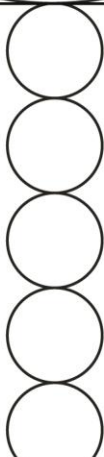
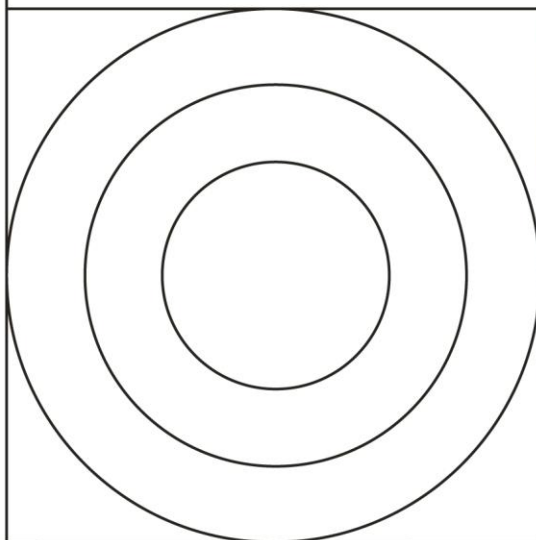
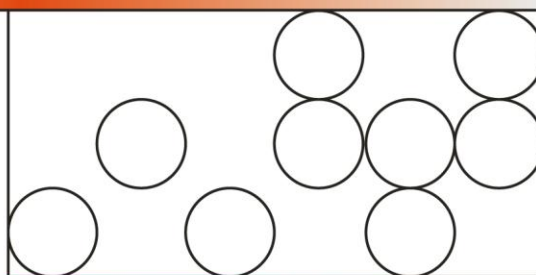
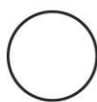


[In]tangible



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Exploring the Seasteading Hypothesis: A Floating Utopia for the Techno-Solutionist age?

ISABELLA TRAEGER

Politecnico di Milano, Department of Architecture and Urban Studies (DASStU)

ALESSANDRO DELLI PONTI

KH STUDIO. building strong stories; University of Ferrara, Department of Architecture

ABSTRACT

The paper focuses on the Seasteading movement's quest to build floating libertarian micro-nations in the High Seas, heralded by its proponents as a bold, 'offshore' solution to society's most pressing challenges. The article situates Seasteading within a broader reflection on the evolution of the floating city paradigm over the past century. It unpacks how Seasteading draws from some of its most relevant predecessors, re-signifying and incorporating elements of their technological, spatial, and rhetorical frameworks to construct a compelling market identity and legitimise its anarcho-capitalist agenda. This framing sheds light on the implications of the techno-solutionist form of territorialisation advocated by Seasteading, and the underlying planetary vision it implies.

FLOATING URBANISM | SEASTEADING | MARITIME URBANISATION | TECHNO-SOLUTIONISM

1. Introduction

In light of the growing interest in floating cities as a potential response to some of the most pressing effects of the current polycrisis, the article explores one of the most recent (and controversial) iterations of this seemingly alternative form of urbanisation: Seasteading. Framed within a broader exploration of society's evolving relationship with the urbanisation of maritime space over the past century, the article critically unpacks how some of the most relevant socio-spatial models have informed the Seasteading vision. These models offer a privileged viewpoint onto the specific challenges of their respective historical contexts and the mindsets that shaped their socio-political aspirations. This framing contributes to develop a critical reflection on the broader implications of Seasteading's conceptualisation of an inhabited maritime planet.

2. The Seasteading hypothesis

The Seasteading movement can be broadly described as the convergence of marine anarcho-secessionist ideals and the 'resortification' of floating urbanism, heralded by its proponents as a bold, 'offshore' solution to society's most pressing challenges. The term itself – a *portmanteau* word of 'sea' and 'homesteading' – was coined by Wayne Gramlich to describe an affordable path for individuals to colonise the High Seas, in analogy with the colonisation of the American West. Gramlich – together with Patri Friedman, grandson of leading libertarian economist Milton Friedman – founded The Seasteading Institute (TSI) in 2008, thanks notably to substantial funding from Silicon Valley magnate Peter Thiel. TSI's stated mission is of "building startup communities that float on the ocean with any measure of political autonomy" (TSI n.d., *About*; Steinberg *et al.*, 2012).

