

# Absolute Waterfrontage: Road Networked Artificial Islands and Finger Island Canal Estates on Australia's Gold Coast

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**Abstract:** The Gold Coast, an urban conurbation stretching along the Pacific seaboard and adjacent hinterland of south east Queensland, has developed rapidly since the 1950s. Much of its development has involved the modification of existing watercourses so as to produce stable areas of land suitable for medium and high density development. This article addresses one particular facet of this, the development of artificial islands and of estates of 'finger islands' (narrow, peninsular areas with direct waterfrontage) and the canalised waterways that facilitate them. The article commences with a discussion of the concepts behind such developments and the nomenclature that has accrued to them, highlighting the contradictions between branding of finger island estates and the actualities of their realisation. This discussion is supported by historical reference to earlier artificial island estates in Florida that provided a model for Australian developers. Case studies of three specific Gold Coast waterfront locations conclude the main body of the article, reflecting on factors related to the stability of their community environments.

**Keywords:** Canal estates, finger islands, Florida, Gold Coast, island cities, shima, waterfront development

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## Absolute Waterfrontage: Road Networked Artificial Islands and Finger Island Canal Estates on Australia's Gold Coast

## 1. Introduction – Concepts and definitions

Since its initial agglomeration in the 1980s and subsequent consolidation through the establishment of the International Small Islands Studies Association (ISISA) in 1992, the (anglophonic) field of Island Studies has overwhelmingly addressed itself to islands as distinct geo-spatial entities that facilitate particular types of human settlement, societies and economies. This focus was furthered by the establishment of the field's two initial journals, the Island Studies Journal, in 2006 and Shima, in 2007. This focus reflected both the belief of many established researchers that islands were distinctly different from a range of other coastal locations and served to put a strategic perimeter around an emerging body of work that allowed it to develop without a regular scholarly mantra asserting why islands were worthwhile to consider in (and as) themselves. The latter project was identified by McCall (1994) as Nissology and acted as an important focus for much late 20th and early 21st Century Island Studies research.

One result of the establishment of the field's two journals as internationally credible interdisciplinary publications is that the defensive orientation of much Island Studies scholarship has abated, allowing the discipline to reconsider the merits of its rigid separation of islands from related coastal, lacustrine and riverine locales and the livelihood, social and cultural systems that occur on – and across – them. One early marker of this tendency was the establishment of the (self-explanatory) Journal of Marine and Island Cultures (JMIC) in 2012, which effectively sidelined the aforementioned disciplinary traditions in an inclusive format. Productive as this approach may have been in allowing for the juxtaposition of geographical case studies, the lack of a theoretical grounding and a thinking-through of the issues involved in its project resulted in it causing minimal re-alignment within the broader project of Island Studies. Despite this, the nature of Island Studies has changed considerably over the past four years as a result of two significant developments. The first has involved the re-imagination and reconceptualisation of islands and archipelagos as fundamentally interrelated with and reflective of adjacent marine spaces and resources (see for instance, Hayward, 2012a, 2012b; Suwa, 2012; Fleury, 2013). The second development, of more specific relevance to this article, has been a broadening of the field to consider related peninsular and/or metaphoric island entities. These have been manifest in the project and content of this journal (Urban Island Studies) (which analyses both urban islands and parts of cities and mainlands that might be considered 'islanded' and/or 'archipelagised' by various factors) and the recent theme issue of the journal Shima v10 n1 on peninsular 'almost islands'.

This article contributes to the extended project of contemporary Island Studies referred to above through the analysis, characterisation and comprehension of a particular class of constructed locales that can be variously regarded as interfacing with and/or blurring

traditional distinctions between islands and coastlines. With regard to this in-betweenness, it is no accident that no standard terminology exists to describe the principal entities discussed in this article. It is therefore appropriate to commence by naming and defining the two types of waterfront developments that are central to our discussions: Road Networked Artificial Islands and Finger Island Canal Estates.

The first term is our own invention and aims to characterise both the nature of Road Networked Artificial Islands (RNAIs) in themselves and signal their position with regard to Island Studies research on related entities. As discussed in detail below, artificial islands are far from an exclusively modern phenomenon. Similarly, the bridging of islands is an enterprise that is both historically well-established and one that has gained particular impetus over the last century (Baldacchino, 2006). There is however considerable difference between natural and/or artificial islands that are linked to adjacent islands and/or mainlands by bridges after the establishment of settlement and livelihood patterns upon them, and artificial islands that are conceived, constructed, marketed and inhabited as integrated with terrestrial road networks from their inception. Whereas the former can be considered to have been (at least partially) de-islanded as a result of their bridging and consequent integration with terrestrial transport networks, the latter have effectively only been islands during the earliest phases of their construction and have, thereafter, been firmly affixed to and integrated with adjacent coastlines or islands. On this basis, we argue, the term Road Networked Artificial Island is the most appropriate characterisation of their essential aspects.

The second term we use, Finger Island Canal Estates (FICEs), draws on and aggregates characterisations used in previous discussions of the topic without any standardisation of use. The term finger island is most prevalent in literature that refers to canal estate developments in Florida and adjacent states. Gillis (2004: 30), for instance, has defined finger islands as "long peninsulas down which a central road created a subdivision of all-waterfront lots" (Figure 1). While far from standard in geographical and/or planning discourse, the term has a degree of currency in the United States and Australia (and has also been used with regard to Dubai's major Palm Jebel Ali and Palm Jumeirah artificial island developments). The first and most obvious (but nonetheless significant) point to make about the term is that finger islands are not (as Gillis's definition identifies) islands in any standard sense of that term. Rather, they are narrow peninsulas connected to a coastal mainland (or, via a hub, to other narrow peninsulas) or else engineered islands that are connected to adjacent peninsulas, islands and/or coasts by bridges or causeways. In this manner they are, more accurately, presqu'îles – 'almost islands' – and it is their 'almost-island-ness', that is their defining aspect in terms of the design and marketing of property lots and/or the residences that are constructed on them.

