HOW DO GEOGRAPHIC OBJECTS PERFORM?

By Neyran Turan

Toward a new materialism.

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Performance is the new gold. Amid contemporary environmental, political and economic instabilities, emphasis on performance—evident through the positivistic tone of environmental efficiencies (sustainability) or the prescriptive tendency of techno-natural processes (biomimicry of computer-generated design)—informs much of architectural thinking today. Presented as a relational aesthetics of processes and data, performance-driven systemic thinking is overtaking us.

Systemic thinking in architecture has mainly developed after the 1950s as an ecological interpretation of context, marked by the prominence of empirical facts of the environment and the call for the disappearance of the architectural object. One can think, for instance, of various formulations of "beyond architecture" with their call for indeterminacy and the dissolution of buildings, and "design methods" with its promotion of problem solving through systems and "design research."[1] Developed concurrently with systems theory and self-regulating decision-making and planning, these postwar architectural ideologies shifted the idea of architectural context to the environment, and introduced the beginnings of the systemic thinking to architecture. As a reactionary opposition to this more positivist lineage, a historical interpretation of context emerged, which favored disciplinary autonomy and aesthetic formalism with a renewed focus on the object.[2]

Contemporary conceptions of environmental and systemic thinking took their current shape in the 1990s. Despite sharing a similar sympathy with their postwar counterparts for indeterminacy and the dissolution of buildings, the '90s position against the fixity and permanence of objects had a fundamentally different reasoning: It was a reactionary response to the representational and symbolic aspects of postmodern architecture. Rather than a project of representation, which devoted itself to the object, this conception of architecture provided an alternative focus on the fluidity and connectivity of relational systems and flows *around* the object. This approach would liberate the material and the performative attributes of the city, and thus provide a more realistic and instrumental role for architecture.[3] These ideas have proliferated in architecture discourse since the 1990s. And after more than two decades, especially with the ubiquity of discussions on sustainability and climate change, a far more positivistic and managerial tone has been applied to the systems of the environment than its initial conception in the '90s. The material and the performative have mutated into an idea about efficiency, as measures to be met and maintained.

GEOGRAPHIC ~~CONTEXT~~ OBJECT

> Let us congratulate ourselves, because the task of colonisation which constitutes the glory of our age would be only a sham if nature set definite, rigid boundaries, instead of leaving a margin for the work of transformation and reparation which it is within man's power to perform.
> —P. Vidal de la Blache

In his seminal 1967 study on the history of geographical ideas, geographer Clarence

Glacken writes that there have been three main geographic ideas since Ancient Greece: the idea of a designed earth, the idea of environmental influence and the idea of human as a geographic agent.[4] More recently, this question is challenged with an alternative narrative by the idea of the Anthropocene. Deriving from the Greek roots *anthropo-* (human) and *–cene* (new), Anthropocene is presented as a distinct geological era that is marked decisively by human terraforming of the earth's surface. The proposition is that the changes brought to the planet by humans have become so prominent that they should establish a new geological epoch. According to this formulation, humans are now described not only as geographic, but also geological, agents.[5]

In parallel to the tendency to conceptualize the earth's surface at a planetary scale in the 1960s and the 1970s, our contemporary global image is constantly reshaped by and filtered through two reciprocal attitudes: The managerial posits that the environment is governable with systemic techno-fixes, while the apocalyptic envisions narratives of catastrophe.[6] While the managerial takes the "human agency" that is suggested by the Anthropocene to an almost heroic extreme of "earth mastering" with massive geo-engineering projects, the apocalyptic supports that vision by promoting various forms of, what historian Scott Gabriel Knowles calls, "disaster experts—specialists in predicting the unpredictable and managing the unmanageable."[7]

Correspondingly, in architecture, architectural planetary imagination and related ideas of resource and land management are reappearing with an overreliance on the positivist knowledge of expertise. While current discussions on climate change, as well as new visualization platforms such as Google Earth and Geographic Information System have helped reconceptualize the scale of architectural production from that of the building to that of larger terrains, the ghost of the '60s and '70s haunts us all. Once again, environment is understood as either the systemic management of an organic and terrestrial unity through invisible flows of energy and resources or a hermetic and atmospheric interior (think: Buckminster Fuller's Dome over Midtown Manhattan). The only difference is the excess of "big data" available today, which causes environmental maintenance and performance to gain more currency. However, as Laura Kurgan argues:

> The word "data" ... means nothing more or less than representations, delegates or emissaries of reality ... not presentations of the things themselves, but representations, figures, mediations – subject ... to all the conventions and aesthetics and rhetorics that we have come to expect of our images and narratives. All data, then, are not empirical, not irreducible facts about the world, but exist as not quite or almost alongside the world, they are para-empirical. To put it another way, there is no such thing as raw data. [8]

Thinking that contemporary architectural conceptions of the environment are mostly limited to maintenance and performance through data and that the idea of raw data is an oxymoron, the question of representation begs further speculation. Rather than negating the representational for the sake of an emphasis on the material as it was in the '90s discussions of environment in architecture, can we instead talk about a new kind of materialism that couples an inquiry of data and matter with their seemingly opposing counterparts, such as representation, monumentality and composition? In his book *Romantic Rocks,* literary theorist Noah Heringman shows how the development of the discipline of geology in the Romantic era created a very specific material and aesthetic appreciation toward rocks, as they embodied formlessness in their composition and dramatized the recalcitrance of raw matter.[9] In the context of the new geological epoch posited by the Anthropocene, can we grant a different role to aesthetics between the representational and the material instead of limiting the concept's potential to the managerialism of planetary thinking and the reliance on data?

In this context, the potential of an alternative geographic imagination in architecture is vital. Geographic imagination is essential so that we are able to transcend dichotomies such as nature vs. culture, national vs. international, or urban vs. wilderness, and further articulate the spatial framing of their dispositions.[10] Second, it is only through a geographic framework that architecture can disrupt the consensus on apocalyptic and managerial attitudes, bringing these frameworks into public and disciplinary imaginaries. Third, and more specifically, rather than conceptualizing performance through systems

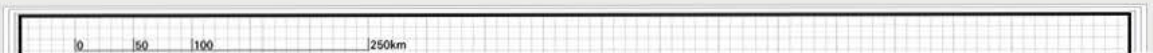
and data, the true potential of a geographic imagination in architecture is its ability to offer a renewed dialogue between environment (system) and aesthetics (object), and thus a nuanced interaction between performance and legibility. In his book *Ecologies, Environments, and Energy Systems in Art of the 1960s and 1970s*, art historian James Nisbet shows us how land art attempted to address monumentality and objectness within holistic ecosystems and planetary thinking rather than a mere displacement of art out from the gallery space to the environment.[11] Similarly, what if geography was not yet another version of an environmental context for architecture, but was an object?