Seasteading's socio-political vision¹ combines libertarian anarcho-capitalist ideals with techno-solutionism. Seasteading originates from a deep dissatisfaction with democracy, believed to be an inefficient and costly "geographically segmented monopoly" (Friedman & Gramlich 2009, p. 21). Conversely, it presents the High Seas as the natural frontier to escape land-bound juridico-political systems, to reappropriate the political agency granted by freedom of movement and to unleash hyper-capitalism. It envisages a post-democratic 'seavilization' based on a constellation of self-ruled libertarian micronations. Navigable housing units would enable each individual to easily move from one micronation to another: you vote by moving your house. By detaching citizenship from fixed territoriality and framing it as a free market value, Seasteading aims to concretise what is presented as a Copernican revolution of the Nation-State paradigm. In this worldview, marine micronations would compete to attract inhabitants, the possibility to choose juridical system would minimising conflict, and deregulation would foster entrepreneurial innovation and prosperity. Heralding a privatisation of space-making on a territorial scale, Seasteading emerges as the marine

¹ While the Seasteading movement groups a range of different spatio-political visions, the current analysis is based on the materials produced by The Seasteading Institute.

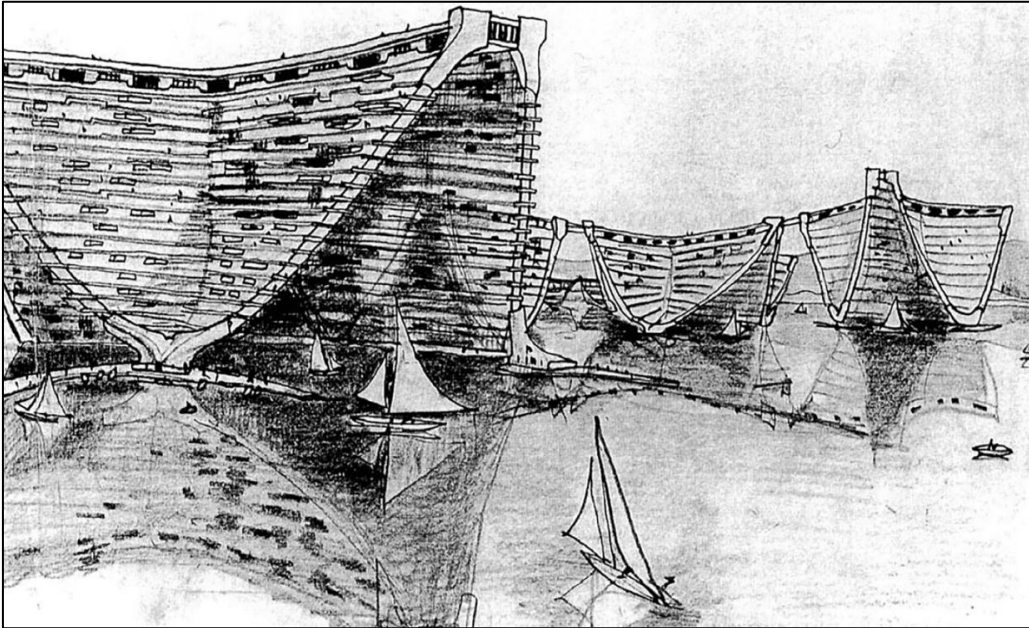
“extrastatecraft” (Easterling 2014) by excellence, combining the appeal of the luxury resort and of the offshore financial centre (Quirk & Friedman 2017; Steinberg *et al.* 2012).

Seasteading inscribes itself within a long lineage of radical socio-political endeavours which have turned to the sea to concretise their vision. Driven by distinct visions and stakeholders’ interests, each experiment engages with the revolutionary implications of inhabiting the sea from a different perspective, translating into distinct forms of socio-spatial organisation. The article explores how Seasteading draws inspiration from various maritime experiments conducted over the past century, re-signifying and incorporating some of their characteristics within its proposed production of space.