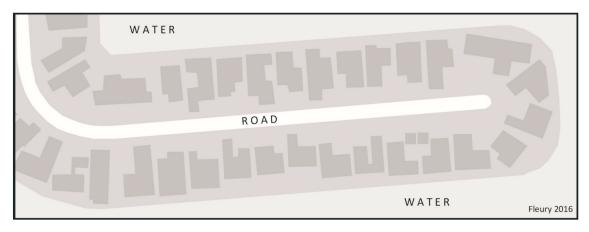


Figure 1: Classic finger island configuration, with house blocks located around a central roadway. Map: Christian Fleury (2016).

As Fleury and Raoulx (2016) have identified, the French language offers two words that correspond to the English language term peninsula (an area of land largely surrounded by a body of water). The first, péninsule, is functionally equivalent to the English term, while the second, presquî'le (presqu - almost + île - island), has more specific meanings. In modern French usage the latter term is mainly used to identify small peninsular features but it also has an older pattern of use, referring to peninsular areas created by pronounced bends in rivers and/or peninsulas created by the convergence of two rivers. This, in turn, has led to the term being used more recently to refer to peninsulas that were once industrial sites but are now being repurposed as residential and/or park areas (Fleury & Raoulx, 2016: 17-18). The appeal of such a description as a marketing hook lies in the 'almost' – i.e. of places having the attraction and mystique of an island without the transport and associated logistical issues of actually being one.

The absence of an English language term equivalent to presqu'îles has led the standard definition of 'island' to be considerably stretched in the naming of many of those FICEs discussed in this article. Discussion of this aspect is not an exercise in mere linguistic pedantry. Names convey meanings, facilitate preconceptions, affect experiences and allow for a variety of public and/or official categorisations of places with regard to those names. Equally, lack of certainty about what types of name to apply to places can be taken to signal a lack of clarity as to what such places are and how they might be understood to function.

With regard to nomenclature, the term canal estate has a wider currency than finger islands, and is less determined by senses of islandness or almost islandness. The distinguishing aspects of such estates have been succinctly summarised by Ramsar (1988):

They include waterfront housing, resorts and boat marinas constructed along artificial canal systems. They are commonly located in, or adjacent to, wetland areas along rivers, estuaries, coastal bays and shorelines. Typically canal estate developments use cut and fill construction techniques, providing fill material to elevate part of the land and reduce its susceptibility to flooding.

It is also worth shifting the frame of reference at this point. Finger islands and canal estates are, of course, equally as defined by the types and shapes of waterways that surround them as they are by their protrusion into waterways. Indeed, the two are necessarily corollary and inseparable. It is salient in this regard that the term finger canal is sometimes applied to the waterways surrounding finger islands. In the course of a discussion of residential developments on the Barrier Islands of West Florida and Alabama, for instance, Bush, Longo, Neal et al. (2001: 107) describe finger canals as "channels" dug into land areas "for the purpose of providing additional waterfront lots." This suffices as a broad definition but neglects key aspects of FICEs, with regard to their provision of easy access moorings for homeowners at the immediate rear of their properties and of the channels' connections and easy access to more open areas of water. Water depth, flow and the relation of these to the elevation of adjacent land areas are also significant. Canal construction aims to create waterways that retain water of sufficient depth to ensure that residents' watercraft remain afloat and remain able to negotiate the canals during various tidal phases. Similarly, their construction aims to create bodies of water that can be refreshed by tidal and/or river water flows (and thereby avoid becoming brackish or stagnant). Ease of access to watercraft from properties is facilitated by the commonly flat nature of drained and filled finger island developments, which are usually only marginally above high/surge tide level. In this sense, FICES and waterfront properties on RNAIs can be considered within terms of the aforementioned discussion of aquapelagos as integrated terrestrial and marine spaces. While the particular integrated terrestrial and marine spaces of FICEs may not be premised on the livelihood aspects of human interactions within marine environments that Suwa (2012) – and, subsequently, Hayward (2012b) – identify as key to the constitution of aquapelagic assemblages, the leisure aspect of waterfront living that utilises boats and watercraft can be understood to constitute another facet of aquapelagism. In this manner, while canals may lay outside the boundaries of FICEs as aggregates of land sold to and owned by residents, their existence provides the raison d'etre for FICEs, promising access to waterways and aquapelagic leisure opportunities.

With regard to the terminology concerning RNAIs, presqu'îles and FICEs, the Japanese/Ryukyuan term shima/jima is illuminating in identifying and articulating senses of space within a different frame of reference. The term refers to a "densely cultured territory" (Suwa, 2007: 6) with distinct insular characteristics and attributes that may (or may not) be those of an archetypal water-girt body of land. Shima are places whose identity derives from the work of humans in shaping landscapes and creating patterns of social interaction, livelihood and/or leisure. As a result, as Suwa (2007: 6) identifies:

Each shima is a work of territorial imagination, an extension of personhood and a 'cultural landscape'. In this sense, a shima is a sanctuary, in that the natural environment and social space are articulated by the performative in such a way that one imagines them as a totality. The island place names given by developers of Gold Coast FICEs can be understood to represent the developers' and/or marketers' imaginations of those places or, rather, their imaginations of the types of identities for those locations that might best appeal to potential purchasers. The continuing allure of islands and of islandness is key here.

#### 2. The Antecedence and early development of RNAIs and FICEs

While the construction of artificial islands is often regarded as a modern phenomenon, there are a number of significant historical examples of the practice. One of the most striking of these is the development of the cities of Mexihco-Tenochtitlan and Tlatelolca on a geoengineered island in Lake Texcoco in (present-day) Mexico to form the capital of the Aztec empire (Onofre, 2005). The city of Venice, developed on a series of islands in Laguna Veneta, at the northern end of the Adriatic Sea (Figure 2), has also been regarded as a forerunner of both contemporary artificial islands and of waterfront estate complexes. However, unlike contemporary FICEs, which routinely have road links integrating them with adjacent urban centres, the settlements that aggregated in Laguna Veneta over the last five centuries have relied on water transport alone, with the result that the city's waterfrontage, "the interface between island and lagoon", formed its "basic axis, or lifeline" during key development phases (Goy, 1985: 2) and continues to dominate contemporary urban life and tourism.