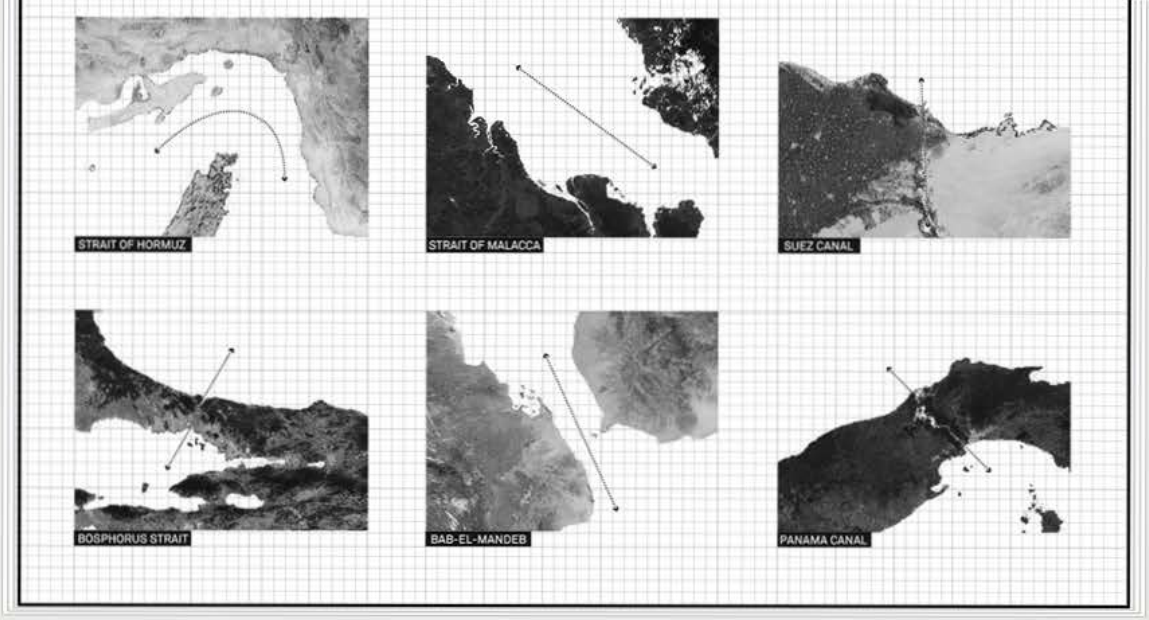
As an alternative to relying on prescriptive efficiency measures, one could instead see an emerging body of speculation in the field of eco-criticism that conceptualizes the environment as an objectification, while offering an expanded interpretation of performance. These explorations understand environment in their temporal and spatial long view—a longer span of time and larger span of earth—and offer an expanded notion of criticality and speculation for the role of aesthetics. For instance, according to Timothy Morton, the environment needs to be reconceptualized "without nature." His "dark ecology" bestows environmental aesthetics a more critical role, which, according to Morton, has the tone of a *noir* detective story. The *noir* detective is caught up in the plot, as opposed to the classic master, Sherlock Holmes, who knows the answer in advance. In this way, Morton argues that dark ecology "undermines the naturalness of the stories we tell about how we are involved in nature."[12] He writes:

> Capitalism is a boiling whirlwind of impermanence. It reveals how things are always shifting and changing. But, it isn't the ultimate horizon of meaning... Capitalism [h]as predictability, patterns in the chaos. And, curiously, capitalism creates things that are more solid than things ever were. Alongside global warming, "hyperobjects," will be our lasting legacy. Materials from humble Styrofoam to terrifying plutonium will far outlast current social and biological forms. We are talking about hundreds and thousands of years. Five hundred years from now, polystyrene objects such as cups and takeout boxes will still exist. Humans have manufactured materials that are already beyond the normal scope of our comprehension... Plutonium will be around for far longer than all of recorded human "history" so far. If you want a monument, look around you.[13]

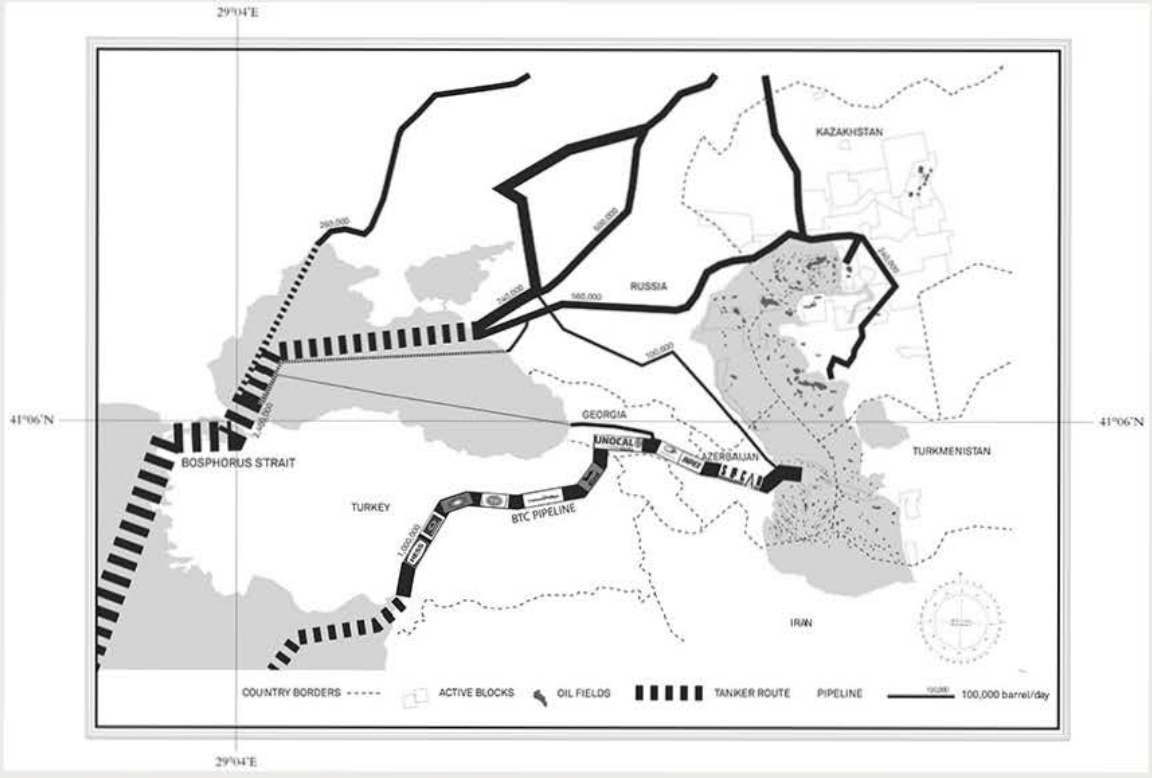
Morton conceptualizes environment through its "hyperobjects" that are vastly spread in time and space relative to humans. Rather than understanding the material aspect of the environment as an undifferentiated context of smooth flows and networks, Morton conceptualizes environment through its object-like qualities. Second, instead of limiting the role of environmental aesthetics to prescriptive techno-fix formulations of the expert (classic master Sherlock Holmes), the noir tone suggested by Morton's "dark ecology" suggests a far more sophisticated relationship between the material and the representational in the context of climate change.

In a similar vein, there is a call in architecture for a more monumental and non-naturalistic conception of environment, which offers alternative lines of inquiry for aesthetics, history and materiality.[14] What all of these frameworks share is the desire for a more sophisticated conception of *geosophy* for architecture, an Annales School-like rigor perhaps, in which the power of geography and environment would come to the fore in an effort to advance an architectural discourse and an unconventional aesthetic sensibility, one that sees the environment as an object and not a system.[15] Seeing environment as an object not only has the potential to put more emphasis on the role of aesthetics over efficiency, but it also opens up a space for further speculation between abstraction and realism on the one hand, and legibility and performance on the other. Moreover, rather than merely relying on the management discourses of environmental science and technology, seeing environment as an object has the possibility to create alternative trajectories for architectural scholarship and experimentation that could build unprecedented relations with eco-criticism, science-technology-studies and environmental history.[16] Environment and object both need to be saved.

