process that inherently favours the elite. In some circumstances, such as the formations of favelas and other kinds of informal settlements on the outskirts of cities, urban sprawl can be a means – however imperfect – of facilitating social mixing and social mobility, of bringing the periphery nearer to the centre. In contrast, coastal land reclamation nearly always favours societal elites inasmuch as the technologies of modern-day land reclamation (dredging/pumping, transport, and construction equipment as well as human labour) are prohibitively expensive for all but the most resource-rich individuals and institutions. If island cities play such a major role in global politics and economy, it is a matter of concern that they seem to be particularly prone to – and indeed, dependent on – a socially problematic variety of development.

Given the time-consuming and expensive nature of the land reclamation process, the amount of new urban space produced at any one time is relatively small, even in the case of land reclamation megaprojects. Cumulative and successive reclamation of small pieces of land along the coast often disrupts the urban fabric since existing infrastructures (transport arteries, sewers, schools) were not designed with the reclaimed land in mind – hence the inefficient networks of parallel and disjointed roadways in Hong Kong and Macau (Ng, 2012; Feng *et al.*, 2012), the lag between residential island construction and services provision in Copenhagen’s Sydhavn, and the unintegrated drainage systems beneath Belize City (Pigou-Dennis & Grydehøj, 2014). Moreover, the construction of new urban space affects life in old urban space: The manufacture of new waterfront property can capture the coastline for elite interests, dispossessing existing users, as in the massive reimagining of Bahrain’s Muharraq Island (Saleh, 2013), the creation of Manhattan’s Battery Park City (Shkuda, 2013), and upwardly mobile Mumbai residents’ quest for a “sea view” (Swaminathan, 2014). Even when the public is not physically denied access, there may be “symbolic” impediments to exercising access to the waterfront alongside such elite developments (Al Ansari, 2009: 47).

Problematic though piecemeal accretions to the urban fabric may be, the reclamation of land for satellite cities on new or existing islands likewise presents difficulties. In terms of integration into the urban infrastructure network, the decision to create an entirely new urban area separated from the centre by mountains or sea can spark an endless cycle of self-justifying infrastructural complexification (Grydehøj, 2014). Furthermore, the ability to imagine new cities into being can privilege overly functionalist – and overly deterministic – approaches that seek to insert future residents and workers into predetermined systems of efficient working and living (Pernice, 2007). Even worse is the conscious construction of secessionary island enclaves that seek to permanently shield power from its social consequences, as in the cases of island paradises that are open only to the highest bidders.

Precisely because it is so costly and time-consuming to manufacture ground, land reclamation rarely serves to de-densify the existing city: It instead simply provides new land for densification – on the terms of whichever societal actors have created the new ground. Such new land is by definition *not* public space, even if it happens to be government owned. The same could be said, of course, regarding any piece of land inasmuch as public access is dependent on the will of the government and/or landowner. The difference in the case of reclaimed land is that, within our reigning societal conceptualisations of territory and ownership, the public lacks moral or historical grounds on which to stake a claim. Land reclaimed within the past decades has been capitalised since conception. It has *never* been public. As Al Ansari (2009) notes, whereas there has been a general trend over the past decades toward the creation of waterfront public space in coastal cities, this trend has applied less frequently to cities with histories of extensive and continual land reclamation. This could suggest that historical land reclamation empirically limits present-day claims to a public waterfront.

This represents a wicked twist on Harvey's "accumulation by dispossession" (Harvey, 2003). A city's coastal waters may not be widely used for civic purposes and are thus difficult to define as public space, yet inasmuch as they are not a form of private space, they may be the next best thing: space that might one day be public. Urban sea space is a space within which future cities – perhaps more egalitarian, more open, more free – may emerge. Whenever such space is claimed by the interests of enclosure, it is a qualitative and relative loss for advocates of a more public city.