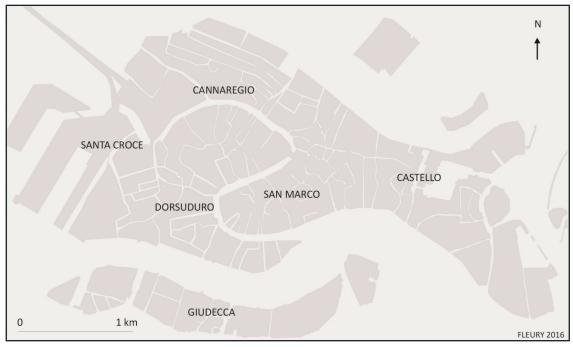


Figure 2: Central Venice, showing networks of canals penetrating residential areas. Map: Christian Fleury (2016).

Despite the distinction between Venice's key features and those of more contemporary developments, three aspects of the Italian city have led to it serving as the model for a number of artificial island and presqu'île developments: a) its location in a sheltered body of water; b) the combination of dredging of waterways and the using of dredged materials in contained structures to build up areas of dry land suitable for building on; and c) the close integration of waterways within urban areas.

The first modern artificial islands created by developers to provide waterfront housing blocks were the Venetian Islands, which were constructed in Miami's sheltered Biscayne Bay in the early 1920s

(Figure 3). The six artificial islands were created by dredging material from the bay floor and containing this within supporting perimeters that allowed for drainage prior to land sale and subsequent building. Unlike the FICEs discussed below, the central group of islands were oval-shaped, with an inner ring road encircling a landlocked batch of houses. Unlike the constructed islands of Laguna Veneta, which developed as the centre of a maritime city-state premised on trading, Miami's Venetian Islands sought to capitalise on what Nichols (2014: 41-78) has referred to as "the water premium" – i.e. the manner in which from the early 20th Century onwards waterfront residential property has increasingly had a higher value than property without

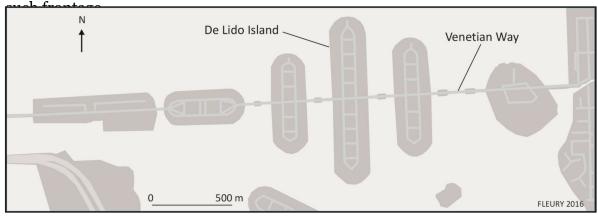


Figure 3: Miami's Venetian Islands. Map: Christian Fleury (2016).

While Miami's Venetian Islands were a partial predecessor of the Gold Coast developments discussed in the following section, the construction of FICEs was pioneered in Fort Lauderdale, 40 km north of Miami. Prior to the 1890s Fort Lauderdale was a small agricultural community but the opening of a ferry across the New River in 1893 and of a railway station on the new Florida East Coast route in 1896 resulted in increased numbers of settlers in and visitors to the area. The burgeoning interest in Florida as a holiday and residential relocation destination in the 1910s (Turner, 2015) led a number of local entrepreneurs to develop land 'reclamation' techniques and residential estate designs that were rapidly diffused throughout the state and further afield due to their potential to maximise premium real estate values by constructing all (or almost all) lots with the waterfrontage that delivered them premium value.

The Fort Lauderdale approach involved the creation of finger islands alternating with dredged canals so as to allow maximum residential waterfrontage in small areas, aggregated into clusters. The initial FICEs were designed and completed in blocks that were given island names. The first of these subdivisions to go on the market was the Rio Vista Isles with more following in the form of the adjacent Las Olas Isles and Seven Isles developments (Figure 4). As these locations' names suggest, they were marketed as having island-like attributes (absolute waterfrontage, relative quietude and easy boat access to open water), while being connected to hinterland access roads by bridges. Early developers cited Venice as an inspiration, prompting Fort Lauderdale to adopt an identity and slogan that us is still used today: 'The Venice of America' (Gillis, 2004: 30). Further developments in the area have replicated this pattern and created

a densely canalised space in the city (Figure 4). The subsequent development of low lying islands in the Florida Keys, running south west from the southern tip of the Florida peninsula, have substantially replicated this pattern, diffusing the Fort Lauderdale model along an extended skein of islets whose landmass has significantly expanded in the process.



Figure 4: Present-day concentration of FICEs in Fort Lauderdale around the area of the initial Rio Vista development. Map: Christian Fleury (2016).

# 3. The engineered waterfronts of the Gold Coast

Prior to European settlement – and most particularly late 20th Century development – the area currently known as the Gold Coast was inhabited by the indigenous Yugambeh clans and was dominated by major marine and riverine mechanisms. The marine mechanism involved the deposit of sands along the coast, delivered by currents from the south in a manner that created an extended spit that commenced around (present-day) Broadbeach and continued up into Moreton Bay, fracturing at various points and at various times into individual islands. Breakpoints in this extended coastal deposit were principally caused by the volume of water arriving in river systems running down from elevated areas in the coastal hinterland. The most significant of these was (what is now known as) the Nerang River. When it met the area of deposited sand around the (present-day) suburb of Surfers Paradise (Figure 5), it split and formed passages parallel to the coastline whose volume and/or period intensity of flow (combined with storm surge patterns) cut through the spit and entered the ocean at various points at various times. Similarly, the (partial) obstruction of the sand spit caused the Nerang River to meander and form tributaries prior to entering the ocean, with shifting areas of sand islands and bankside deposits marking its lower reaches.