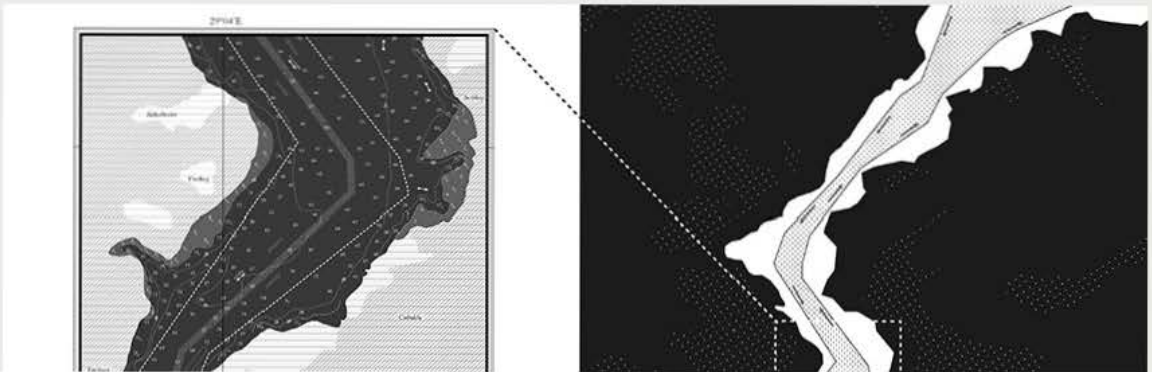


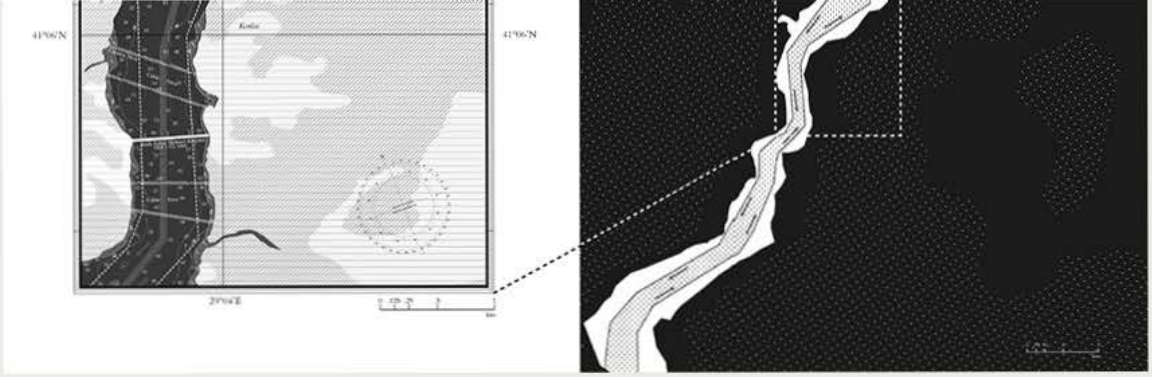


The Bosphorus Strait among other important oil-shipping "choke-points." Image courtesy of Neyran Turan.



The Bosphorus Strait as a liquid pipeline: regional oil pipeline networks. Image courtesy of Neyran Turan.





Navigational oil-shipping route at the Bosphorus Strait and its proximity to the city.
Image courtesy of Neyran Turan.

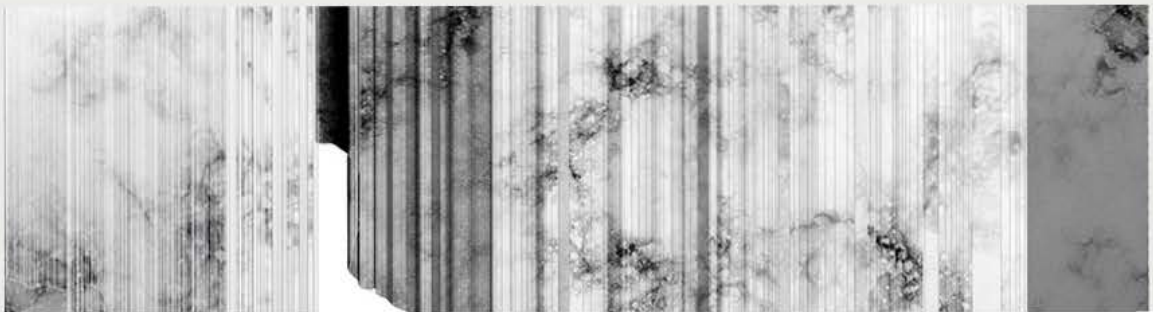
STRAIT: A Geographic Object and Fiction[17]

In March 1994, a dramatic accident occurred in the Bosphorus Strait. *Nassia*, a 100,000-ton tanker carrying crude oil from Russia, collided with a cargo ship at the northern exit of the Strait. The cargo ship exploded and ran aground, while the *Nassia* immediately caught fire and released more than 13,000 tons of oil into the sea. The fire continued for weeks, causing a devastating environmental disaster. The accident marked a delicate moment in the history of the Bosphorus Strait. After the collapse of the Soviet Union and the opening of the Caspian oil reserves in the 1990s, the Strait became one of the six busiest oil-shipping choke points in the world, along with the Suez Canal, the Straits of Malacca, Bab el-Mandab, the Strait of Hormuz and the Straits of Dover.

Compared to the other trade routes, however, the Bosphorus Strait is unique as one of the narrowest and most urbanized, as it passes through the heart of Istanbul, a city of fourteen million citizens. To complicate matters even further, the geographic form of the Strait, with its sharp and narrow turns, makes it one of the most risky and difficult channels to navigate in the world. To do so, vessels must change their course at least twelve times with turning angles reaching to 80 degrees at times. Four of these turns are blind corners, which means approaching vessels cannot be seen until it is too late.

Despite the seriousness of the risk, in the 1990s, environmental concerns regarding the transit of colossal oil tankers through this navigational route was conspicuously related to the promotion of the transnational Bakü-Tblis-Ceyhan (BTC) pipeline—as the pipeline was an alternative route to the transit of the Caspian oil through the Bosphorus Strait.[18] And more recently, the risk associated with the tanker passage through the Strait is used as a pretext for the construction of the controversial Kanal Istanbul project, a massive thirty-mile-long canal that will act as an alternative route between the Black Sea and the Marmara Sea. Thus, recalling sociologist Ulrich Beck's claim that "even the most restrained and moderate objectivist account of risk implications involves a hidden politics, ethics and morality,"[19] the risk associated with the tanker passage is ambivalent.

In the end, the "unattractive" oil tanker passing through the fragile picturesque landscape seems to mark this ambivalence of risk. As the number of international ships passing through the city has increased threefold since the 1990s, their unsettling scale is almost flattened and has become a ubiquitous part of the Bosphorus picturesque. Only the occasional errors, accidents in the form of a collision, grounding or fire, have shattered this complacency. These accidents remain the only moments when the visual screen is lifted to reveal the zone of insecurity at the heart of this dense and rapidly growing city.