3. Metabolism – the megastructure as ‘machine sociale’

Arguably, one of the major catalysts and testing fields for the floating city typology was the wave of proposals to urbanise the Bay of Tokyo (1957-1961), as Japan navigated the tension between post-catastrophe reconstruction and rapid economic expansion. This endeavour occupied a central place in the international architecture discourse, yet its main resonance was at the national level. It contributed to shape and crystallise the ideology of the Metabolists – a Japanese avant-garde movement created in 1960 by architects and intellectuals part of Kenzo Tange’s *entourage* (Kikutake, Kawazoe, Otaka, Maki & Kurokawa 1960).

As architectural historian Maurizio Vitta observes, Metabolism “wasn’t an architectural theory, but a critical theory of society seen from an architectural perspective” (Kikutake & Vitta, 1997, p. 17). At its core is a conceptualisation – drawn from ecological metaphors – of spatial models not as fixed forms, but as ‘regenerative’ frameworks able to adapt organically to their inhabitants’ evolving demands, granting a plurality of possibilities. Inspired notably by Buddhist philosophy and Marxist ideals, the production of space is envisioned as an act of symbiosis which transcends dualisms (such as technology vs. tradition; nature vs. man etc.), enabling a more egalitarian, ordered and harmonious *Urbs* and *Civitas*. This strive for symbiosis is well illustrated by Kurokawa’s renders for his *Floating City Kasumigaura* (1965) project. [img. 1]



Img. 1

Noriaki
Kurokawa,
Floating City
Kasumigaura
project render,
1965 (Japan).

The central spatial expression of the Metabolist approach is *artificial ground*, primarily megastructures (a term coined by the Metabolist Fumihiko Maki), which serve as infrastructural and service backbone for modular 'capsules'. Collectively owned artificial ground is proposed as a solution to bypass the liabilities which were heavily hindering Japan's reconstruction, including lack of buildable space, land ownership fragmentation and vulnerability to natural disasters (Kikutake, Kawazoe, Otaka, Maki & Kurokawa 1960; Kikutake & Vitta, 1997; Lin 2010; Koolhaas & Obrist 2011). The sea, a fundamental element in Japanese imaginary and culture, is portrayed as a natural frontier to unfold the Metabolist' spatial and societal agenda (Lin 2010, pp. 109-111). This line of thought is particularly embodied by Kiyonori Kikutake, widely recognised as the godfather of marine architecture. In his presentation of the *Ocean City* in the Metabolist manifesto (1960, pp. 20-21), he thus argues that "the civilization of continents was an accumulation of bloody struggles of human relations established on limited land, so it was a history of endless wars"; while "the sea is awaiting a new discovery which will promise true happiness for human beings. It is just a matter of time that the civilization of continents hands over its part to the prospective civilisation of the sea commenced by Marine City".