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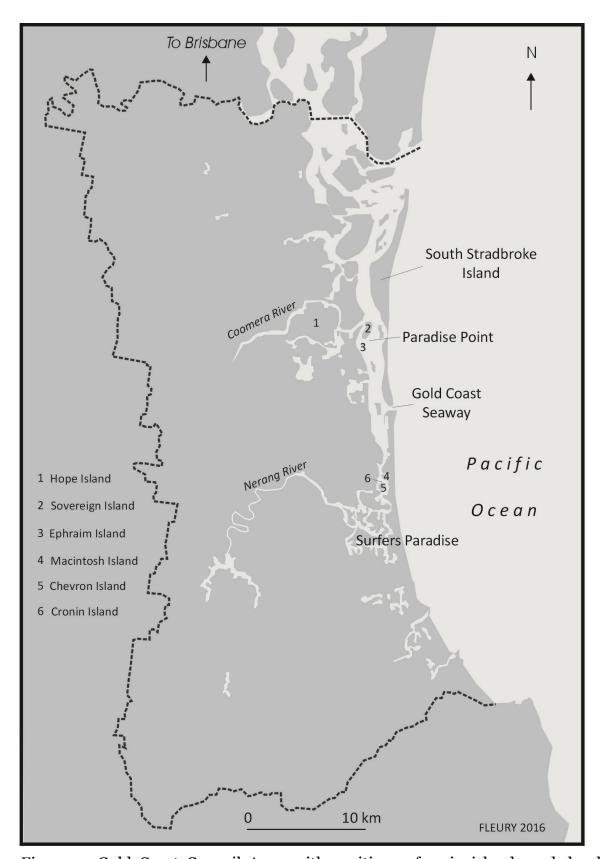


Figure 5: Gold Coast Council Area, with positions of main islands and developments discussed to in the article. The channel between South and North Stradbroke islands arose from a storm in 1896 (see Tomlinson & McCauley, 2006). Map: Christian Fleury (2016).

The term 'Gold Coast' is of fairly recent origin. It emerged after World War II, seemingly in reference to the money to be made from real estate development in what was then a rural area with poor infrastructure but abundant beaches located close to the state capital of Brisbane. The term has subsequently been used to refer to two related entities – a coastal strip that extends northwards from the New South Wales border up to the southern end of Moreton Bay and, since 1995, an area administered by Gold Coast Council which includes the coastal strip and a hinterland that runs up to 25 km inland into elevated areas. The current population of the city is just over 550,000. Throughout this article the term 'Gold Coast' is used to refer to the area's coastal strip (and connected waterways) and the term 'Gold Coast Council area' is used to refer to the broader region. As Hundloe and Page (2015: 1) summarise, the Gold Coast is:

a unique city, Australia's premier tourist city, a city cut out of coastal vegetation, including paperbark swamps, mangroves and rainforests of worldwide significance. The city has a relatively short history as until half a century ago [...] it was but several relatively small villages, each with its own natural and social features. Two generations is a very short time for a city to grow to be the sixth-largest in population in Australia and to have global recognition as the country's beach playground. The Gold Coast ranks with Honolulu in Hawaii, with Palm Beach in Florida and with the French Riviera in tourist promotions and is a high-priority destination in the minds of beach-lovers worldwide.

The sand dune frontage of much of the central Gold Coast, between occasional rocky headlands and river-mouths, and the (often vigorous) surf that breaks upon it provided early post-World War II entrepreneurs with limited options for seafront development (at least prior to extensive sea-walling) and prompted several of them to explore draining areas along the banks of estuarine waterways close to their junctions with the sea. One of the most influential figures in this regard was Brisbane's Alfred Grant. Inspired by developments he had seen on visits to Florida, he worked with Austrian émigré architect-planner Karl Langer to develop waterfront residential estates along the south bank of the Nerang River, just inland from the coastal Broadbeach area, in 1956-57. The Florida Gardens development was the first to be completed. Based on Miami's Venetian Islands, it had a fringing road with waterfront lots together with interior streets without direct water access. This was followed by two FICEs of the type pioneered in Fort Lauderdale and subsequently diffused throughout Florida (an aspect explicitly acknowledged in their names – Rio Vista and Miami Keys). These set the model for subsequent canal estate development throughout the Gold Coast, ensuring that the vast majority of houses constructed on them had direct water views and access.

Other developers also embraced the FICE model with enthusiasm, with Bruce Small advocating for the establishment of 160 km of canal developments in the central Gold Coast area. As a result of Grant and Langer's activities, Small's boosterism and the support their vision received from other developers, the Queensland Government assisted the development of canal systems providing waterfronts to new coastal property developments by passing the state 'Canals Act' in 1958. This defined canals as:

Any artificial channel or lake for use or intended for use for navigational, ornamental and recreational purposes, or any of those purposes, and connected or intended to be connected with any tidal water so that the water of such artificial channel or lake becomes or, on such connexion [sic], will become tidal water: The term includes any access channel, any addition to or alteration of any canal within the meaning of this definition, and any system of canals within the meaning of this definition (Queensland Government, 1958: 2).

The Act outlined approval mechanisms and opened the way for a series of further FICE developments and (by virtue of normalising processes of canal dredging and creation of adjacent land blocks buttressed by sea walls) to the creation of artificial island developments. The area around the intersection of Rio Vista Boulevard and T.E. Peters Drive, close to the epicentre of the Gold Coast's original FICE developments, now forms the heart of the most extensively engineered landscape of the city (Figure 6). This area includes a profusion of FICEs, RNAIs and localities that combine both attributes. A further cluster occurs to the north, around the lower reaches of the Nerang river where the Coomera River meanders to the sea opposite the lower east coast of South Stradbroke Island.

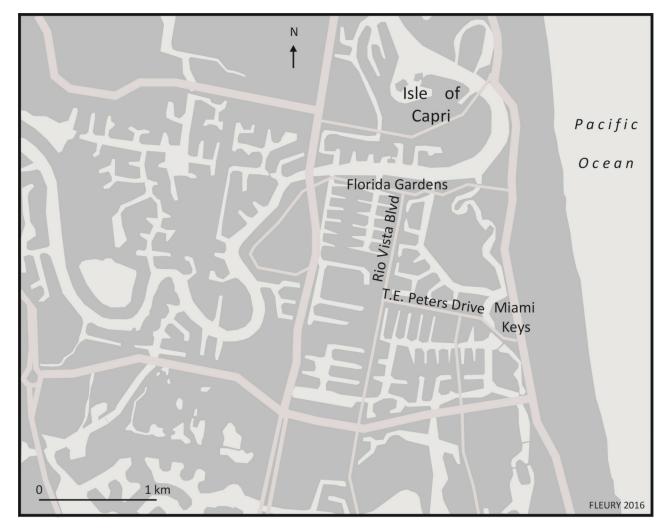


Figure 6: Central Gold Coast FICE developments. Map: Christian Fleury (2016).