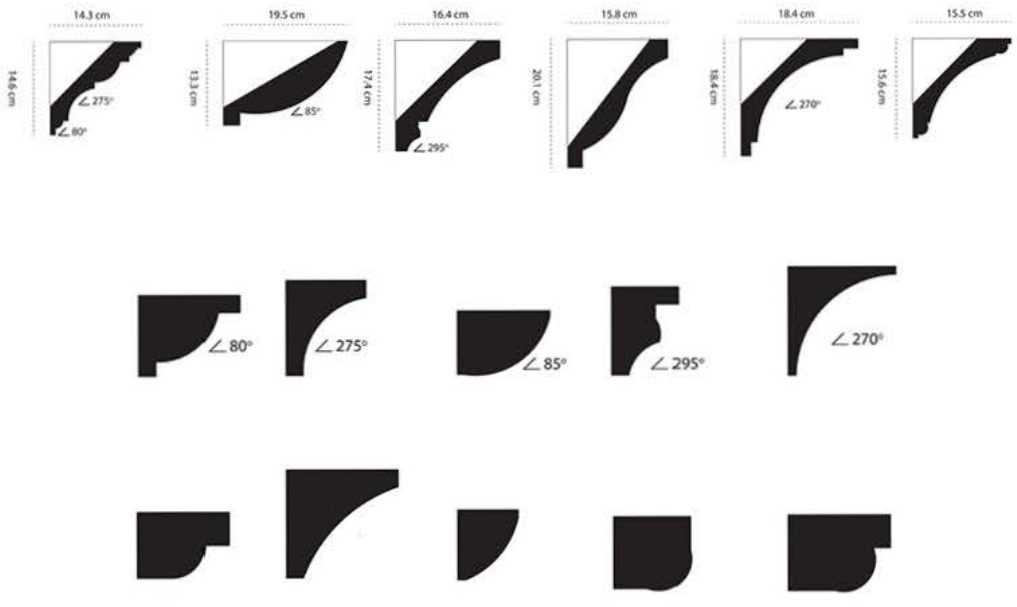
Geographic object. Image courtesy of Neyran Turan.

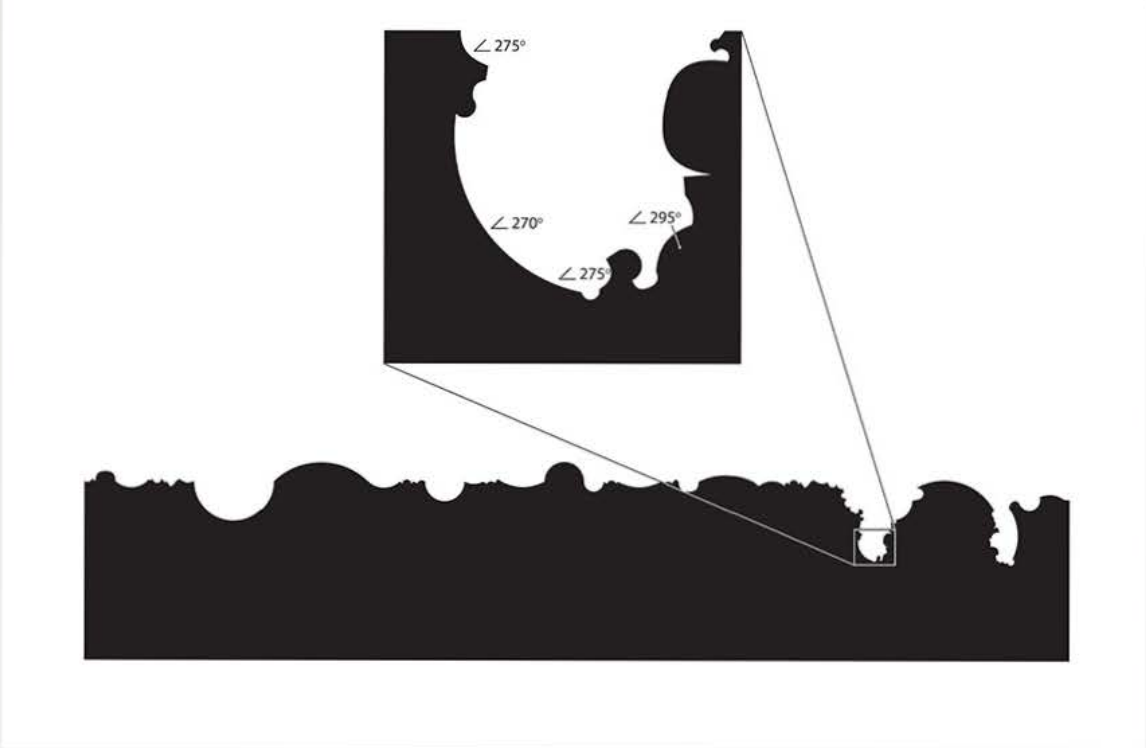
Ninety centimeters through the permeable monolith. Image courtesy of Neyran Turan.

Strait as a monolith. Image courtesy of Neyran Turan.

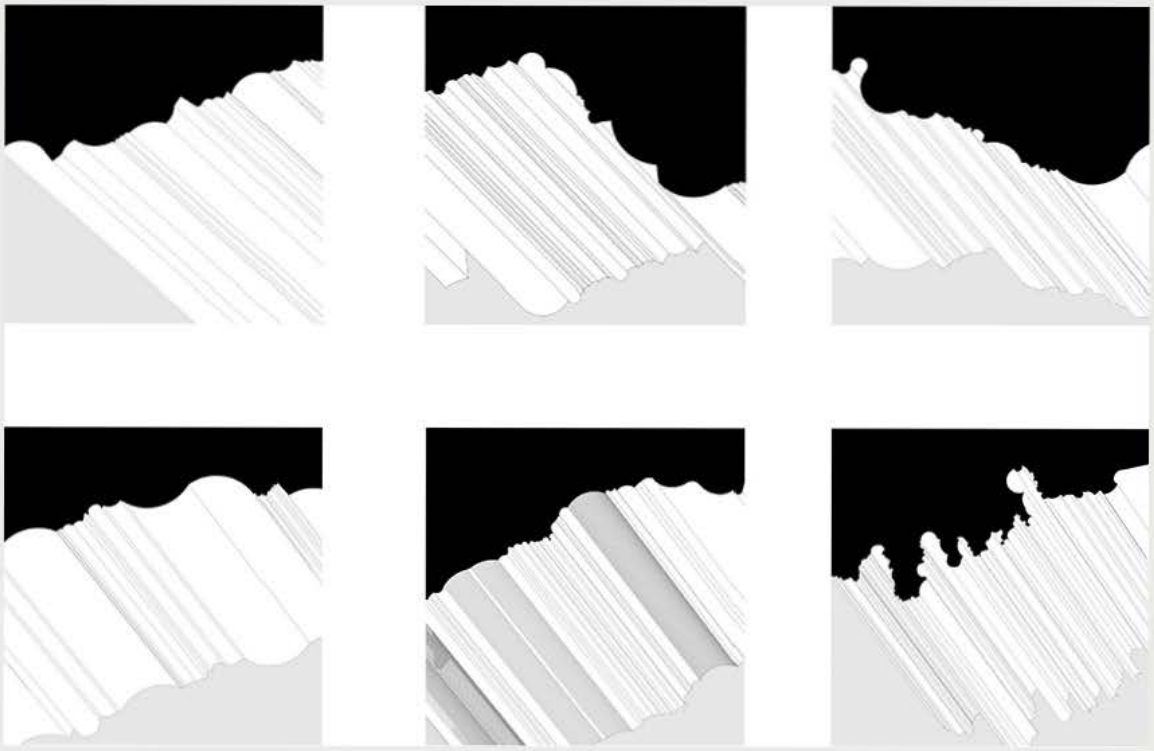
In light of this background, *STRAIT* is an exhibition that renders the Bosphorus Strait through the tangible experience of an installation object and a fiction presented through speculative drawings. [20] Invading the entrance floor of the gallery as an "out-of-scale" monolith, the installation introduces the idea of the "Geographic Object," as an extrusion of the Bosphorus Strait shoreline to the height of the gallery ceiling without articulating its actual topography. The visitor's pathway through the installation evokes the narrowness of the Bosphorus Strait within the language of architecture. The object is scaled so the tightest point in the Strait measures 90 centimeters, the minimum dimension for a door opening. In this way, the object renders the Bosphorus as a constricted experiential condition.

Instead of treating geographic information merely as data, *STRAIT* re-enacts objectification and the role of spatial demarcation as an alternative conception of environment to articulate a more nuanced interaction between aesthetics and geography. As an abstraction of geographic information as a "para-empirical" phenomenon, the object renders the Bosphorus simultaneously more tangible and more abstract.