Although the corporate creation of new urban space for development may be superficially superior to the violent 'renewal' of existing urban space, it also involves a dangerous avoidance of conflict: Locally controversial urban renewal projects sow seeds for protest, for activist involvement, for the emergence of democratising social movements. In comparison, the terrestriation of marine territory – though frequently controversial and with deleterious effects on adjacent communities – serves to disenfranchise and make ambiguous non-elite stakeholders, precisely because, as Steinberg and Peters (2015) observe, we lack the conceptual tools for dealing with conflicts over liquid, voluminous space. By the time this space ceases to be liquid and has solidified into territory, it is too late for contestation. Land reclamation – which renders private and makes static a fluid realm that has hitherto resisted history – can never serve anyone but its masters. The urban edge – the land-sea interface – is at once the most profound urban space and that which is least defended by arguments of publicness.

5. Conclusion

This paper has considered the creation of ground in island cities from the perspective of theories at the intersection of the land and the sea in order to propose a socially and politically nuanced understanding of land reclamation. In the process, we have seen that land reclamation represents not just a claiming of territory for private interests but a claiming of territory that is difficult for the public to contest and that steers clear of what could ultimately have been socially productive urban contention.

It would be wrong to state that land reclamation is the worst imaginable form of urban development, even if it is uniquely problematic in the sense that it is problematic in a unique way. It is, after all, possible for the corporate and the public good to dovetail: Residential island development in Copenhagen's Sydhavn has negatively affected low-income traditional waterfront users (whose population was already dwindling due to wider gentrification processes); however, it has also privileged the creation of centrally located middle-class housing over use of the waterfront by relatively high-income boat owners, and this residential area is utilised as leisure space by the public. Sometimes, island land is reclaimed or repurposed with explicitly public aims, resulting in the creation of public parks or facilities, as is the case with Xiamen's Yundang Lake and Singapore's Pulau Semakau. Even this, however, can be problematic, for city authorities may be tempted to deploy the symbolic power of island status to create 'themed' spaces of innovative leisure, business, or

environmental use – which can potentially relieve social tensions yet fail to solve underlying power imbalances, poor standards of living, and environmentally destructive activities. The flipside to the argument that iconically private spaces can be perceived as more damaging than they really are (Paddison & Sharp, 2007) is that iconically public spaces can appear more beneficial than they really are (Grydehøj, 2014b: 186-187).

This has disturbing implications for the role of public space in what are, by any assessment, some of the most economically and politically significant cities in the world. In many island cities, space has needed to be constructed before it could be claimed for the public. ‘The public’, as an abstract entity, is perfectly capable of constructing communities and even of manufacturing ground, but in practice, land reclamation has often been led by highly organised societal forces (business, political, or military actors). This is not only because land reclamation is labour intensive and resource intensive but also because of the emergence of a set of interlinked legal frameworks setting forth what state, private, and corporate actors can and cannot do on or with urban space (Hudson, 1996: 65-79). Gone are the days when Hong Kong property owners could expand the waterfront out into the sea of their own accord (Ng, 2010). Informal, illegal, or extra-legal land reclamation *does* occur and can be carried out by individuals and communities (e.g. Pigou-Dennis & Grydehøj, 2014) or corporate actors (e.g. Li, 2012), but it may be the corporate actors which are most capable of managing or keeping a step ahead of the legal consequences.

If the public is excluded from recently reclaimed space, it is not necessarily because powerful interests have pushed the public out but could just as easily be because the public never had any foothold there to begin with. The situation is more complex with regard to older reclaimed land, which may have become public space through custom or through law. Yet if the average city dweller cannot tell the difference between ‘natural’ ground and recently or historically reclaimed ground, how is he or she to evaluate his or her claim to any particular piece of urban space? Furthermore, even in circumstances in which land has not been stolen from the poor for the benefit of rich, does not the claiming and territorialisation of new urban space in the name of the already empowered represent a relative loss on behalf of those who lack power and status? Does it not cede future cities to those with the finances to undertake land grabs? Do not the calls for liquid, archipelagic, or aquapelagic understandings of society precisely require that we remain vigilant against processes that dispossess the public of that which it was unaware it possessed?

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