Discussing the development of FICEs around the lower Nerang River in the 1950s, Freestone (2010: 194) asserts that these represented the application of "Radburn principles." These principles coalesced in the United States in the 1920s as part of a broader response to the British Garden City movement. The latter movement was started by Ebenezer Howard in 1898 and advocated open public spaces and public boulevards as essential for fostering senses of community. While there were relatively few Garden Cities built in the United Kingdom in the early-mid 1900s, the movement's design principles were widely considered and supported, feeding into subsequent town planning initiatives internationally. In the United States a number of developers, planners and architects established the City Housing Corporation in 1924 in an attempt to create American versions of Garden City housing estates. Their project resulted in the establishment of the Radburn urban development in New Jersey in 1928, which remains a seminal reference point for American town planners due to features such as its rejection of through roadways in favour of cul-de-sacs that encourage more diverse uses of open spaces.

While the development of FICEs in Florida preceded the Radburn project and does not appear to have been influenced by similar concerns, Freestone has asserted that the close copying of Floridian FICEs by Australian developers represented "novel interpretations of Radburn" (Freestone, 2010: 194 – our emphasis). He supports this claim by identifying the manner in which a number of Australian post-World War Two "reconstruction texts" drew heavily on Radburnian principles such as "segregating cars from people and orientating houses towards neighbourhood spaces" (Freestone, 2010: 194). The contribution of Karl Langer, architect of the Gold Coast's Miami Keys and Rio Vista FICEs, to this literature (in the form of his 1944 volume Sub-Tropical Housing) appears to support Freestone's contention. But the disparity between the dates of the design of the initial Florida FICEs and that of the Radburn project, and the lack of any evidence that progressivist planning discourse autonomously informed the Fort Lauderdale developments, complicates this somewhat. While Langer's imitation of Floridian FICEs may have represented an attempt to use "land-reclamation methods to produce a layout in which inliers and corridors of open space were replaced by waterways" (Freestone, 2010: 194), the design he adopted was one that does not appear to have been premised on Radburnian principles. Indeed, its essential corralling of waterfront views into private access points at the rear of properties was antithetical to both Radburnian principles and to those of the British Garden City movement that inspired it.

FICEs, such as those constructed on the Gold Coast, can also be interpreted with reference to recent studies of the territorialisation of neighbourhoods and the manner in which some function to deter non-residents and thereby ensure near exclusive access for residents (and their guests). Charmes (2010: 358) provides a particularly pertinent discussion of these in an article that analyses the manner in which "exclusionary residential territories exist along a continuum, ranging from no-through streets, superblocks, environmental areas, gated communities and privately managed communities." Charmes identifies the particular significance of gates, cul-de-sacs and the aggregation of the latter into 'superblocks' in creating neighbourhoods

which are impossible to pass through en route to other places (and which consequently challenge outsiders' right to be there). As Charmes (2010: 358-359) also characterises:

The cul-de-sac turns the residential ideal generally associated with moving into the suburbs, into reality. Moving into a suburban house is most often guided by the desire to benefit from a calm and verdant environment, a desire that is impossible with vehicles passing incessantly in front of the yard.

Noting that, "in many suburban residential estates, the main feature is not the cul-de-sac, but the integration of cul-de-sacs within a 'superblock'," Charmes (2010: 361-366) goes on to identify that: It is no longer just the case of organizing cul-de-sacs around a central green space, but of surrounding a housing development with green spaces. In residential neighbourhoods, these green spaces act as buffers, which separate the homes from arterial roads [... At larger scales] the greenbelt is like a cocoon and the residential area it encloses looks like a bubble isolated from its surroundings.

There is much in Charmes' discussion that invites comparison to both the manner in which no-through roads are central to finger islands and the manner in which cul-de-sac canals fringe and define FICEs. Rather than greenbelt spaces they offer 'bluebelt' ones. The calm of open waterways replaces the calm of shared vegetated spaces, as in the Garden City model. The enfolding waterways similarly 'cocoon' FICEs from nearby arterial roadways. In these regards FICEs have close similarities to aspects of modern post-Radburnian residential developments but they also have significant dissimilarities that reflect their separate lineage. Whereas the Radburn development aimed at providing low-income families with integrated residential estates with public amenities and spaces, the FICE developments of Florida, the Gold Coast and elsewhere were more designed for mid- to high-income families for whom public space was less important than private amenities and security. As subsequent discussion will outline, this is particularly the case with the Sovereign Islands, the most expensive and prestigious FICE development on the Gold Coast.

In his discussion of "residential territorialisation" in post-Radburn residential developments Charmes (2010: 367) considers the factors that have led to residents' associations in many of these forming local "ad hoc governments" and contends that this is related to the design principles of such neighbourhoods and the central public amenities, which – in our terminology – can be seen to create highly specific senses of shima. It is unsurprising in this regard that RNAIs and FICEs have not produced residents' associations of a similar type or with similar neo-governmental aspirations (given their orientation around private spaces and amenities). Indeed, one of the more significant aspects of the majority of Gold Coast RNAI and FICE neighbourhoods is the dearth of ongoing community organisations (as distinct from the short-term, specific issue focus of those initiatives described in the following section).

In the discussions that follow, we provide brief case studies of three Gold Coast locations that simultaneously exemplify aspects of the region's RNAI and FICE developments and have distinct attributes and trajectories.

#### 4. Three case studies

#### a) Hope Island

Hope Island is located in the lower estuary of the Coomera River within an estuarine space in which the low-lying land is fragmented into a variety of small islands and islets. Hope stands out from adjacent islands by virtue of being engineered into a particular type of island space that was constructed for integration with the road networks of the contiguous mainland to its south via two bridged access points. Significant though the latter may be, an aspect that Hope Island shares with many FICEs is its absence of through roadways to other locations that might generate traffic flow across it. Within the terms of the discussions advanced in this article it might be considered as an engineered island (rather than a RNAI) that incorporates small FICEs integrated within a purpose-designed private-commercial leisure and residential space (Figure 7). It also merits particular attention with regard to the manner in which its development occurred outside of standard planning processes. Indeed, Hope Island is an iconic example of the rampant cronyism that dominated Queensland politics and property development in in the 1970-1980s during the corrupt period of Liberal-National coalition rule under state premier Joh Bjelke-Petersen (1968-1987) (Condon, 2015).