Crown-moulding (*kartonpiyer*) as shorelines. Image courtesy of Neyran Turan.



Crown-moulding (*kartonpiyer*) as shorelines. Image courtesy of Neyran Turan.

To amplify the contestation between architectural and geographic scales, the installation reconstructs the crenelated shorelines of the Bosphorus with locally used crown moulding (*kartonpiyer*) section profiles, commonly used as interior ceiling ornamentation in Istanbul. By collapsing the vertical extrusion of geographic information (shorelines) with the horizontal extrusion of a ceiling ornamental profile, the shorelines become both more tangible and more abstracted at an architectural scale. While utilizing the elemental technique of geometric extrusion by way of juxtaposing a plan condition (shorelines) with a section profile (crown moulding), the project sets out a new dialog, as though Superstudio's horizontal extrusion New York profile from the Continuous Monument project (1969) suddenly started speaking with Mies van der Rohe's vertical charcoal extrusion of the plan at his Glass Skyscraper project (1922).

A still from the silent film. Image courtesy of Neyran Turan.

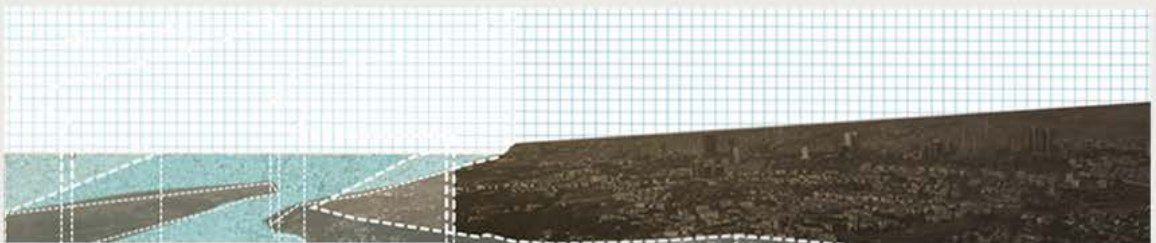
In the exhibition, the installation object is accompanied with the presentation of "Geographic Fiction," a story illustrated through a series of speculative architectural drawings and presented in the form of a silent film. The story depicts an instance in 2025, when *Oilella*, the biggest oil tanker in the world gets stuck in the Bosphorus. This incident not only blocks the passageway forever but also causes the Bosphorus to be transformed into a new land of urban development. In the story, while some structures on the Bosphorus turn into touristic destinations depicting an archaeology of an oil-shipping landscape, new developments take advantage of this rapidly urbanizing land. For new construction, building codes get created by taking *Oilella* as a guideline for the most historical structure, and monuments get built to commemorate previous oil spills on the spots where they happened. Finally, the installation object of the Strait exhibition is presented as the lead character of this particular *noir* narrative.

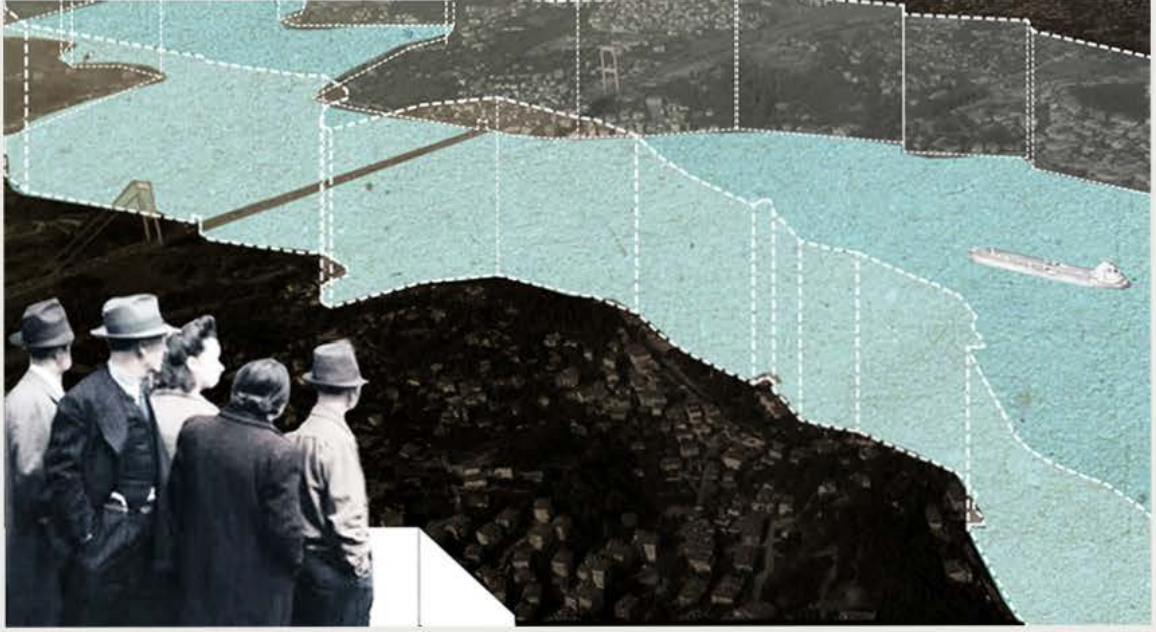
In the end, both the installation object as well as the fiction and its visual representations are *slightly unfamiliar.* That is, while taking their cues from real events, facts and data in the world, they are slightly abstracted or de-familiarized in order to push the limits of imagination through speculative thinking. Similar to Morton's "dark ecology," the object as well as the fiction do not articulate the contemporary urbanism of the Bosphorus through extreme realism (as a Sherlock Holmes detective story, dogmatic process-driven diagrams or righteous scenario-building might) or gentle surrealism. Instead, in an attempt to resemble the realism of, one can see for instance, in painter Edouard Manet's *The Luncheon on the Grass* or photographer Lauren Marsolier's *Transition Series*, the narrative and its representation are real with a slight abstraction/separation from the actual.[21]

Instead of conceptualizing the environment as purely natural, and therefore needing to be preserved and protected, or as merely systemic, and needing to be managed and maintained, *STRAIT* manifests the environment as aesthetic and monumental. By suggesting a non-naturalistic and more monumental conception of the environment, it projects an alternative relationship between the material and the representational. It calls for a new conception of materialism and performance in architecture, one that is *slightly unfamiliar*, strategically suspended between legibility and abstraction.

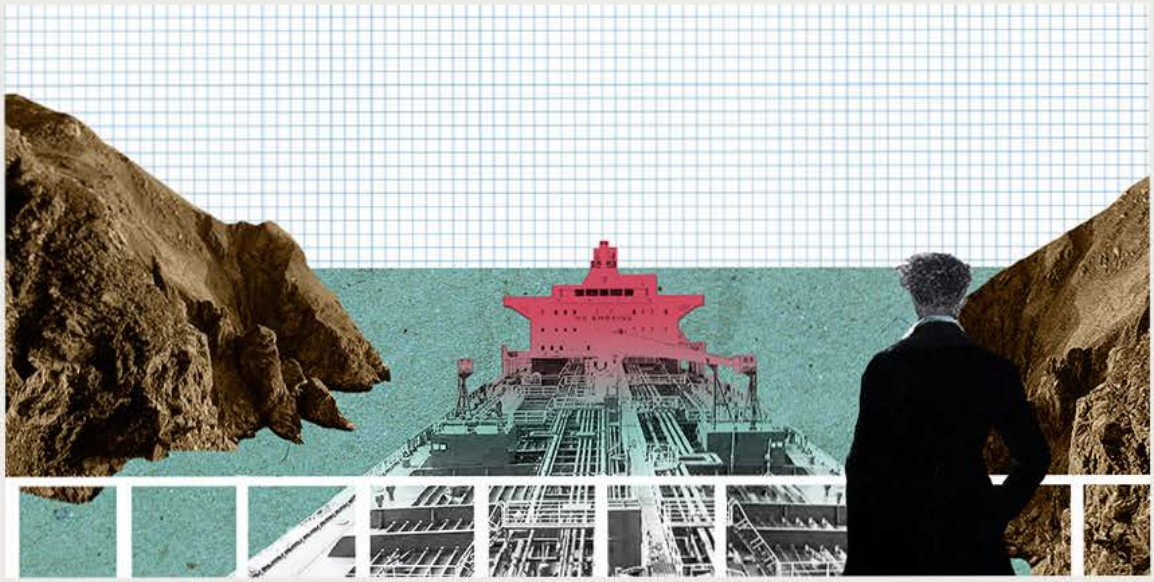
In March 2025, *Oilella*, the biggest oil tanker in the world, arrived in the city of Istanbul. The gazes of the inhabitants turned toward this colossal object that was slowly passing through the Bosphorus Strait. Image courtesy of Neyran Turan.