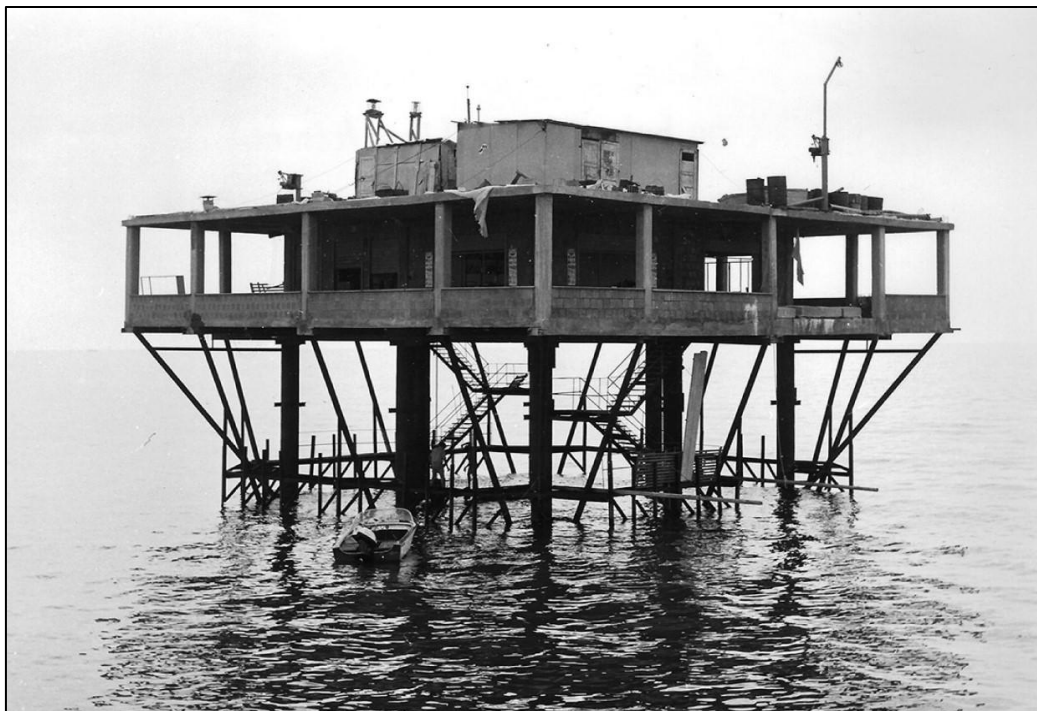
The typology of floating urbanism envisaged by the Metabolists can be broadly divided into two main categories. The first one can be described as a *hybrid* model, which extends land-based infrastructure (notably transport) onto the sea, combining it with technology and modularity specific to floating urbanism. It thus seeks to transcend the functional limits between land and sea, centre and periphery, envisioning a theoretically ever-expandable model. In addition to Otaka, Kurokawa and Kikutake's proposals for the Tokyo Bay masterplan, some examples include Kikutake's Disaster Prevention City (1961) and Shallow Sea-type community (1963). The second category centres on a territorial-scaled, self-contained *floating archipelago* model. It envisages a form of territorialisation entirely independent from the land, spatially governed by its own metabolic cycle. This category includes most of Kikutake's Marine and Ocean City projects (Lin 2010; Koolhaas & Obrist 2011 pp.

354-59; Nyilas 2016). While none of the Metabolists' floating projects saw the light of the day (exception made of Kikutake's Aquapolis, 1975), they spurred considerable technological innovation, largely thanks to Japanese and American government funding.

Examining the relationship between Seasteading and Metabolism reveals a significant conceptual shift. Rather than evolving from Metabolist ideology, Seasteading merely appropriates some of its visual language as a reassuring aesthetic, suggesting that a self-sustaining, adaptable urban system at sea is viable. While Seasteading, similarly to Metabolism, envisages a systemic and dynamic infrastructuralisation of maritime space – one that notably aims to foster individual mobility and empowerment, framed as key preconditions for socio-economic progress – pertinent similarities largely end there. While current prototypes of 'seasteads' function as floating *habitats*, their classification as constitutive element of a floating *city* remains, at present, tenuous.

4. Maritime anarcho-secessionism - the self-made platform and ship

In the same period as Metabolism burgeoned, an entirely different form of marine cities attracted significant investments and public attention. Namely, the short-lived wave of anarcho-secessionist maritime micronations in the 1960s and 70s. These experiments are widely disparate, as their socio-political agenda and spatial embodiments are moulded by the vision of the charismatic leaders promoting them. What they share is a desire to capitalise on the deregulation of the High Seas to enact Libertarian ideals; and a rather picturesque drive to affirm their institutionality through the creation of flags, currencies and post stamps. It is hard not to feel the anticipatory echoes of the interest in Bitcoin and metaverses that would appear only decades later. These experiences can be classified in more 'piratesque' endeavours – led by a small group of people with minimum funding – and more structured ones. The first category groups for example *L'Isola delle Rose* (1968) – a DIY platform near Italy which takes its name from its founder, Giorgio Rosa, and operated mainly as a touristic attraction [img. 2]; and *Sealand* (1967 – today) – an ex-military platform near the UK governed by the pirate radio broadcaster Roy Bates and his descendants (though it wasn't used for this purpose). The latter was even the unlikely object of a daring *coup d'état*, which included kidnapping and a government in exile. The second category groups more ambitious endeavours, backed by solid funding, for example *Operation Atlantis* in its various tentative incarnations as a custom-built ferro-cement boat, reclaimed island and oil rig (1968-73), brainchild of millionaire and Ayn Rand enthusiast Werner Stiefel. In a contemporary reinterpretation of Plato's *Atlantis*, all these micro-nations (except Sealand) either sank or were dismantled militarily by nearby states after only a few months of existence (Graziani 2015, pp. 32-52; Kaji-O'Grady & Raisbeck 2005, pp. 470-74).