Fully encircled by Saltwater Creek to the south and by the Coomera River to the north, Hope Island is largely occupied by the Sanctuary Cove residential and tourist development. Located at some distance from the major urban centres to the south (and the social conditions and issues prevailing there) cultural critic Meaghan Morris (2006: 72) has characterised Sanctuary Cove as "a high-priced, high-security, residential 'vivarium' with public leisure enclaves." The "vivarium" includes golf courses that offer extensive green spaces within the island (which otherwise lacks any substantial undeveloped areas). The residential areas of the development occupy the island's coastal fringes - including various 'fingered' promontories and a marina - creating a highly exclusive shima within the broader island space. The project was the brainchild of Queensland developer Michael Gore who was one of a group of entrepreneurs active in the 1970s and 1980s who were disdainful of any restriction on their activities and who had close connections with the highest levels of the state government. Aware that his desire to build a massive and luxurious residential resort on a largely undeveloped island in area of considerable environmental significance might run foul of a number of aspects of state planning laws, he lobbied the Queensland Government for a special exemption from these laws, which was granted by the passing of the 'Sanctuary Cove Resort Act' in 1985. The (250 page long) Act had a single purpose, namely the excision of Gore's development from local planning laws and the establishment of a commercial operation as the managing body for all subsequent developments on the island.

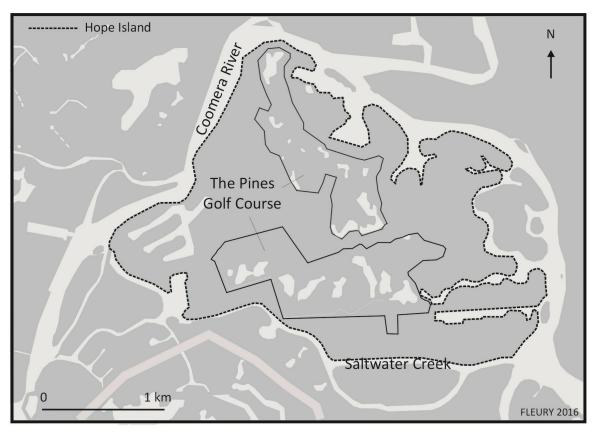


Figure 7: Hope Island, with its golf courses indicated. Map: Christian Fleury (2016).

In terms of the social history of the area it is notable that Gore's chutzpah was compounded by the scale of the launch he gave the newly completed development in 1986, when an opening concert was headlined by famous American singer Frank Sinatra. Gore's opportunism was however not matched by his business acumen and within six years the resort went into receivership, with Gore leaving Australia to avoid his creditors. After a prolonged hiatus Sanctuary Cove was acquired by the Mulpha Company (which also operates Hayman Island resort in the north east of the state) in 2002. The island has been run relatively stably since as an upmarket residential and tourism enclave that is largely separate from the area in which it is located – multiply islanded through engineering and private ownership.

#### b) The Paradise Point Islands

To the south east of Hope Island is Paradise Point (Figure 8), a high-value suburb that was created in the 1970s on low-lying marshy land that currently has a population of around 6000. Its western side largely comprises FICE developments and it has a relatively straight eastern coastline that runs parallel to the south of South Stradbroke Island and which is linked by bridges to two artificial islands, the Sovereign Islands and Ephraim Island, built upon reclaimed areas of low-lying sandbanks and mangroves. Aside from both being created to establish valuable real estate in prime coastal locations, these two artificial island developments have a number of significant differences.

Hayward, P., & Fleury, C. (2016). Absolute waterfrontage: Road networked artificial islands and finger island canal estates on Australia's Gold Coast. *Urban Island Studies*, *2*, 25-49.

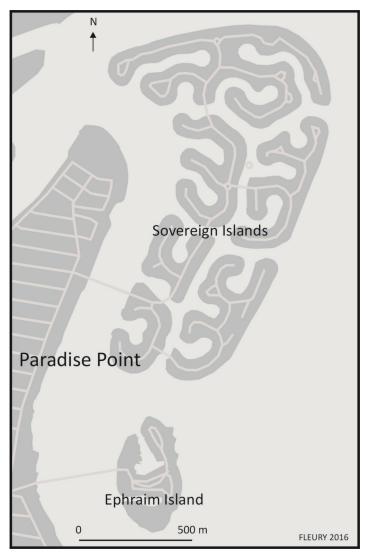


Figure 8: The northern tip of Paradise Point, the Sovereign Islands and Ephraim Island. Map: Christian Fleury (2016).

The Sovereign Islands effectively comprise a single development built around a low-lying area previously known as Griffin Island in the late 1980s. It closely resembles FICEs on the mainland coast, with some of its finger islands being connected by short bridges, such as in the southern extremity, and others through land junctions. Despite this, its initial planning and subsequent publicity have represented it as six interconnected islands (see, for example, Burchills, n.d.). The Islands were created by dredging 2.3 million cubic metres of sand up from adjacent waterways (Burchills, n.d.). The latter exercise both allowed for land creation and the clearing of surrounding water channels that could accommodate the draft of large private recreational boats (requiring 25,000 cubic metres of concrete to stabilise coastal perimeters and linking causeways).

The plural in the area's designation is somewhat fanciful, suggesting individual island status to particular finger island promontories. In classic FICE mode, almost all residential properties on the Sovereign Islands have frontal access to a roadway and rear access to either

the internal waterways between the finger islands or else to the open channel between South Stradbroke Island and Paradise Point. This gives a clear perception of the Islands' coast-ness (if not island-ness) which is not available to those who cannot access the rear of the buildings, for whom the experience of driving or walking down many of the Islands' streets is similar to that of travelling through an inland suburban location. There is, in this regard, a sense of shima that involves shared access to water as a defining aspect that is available to residents but only suggested to outsiders passing through access roads within a private island-like "sanctuary" (Suwa, 2007: 8) enabled by wealth.