Following the festive spectacle, something unexpected happened. As *Oilella* continued its journey down the Bosphorus Strait, at the narrowest point, it could not move any farther. The oil tanker was stuck! Image courtesy of Neyran Turan.

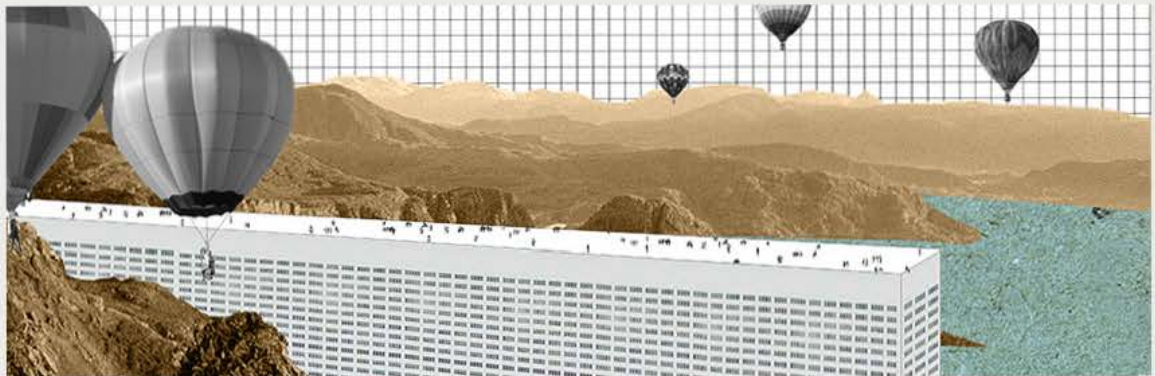


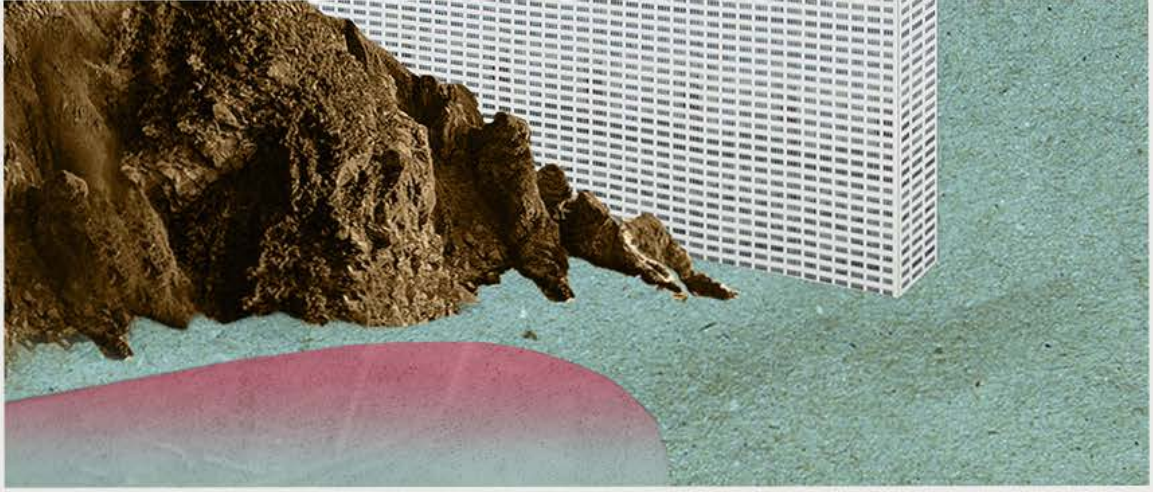


Because the tanker was stuck, the Strait was blocked, allowing no further passage. The Council of New Lands immediately saw this as an opportunity. They thought, if the Bosphorus could no longer function as a passage between the two seas, perhaps it could be repurposed. Excited about the possibility of a new and prosperous land of development, the council started organizing territorial surveys to see how this water passage could be transformed into land. After months of inspection, planning and feasibility studies, it was decided that a giant landfill be constructed in place of the Bosphorus waterway. Image courtesy of Neyran Turan.

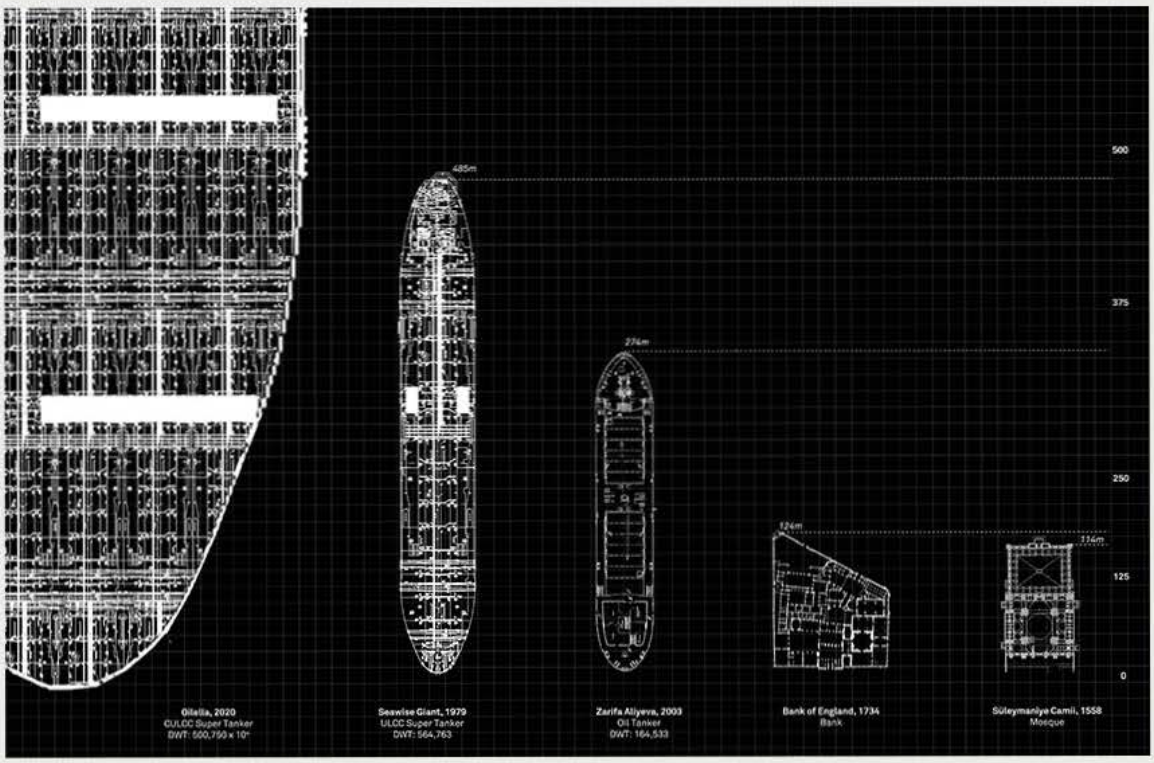


During construction after the Council of New Lands' decree, residents used the top of the *Oilella* to watch a city under construction and in transformation. From these spots, they were able to witness the archaeology of an era that was about to close. Image courtesy of Neyran Turan.