Img. 2

L'Isola delle
Rose micro-
nation in 1969
(offshore, near
Rimini, Italy).

Though not constituting floating cities from a strictly typological perspective, these experiments constitute a non-negligible part of its imaginary, inspiring various books and films and successive secessionist endeavours. While successive endeavours, for example the *Freedom Ship*, never saw the light of the day due to unsustainable costs and timelines, Seasteading emerges as the most tangible and ambitious successor, aiming to systematise this model. All the aforementioned micronations are explored in dedicated sub-chapters of Friedman and Garmlich's 2009 book "Seasteading: A Practical Guide To Homesteading The High Seas". It is, then, perhaps not a coincidence that early attempts at Seasteading associated with The Seasteading Institute (TSI) used the same spatial expedients, namely self-made platforms and repurposed boats.

The first (and at the time of writing only) inhabited Seastead to be stably deployed in international waters was a DIY platform off the coast of Thailand in 2019 [img03]. It had to be precipitously abandoned by its two inhabitants after only two months when Thailand intervened militarily declaring it a threat to its sovereignty. The episode is recounted in epic tones in a Youtube series titled *The First Seasteaders*², directed by the TSI's current president. The same firm, Ocean Builders, relocated to Panama. In 2020-21, on the wake of the pandemic, its three founders saw the opportunity to repurpose a cruise ship, the MS Satoshi, into the heart of a Bitcoin-shaped "coastead", a Seastead located in Panamanian territorial waters. Despite garnering a non-negligible interest from prospective inhabitants, it had to be sold before it came into use because of prohibitive insurance costs. Ocean Builders, which have now distanced themselves from TSI, are developing various models of a luxurious brand, the SeaPod, whose *Alpha Deep* version is deployable in deep water

² <https://www.seasteading.org/facing-the-storm/>

[Img. 4] (Elmhirst 2021; Simpson, 2021; Yarm, 2025; Ocean Builders, n.d.). The SeaPod – similarly to TSI-related designs conceived for shallow waters, such as Arktide’s *Coquina* (n.d.) and CSTM’s *Arkhaus* (n.d.) – seems to evoke an elite getaway for high-net-worth individuals rather than any sense of urbanity. These navigable pods emerge as the first steps towards the ‘you vote by moving your house’ ideal: the spatial manifestation of an atomised and individualistic society brought together by temporary interest. As argued by Simpson (2021, p.72), the seastead is as much an infrastructural device as a rhetoric one: “the [performative] construction of the seastead as a space of freedom, and of freedom as a product that could then be marketed and sold.



Img. 3

Ocean Builders, the First Seastead in 2019 (offshore, near Phuket, Thailand).

5. Design Science set sails – neo-liberal speculative coastal experiments

In more recent years, as the implications of climate change – notably in terms of vulnerability to sea level rise, natural disasters and resource scarcity – have taken centre stage in the urban planning and political discourses, amphibious and floating urbanism are increasingly emerging as the ‘go-to’ solution (Steinberg 2011). Ongoing experiments and visions align with a supposedly post-ideological interpretation of Design Science, tracing back to Buckminster Fuller’s legacy. This approach frames spatial design as a neutral, problem-solving endeavour, sidestepping deeper political and economic considerations.

On the one hand, the most prominent contemporary projects draw heavily on the spatial (modularity, scalability and adaptability) and technological (complex buoyancy, metabolic self-sufficiency) concepts underpinning the 1960s and 70s marine megastructures. On the other, as climate adaptation intersects with real estate dynamics, the typology and its strongly evocative imaginary become convenient vehicles to unfold oversimplistic and marketable narratives of sustainable development, romanticised through the ‘living in harmony with the sea’ trope. This novel capitalist-

driven version of floating urbanism tends to blur the line between sensationalist ‘resortification’ and testing ground for alternative resilient urban models.