Access is via a single, low-rise bridge that connects the south eastern corner of the Sovereign Islands with the northern end of Paradise Point (see Rofe, 2006). While sale of the Sovereign Islands' land allotments is still incomplete, the prestigious nature of the location attracted a range of international buyers in its immediate post-construction phase, many of whom built palatial residences that currently fetch a high value on the property market (at least, when purchasers can be found). A report in the Gold Coast Bulletin, for example, identified that the Palacio de Venezia villa on the Sovereign Islands (modelled on Andrea Palladio's iconic Renaissance villa outside Venice) was the most expensive property sale on the Gold Coast in 2015, being purchased by a Chinese national for Australian \$8.6 million (Thomson, 2015). Our reference to problems finding purchasers reflects the changing nature of national and international economies since the Sovereign Islands were created. The Global Financial Crisis of 2007-2008 severely impacted local property values and, indeed, the ability of purchasers to complete building works. This aspect has been compounded in recent years by a tightening up of restrictions on the purchase of Australian residential properties by foreign purchasers (and related penalties for the violation of guidelines) that came into operation in 2015.

A group of Sovereign Islands residents perceived that the aforementioned regulatory developments might severely impact the value of their properties. In an echo of Michael Gore's engineering of the Queensland 'Sanctuary Cove Resort Act' (1985) to exempt his development from unwelcome state government regulations, the Sovereign Islands Owners Association (SIOA) proposed that their Islands be exempted from Australian foreign residential property acquisitions guidelines so as to (re-)stimulate international interest in their properties. In a submission to national Treasury with regard to their implementation of foreign investment reforms (2015), SIOA contended that other areas of the Gold Coast, such as Hope Island, had traditionally escaped scrutiny from the Foreign Investment Review Board and called for a trial scheme for the Sovereign Islands whereby overseas purchasers of residences selling for over \$2 million (i.e. the vast majority) would be exempt from scrutiny in return for paying a 2.5% infrastructural levy on purchase and resale (Douglas, 2015: 1). Despite widespread backing from local residents, the SIOA did not get support for its proposal from the national government and the restrictions continue to impact upon property sales, related value and the attractiveness of vacant lots on the Islands.

Immediately to the south of the Sovereign Islands is Ephraim Island (Figure 8), which is distinct from Sanctuary Cove and Sovereign Islands by virtue of its comprising a small, medium-density community primarily housed in mid-rise apartment complexes. The island's current built environment has its origins in distinctly different development planned for the location. Prior to the 1950s the current Ephraim Island site was part of a long, low-lying area of sandbanks and mangroves named Crab Island. During the initial construction boom of the 1950s the area around it was cleared and dredged in anticipation of likely development opportunities. These did not eventuate and the cleared area was owned by various companies until the Raptis development group attempted to advance its development by constructing a bridge between the island and nearby Paradise Point in 1988. The island was then acquired by the Japanese KK Alpha Corporation in 1990, which planned to construct a Venetian themed resort development on it but ran into financial difficulties and did not progress the development. The Lewis Land Group then acquired the area in 1995 and developed the current residential development on it in partnership with Mirvac, with construction commencing in 2002 and being completed in 2004. The final development, based on five residential precincts, limited to a height of six storeys by a council approval given in 1988, includes a substantial area of mangroves to the



Figure 9: Ephraim Island (view to south from access bridge, showing edge of southern mangrove reserve area. Photograph: Philip Hayward (2015).

Pre-publicity for Ephraim Island in Gold Coast newspapers was hyperbolic, with headlines referring to it as 'Isle of Dreams', 'Closer to Utopia', 'Leisure Island', and 'Island Paradise'. The development was completed in 2004 and covers just under 10 hectares, combining a dense cluster of apartments, service facilities and a small marina together with an undeveloped area (a nature reserve) to the south (Figure 9). Access to the area is via the bridge that connects the central area of the island to the shore. Unlike the Sovereign Islands, with their miniscule public access spaces, part of the agreement between Gold Coast Council and the developers was facilitation of public access to the nature reserve. While there is little evidence that this is substantially visited by residents of the mainland (who have to walk over the bridge and through the residential

development to get to it), it remains both accessible and appealing as a rare enclave for native species in the intensely developed northern part of the Gold Coast. While research on residents' perceptions of living on Ephraim do not appear to have been conducted, the easy walk (or drive) to the adjacent coast, its shops, cafés and general amenities, is unlikely to result in pronounced senses of isolation from the mainland. At the same time, the bridge access, medium-density housing and the sports and café amenities on the island are likely to foster a sense of neighborhood identity and a sense of shima in which bridged islandness is a prominent characteristic.

#### c) The Lower Nerang River Estuary Islands

The densely developed aggregation of FICEs inland from Surfers Paradise (detailed in Figure 4) occurs just before the Nerang River bends northwards and runs parallel to the coastal sand-spit upon which the Gold Coast's most desirable high-rise apartment buildings are located before connecting with the open waters of the Pacific via the (engineered) Gold Coast Seaway passage. A cluster of developments in the final reaches of the river exemplify the different types of artificial island development detailed in this article and the pressures upon such locations in areas where land is in short supply.

The most northerly FICE in the Nerang River takes the form of the two-pronged Paradise Waters development on Macintosh Island. The FICE was created in the mid-1960s by the construction of channels into the western parts of the low-lying (and then densely wooded) Macintosh Island and the construction of drained and elevated fingers. The island is located close to the main coastal strip and is firmly integrated into it by the Gold Coast Highway that runs across the eastern side of the island (Figure 10).

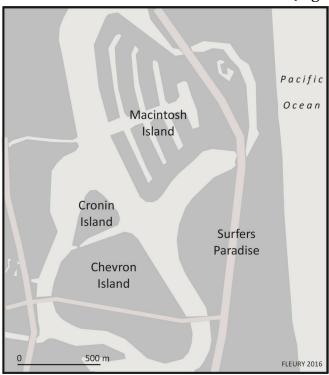


Figure 10: Chevron, Cronin and Macintosh islands. Map: Christian Fleury (2016).