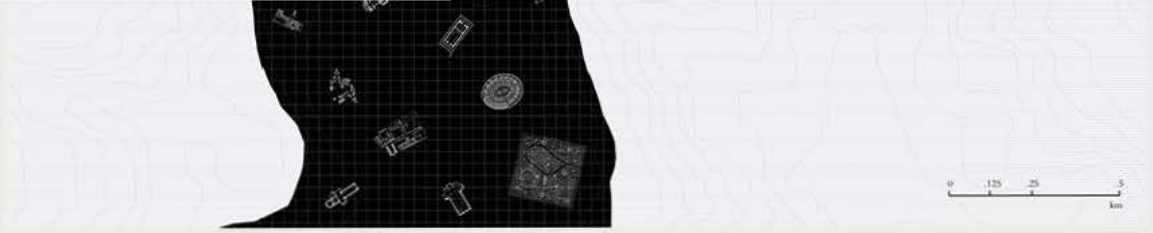




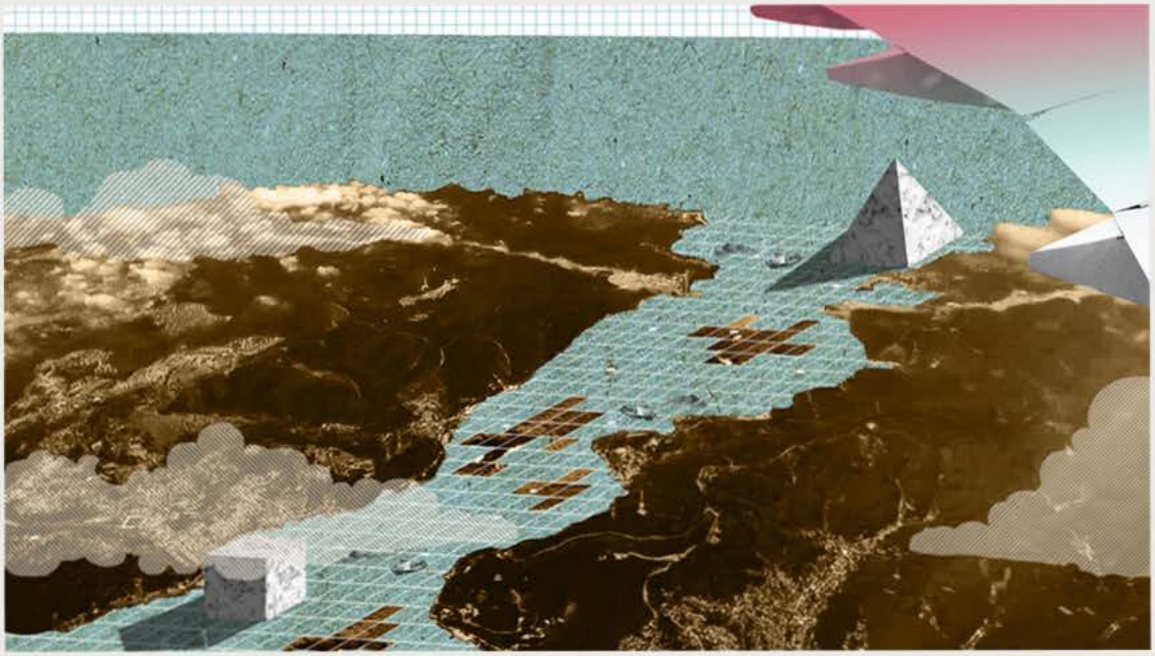
Now that the Bosphorus shores were turned into major development zones, these areas transformed from preservation landscapes to landscapes of real-estate speculation. Numerous hotels, marinas and luxury housing were built on the edge of the shoreline, trying to take advantage of the Bosphorus water, picturesque within its little remaining period of time. Image courtesy of Neyran Turan.



Oilella was now an artifact surrounded by new developments that were ready to take advantage of this rapidly urbanizing land. Because of its historical prominence, for new construction, building codes were created by taking *Oilella* as a guideline. Image courtesy of Neyran Turan.



After the construction, the Bosphorus was now an occupied land. Council of New Lands commissioned various famous architects for new buildings on this location.Image courtesy of Neyran Turan.



In an effort to commemorate the disastrous oil tanker accidents and accompanying spills that occurred on the Strait, various monolithic structures were built at the geographic locations of these accidents. Each monument represented the amount of spill as a platonic volume at the particular location of the accident.Image courtesy of Neyran Turan.

Since the two banks of the Strait were united by a land and did no longer exist, a monument was built to commemorate the original shorelines that dissolved after the infill. The monument was titled the Strait Object.Image courtesy of Neyran Turan.

1. For the emphasis on systems and the dissolution of buildings, see Simon Sadler, "Beyond Architecture: Indeterminacy, Systems and the Dissolution of Buildings," in *Archigram: Architecture Without Architecture* (Cambridge, Mass.: MIT Press, 2005, [91]-138, and Hadas Steiner, "The Architecture of the Well-Serviced Environment," *ARQ: Architectural Review Quarterly 9:2* (2005), 133-43. For the development of "design methods" within the British and North American institutional contexts, see Mary Lou Lobsinger, "Two Cambridges: Models, Methods, Systems, and Expertise," in *A Second Modernism:*

MIT, Architecture, and the "Techno-Social" Moment (Cambridge, Mass.: MIT Press, 2013), 652-85. Also see Sean Keller, "Fenlad Tech: Architectural Science in Postwar Cambridge," *Grey Room* 23 (2006), 40-65. Also see Brendan Moran, "Research," in *Architecture School: Three Centuries of Educating Architects in North America*, ed. John Ockman (Cambridge. Mass: MIT Press, 2013), 386-91. ^

2. One could position Colin Rowe and Reyner Banham as two historians who portray the two ends of this spectrum: historical context (Rowe) vs. environmental context (Banham). For a thorough contextualization of these two figures in relation to the two opposing spectrums they present, see Anthony Vidler, *Histories of the Immediate Present: Inventing Architectural Modernism* (Cambridge, Mass.: MIT Press, 2008). ^

3. Two publications stand as classics to understand this transition and the specific environmental tone of the era. First is Sanford Kwinter and Michael Feher's *Zone 1/2: The Contemporary City (Zone Books, 1986), and second is Stan Allen's "Field Conditions" and "Infrastructural Urbanism" essays published in Points and Lines: Diagrams and Projects for the City (Princeton Architectural Press, 1999). An excerpt from Kwinter and Feher's introduction would be helpful to understand the positioning of the environment as an alternative to the "distinct object" of classical urbanism: "To draw a carp, Chinese masters warn, it is not enough to know the animal's morphology, study its anatomy or understand the physiological functions vital to its existence. They tell us that it is also necessary to consider the reed against which the carp brushes each morning while seeking its nourishment, the oblong stone behind which it conceals itself, or the rippling of water when it springs toward the surface. These elements should in no way be treated as the fish's environment, the milieu in which it evolves or the natural background against which it can be drawn. They belong to the carp itself ... The following texts may be seen as an attempt to draw a picture of the city faithful to the precepts of the Chinese masters. This method differs greatly from the contributions of classical urbanism whose richest achievements remain circumscribed by their morphological or at best, physiological approach. It differs also from most attempts in sociology and political economy to conceive of the city as a site shaped by exterior forces...While classical urbanism is devoted to the intrinsic analysis of a distinct object ... the social sciences perceive the city and its evolution as the product of extrinsic socio-economic laws..." Feher and Kwinter, op. cit., 10-11.* ^