Img. 4
Ocean Builders,
Alpha Deep
SeaPod
prototype in
2024 (offshore,
near Linton Bay,
Panama).

Two examples of modular coastal extension projects well illustrate this trajectory: *Oceanix City* and *Oxagon*. They share a similar spatial model – based on modular floating units that maximise valuable waterfront real estate – and narrative, using compelling videos and renders promising a “trail-blazing” sustainable urban model and vibrant lifestyle (NEOM n.d.; Oceanix n.d.;). *Oceanix City*, designed by the blue tech company OCEANIX and Bjarke Ingels Group, is the perfect embodiment of the typology’s institutionalisation. It has been heralded as “the definitive blueprint for a sustainable marine metropolis” in the framework of the UN-Habitat Roundtables on Sustainable Floating Cities. A prototype meant to house 12,000 people is currently being developed in Busan (South Korea) with the support of UN-Habitat [img05] (idem; UN Habitat 2022). *Oxagon*, on the other hand, is the octagonal-shaped port and ‘4.0’ industrial city proposed as part of Saudi Arabia’s NEOM megaproject. In its promotional video³, it is presented as a “the largest floating structure in the world, creating a new paradigm for living and working on water”, notably thanks to automation, AI and Internet of Things.

³ https://www.youtube.com/watch?v=V_p3kl6FHDY&t=4s

**Img. 5**

OCEANIX and BIG, Oceanix City Busan, expected completion in 2030 (Busan, South Korea).

These projects aren't entirely dissimilar from a full-fledged Seasteading real estate development for shallow waters ('Coastead'). As both models evolve and become more normalised, the boundary separating them is likely to become increasingly blurred. Both present themselves as environmentally friendly (e.g. net-zero energy, zero waste) and eco-restorative (e.g. biorock as building material, algae farming) solutions to often oversimplified discourses on 'environmental refugees' and climate change (see notably Hodson & Marvin 2010). The TSI narrative, outlined in its 'Eight Great Moral Imperatives' (n.d.; Quirk & Friedman 2017), goes one step further, decisively embracing techno-solutionist rhetoric. Both, however, manifest as globalised sea-oriented enclaves, loosely connected to their territorial hinterland, intended communities, or marine surroundings – treated as interchangeable. As such, they can be read as the latest development in juridic-spatial forms of extraterritoriality which blur the distinction between logistic, productive and leisure spaces. Various combining a strategic position in global flows, fiscal and legislative exemptions, and an appealing coastal leisure environment, these forms of infrastructuralised territorialisation systematise corporate-run space-making which dilutes socio-environmental accountability and reinforces existing power structures (notably Easterling 2014, Farinella 2024 and Abrahamian 2024).

6. Conclusion

Seasteading emerges as the extreme manifestation of Western extractivist and functionalist conceptualisation of the sea as a blank canvas onto which to project yearnings for territorial expansion, affirmation of individual freedom and deregulation. By framing Seasteading within a trajectory of radical floating socio-spatial models, the article highlights how Seasteading incorporates elements of their technological, spatial, and rhetorical frameworks to construct a compelling market identity and legitimise its anarcho-capitalist agenda.

In a historical moment where *extrastatecraft* has become a key driver of territorialisation within and beyond our planetary confines, enjoying a pervasive level of connivance with governmental institutions (notably Eastering, 2014), the Seasteading hypothesis warrants closer examination. It reveals the underlying implications of many “techno-solutionist” visions that have emerged over the last decade catalysing substantial funding, centered on the conquest of ‘otherworldly’ environments, whether distant celestial bodies or extreme terrestrial environments (Abrahamian, 2024). These visions offer a common response to the epochal polycrisis, namely a form of land-based escapism where proposed self-sufficient ‘islands of security’ carve out new geographies of in/exclusion on an unprecedented scale. Taken to their ultimate conclusion, these visions draw legitimation from postulating a future state of permanent catastrophe, “the Future” being reserved for those few that will be in a position to afford it.

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