With a prime location just north of Surfers Paradise and with easy access to the coast, the island combines its extensive low-rise FICE area with luxurious residential developments, such as the high-rise Atlantis West complex at its south eastern corner. Unusually for such a Gold Coast development, there are three green spaces – Macintosh Island Park, on the eastern area of the island separated from the remainder by the Gold Coast Highway, and two small park spaces located at the connecting point between the northerly and southerly FICEs and the original easterly portion of the island. The public status of the latter two is somewhat notional however, as they occur within the space of the residential FICE area and do not seem to have any significant public visitation by non-residents.

Chevron Island, to the north of Capri, and its smaller northerly neighbor, Cronin (Figure 10), were drained and developed in the late 1950s and are RNAIs that resemble Miami's Venetian Islands, lacking finger island promontories and having inner streets with blocks without waterfront access. The development of Chevron Island was undertaken by Melbourne entrepreneur Stanley Korman, who was also responsible for the Las Vegas-style Chevron Hotel, on the adjacent coastal strip of Surfers Paradise. The hotel, with its large pools and bars, set the tone for subsequent development around Surfers Paradise. From the 1960s onwards much of this development was vertical, as high-rise apartments were constructed along the waterfront to maximise beach views, with subsequently lower premium towers being constructed in receding blocks until the western boundary of the Nerang River was reached. The minimal re-development of Chevron and Cronin Islands (particularly in terms of building heights) since the 1960s has been in increasing contrast to the height of constructions in its neighbouring area across the eastern arm of the Nerang River. The massive increase of the population of Surfers Paradise has also resulted Chevron Island's central roadway, Thomas Drive, becoming a major access point to the Gold Coast City's central area (and thereby being snarled with traffic in peak periods).

The latter situation has caused one of the most significant mobilisations of Gold Coast RNAI or FICE communities over the last fifty years through the formation of the Chevron and Cronin Island Residents Association (CCIRA), established in early 2016 to "promote and protect the residential amenities and environment of the Islands" (CCIRA, 2016) in direct response to the Gold Coast Council's announcement that due to severe shortage of land in the Surfers Paradise/Broadbeach area it would approve 30-storey high residential developments on the low-rise islands. Public responses to this announcement in the city were highly polarised (see, for instance, online dialogue related to Skene & McElroy, 2016) but opinion was less divided in the Chevron and Cronin communities where the CCIRA appears to reflect a broad degree of community consensus that residents should be allowed to the right to maintain their areas in a condition they are familiar with (Figures 11 and 12). CCIRA co-ordinator Neil Broadbent has characterised the issue in the following terms:

We are battling a Local Council that is headed up by a developer plus an influx of wealth from China. This has created the 'perfect storm' where whole suburbs are being sold off

and unlimited height high rises are available for developers. Our original Local Area Plan would have seen a height restriction of 8 stories on the block at the corner of Parnoo Street and Stanhill Drive – this is now a 24 story development with 5 floor of underground parking. The community lodged over 330 objections but these are now not being included as the developers have lodged a Material Change of Use (MCU) under the New City Plan, effectively hiding our concerns (Personal communication, 3 June 2016).



Figure 11: Aerial view of Chevron Island and southern half to Cronin Island (left) in their current state of development. Source: Weston & Emery (2016).



*Figure 12:* Top section of 2015 flyer showing an impression of what Chevron Island might look like with unfettered high-rise development.

At time of writing (August 2016), the CCIRA had secured financial support from a wealthy resident to enable it to challenge the Council decision in the state Land and Environment Court (Weston & Emery, 2016). But whatever the outcome of the specific dispute, the severe shortage of land in the central Gold Coast makes it unlikely that residents' campaign groups such as CCIRA will be able to maintain the built environment of the RNAIs that initially attracted them to the area. Chevron and Cronin are particularly vulnerable to such developments since they have through roadways on them (unlike the majority of FICEs) that allow for the development of high-rises without entirely new road infrastructure being constructed, whatever impacts the developments may have on light, congestion and the general quality of residents' lives.

#### 5. Conclusion

Much of the above discussion has centered on the nature of RNAIs and FICEs and the manner in which they have been developed — as variously bridged islands, finger-like presqu'îles and/or nominal islands of other types. In this regard the English language term 'island' and its standard definition as a body of land entirely encircled by water is strained by its attribution to locations that only fit this definition in a partial and/or metaphorical manner. The term shima, discussed in the Introduction to this article, is a far more accurate reflection of the types of physical location and residential-community experience that the developers and promoters of particular locales have been striving for. As the discussions in the previous section indicated, senses of shima are also multi-facetted, fragile and mutable. Chevron and Cronin Island residents cherish a particular sense of shima that will be challenged (if not erased) by the construction of high rises upon their land.

As characterised in this article, RNAIs and FICEs are highly specific entities that operate as the external fringes of built terrestrial environments. They interface with adjacent waters in a manner that isolates them into fingered aggregations whose residents are atomised as consumers of waterfront residential experiences rather than being united in the communities of experience that the locations' designations as islands (and, consequently, residents' designations as islanders) suggest. The sense of 'almost' key to the notion of the presqu'île is thereby predominantly an 'almost but not': an affectation staged by developers and variably accepted by residents who make their own senses of space in a Gold Coast region that is, above all, dynamic. The city's landscapes are not fixed and senses of security of place and identity are just as likely to shift as to stay set.

Two aspects of elevation, in particular, are likely to increasingly impinge on the low-lying, low-rise RNAIs and FICEs of the Gold Coast. One is that of the built environment. If the city's population continues to increase at present rates the city is likely to require 50% more housing by 2025. Given the limited land within the city's central areas, high-rise developments are likely to spread out from their Surfers Paradise epicenter in forthcoming years and intrude into established low-rise suburbs. The second elevation issue concerns the low-lying nature

of all the RNAIs and FICES discussed in this article. As research teams such as Sano, Golshani, Splinter, et al. (2011) have established, the Gold Coast is particularly vulnerable to storm surge inundations that could trigger extreme erosion events, changing watercourses and undermining material structures. In this regard, for all of the developers' attempts to fix waterways and terrestrial perimeters through canalisation, residents' premium 'blue-belt' properties in the Gold Coast (as in Florida and elsewhere) may well be among the first to be submerged as global climate change begins to affect coastal communities worldwide.

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