4. Clarence Glacken, *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century* (Berkeley: University of California Press, 1967), vii. ^

5. The term *Anthropocene* was coined in the 1980s by ecologist Eugene Stoermer, but the neologism has become prevalent after chemist and climate scientist Paul Crutzen's adoption of the term in the 2000s. See Will Steffen et al., "The Anthropocene: From Global Change to Planetary Stewardship," *Ambio* 40, no. 4 (2011a), 739–61; Paul Crutzen, "Geology of Mankind," *Nature* 415 (2002), 23. ^

6. For the historical and contemporary conception of environment as a governable entity and the critique on systemic techno-fixes in relation to contemporary climate change, see Mike Hulme, "Governing and Adapting to Climate: A Response to Ian Bailey's Commentary on 'Geographical Work at the Boundaries of Climate Change'" in *Transactions of the Institute of British Geographers* 33:3 (July 2008), 424-27. For more on the social repercussions of climate change, see Mike Hulme, *Why We Disagree About Climate Change* (Cambridge University Press, 2009). For the history of planetary thinking from the 1960s to our present day, see Ursula Heise, *Sense of Place and Sense of Planet: The Environmental Imagination of the Global* (Oxford: Oxford University Press, 2008). For a discussion of planetary thinking in architecture via the analysis of Constantinos Doxiadis, see Panayiota Pyla, "Planetary Home and Garden: Ekistics and Environmental-Developmental Politics," *Grey Room* 36 (2009): 6-35. For a broader discussion on space exploration, planetary thinking and the conception of a "space-ship earth" in relation to architecture during the 1960s and 1970s, see Peder Anker, "The Closed World of Ecological Architecture." *The Journal of Architecture* 10:5 (2005), 527-52. ^

7. Scott Gabriel Knowles, *The Disaster Experts: Mastering Risk in Modern America* (University of Pennsylvania Press, 2011), 5. For a critique of massive geo-engineering projects that aim to fix climate change, see Clive Hamilton, *Earthmasters: The Dawn of the Climate Age Engineering* (New Haven: Yale University Press, 2014). ^

8. Laura Kurgan, *Close Up at a Distance: Mapping, Technology and Politics* (New York: Zone Books, 2013), 13. Also see Lisa Gitelman, *"Raw Data" is an Oxymoron* (Cambridge Mass., MIT Press: 2013). ^

9. Noah Heringman, *Romantic Rocks, Aesthetic Geology* (Ithaca and London: Cornell University Press, 2004). ^

10. Neyran Turan, "New Geographies," in *20/20: Editorial Takes on Architectural Discourse*, ed. by Kirk Wooler (London: AA Publications, 2011), 219-27. ^

11. See James Nisbet, "Planetary Visions: Land Art, Minimalism, and the Whole Earth," in *Ecologies, Environments and Energy Systems in Art of the 1960s and 1970s* (Cambridge, Mass.: The MIT Press, 2014), 67-129. ^

12. "While the classic Sherlock Holmes type is the master, floating above the story knowing the answer beforehand, the noir detective story implicates the detective in the plot. The noir detective finds that he is caught in a story...like history or nature. Ecological politics has a noir form. We start by thinking that we can 'save' something called 'the world' 'over there,' but end up realizing that we ourselves are implicated... Dark ecology undermines the naturalness of the stories we tell about how we are involved in nature. It preserves the dark, depressive quality of life in the shadow of ecological catastrophe, instead of whistling in the dark, insisting that we're part of Gaia, why not stay with the darkness?" Timothy Morton, *Ecology Without Nature: Rethinking Environmental Aesthetics* (Cambridge, Mass.: Harvard University Press, 2007), 187. ^

13. Timothy Morton, *Ecological Thought* (Cambridge, Mass.: Harvard University Press, 2010), 130–31. Also related here might be Jo Guldi and David Armitage's *History Manifesto*, which offers a refreshing critique of short-termism in the writing of history and calls for a renewed conception of *longue-durée and* performance for history writing. See Jo Guldi and David Armitage, *History Manifesto* (Cambridge University Press, 2014). Also see Dipesh Chakrabarty, "The Climate of History: Four Theses," *Critical Enquiry* 35 (2009), 197-222. ^

14. See David Gissen, "More Monumental and Non-Naturalistic Environment," *TARP: Not Nature* (2012), 51-53, and Hashim Sarkis, "*New Geographics*: Notes on an Emerging Aesthetic," in *New Geographies* 0, ed. by Neyran Turan (Cambridge, Mass.: Harvard Graduate School of Design, 2008), 98-109. ^

15. For the concept of *geosophy*, see John K. Wright, "Terrae Incognitae: The Place of Imagination," *Geography Annals of the Association of American Geographers* 37 (1947): 1-15. The *Annales* School emerged in France in the first half of the twentieth century and brought a geographic approach to history, influenced by the regional studies of the geographer Paul Vidal de la Blache. Criticizing traditional anthropocentric history, the anthropological and geographical focus of the Annales School can be observed, for instance, in the work of Lucien Febvre, Marc Bloch, Fernand Braudel and Emmanuel Le Roy Ladurie. While Annalists would later be criticized for their overemphasis on natural history and minimization of individual agency, many environmental historians would follow the tradition of the Annales School in their attention to the active quality of natural phenomena as the discipline was taking form following the 1970s. This tendency may be seen, for instance, in the works of environmental historians Alfred Crosby and Donald Worster. For more on the Annales School, see Alan R.H. Baker, "Reflections on the Relations of Historical Geography and the Annales School of History," in A. Baker and Derek Gregory, eds., *Explorations in Historical Geography: Interpretative Essays* (Cambridge: Cambridge University Press, 1984), 1-28. ^

16. Particularly, more recent attempts to create original linkages between environmental history and science-technology-studies (STS) provide very helpful hints for new methodologies for architectural scholarship. See, for instance, Dolly Jorgensen, Finn Arne Jorgensen and Sara B. Pritchard, *New Natures: Joining Environmental History with Science and Technology Studies* (Pittsburgh: University of Pittsburgh Press, 2013). ^

17. For the background research on this project, see Neyran Turan, "Strait," *MONU: Geographical Urbanism* (2014): 40-45. ^

18. In addition to the annual $200 million revenue that the pipeline would bring from transit fees, possible increased importance of the port of Ceyhan on the Mediterranean was also an important plus for Turkey. The line has cost $4 billion and has a capacity of 50 million tons. With a 30 percent share in the project, BP has been the largest stakeholder and served as acting leader for the project's design and construction phases. ^

19. Ulrich Beck, "Risk Society's Cosmopolitan Moment," *New Geographies: After Zero*, ed. by Neyran Turan and Stephen Ramos (Cambridge, Mass.: Harvard Graduate School of Design, 2009), 25. ^

20. STRAIT has been on view at Forum, the entrance floor of SALT Beyoğlu-Istanbul, during May-August 2015. ^

21. *Lauren Marsolier: Transition* (Kerber Verlag, 2014). Pier Vittorio Aureli, "Manet: Images for a World Without People," *Scapegoat* 3 (2012), 10-11. ^

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