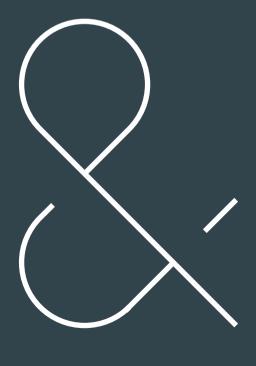
Transient Liquidities along the New Silk Road II GRADUATION STUDIO



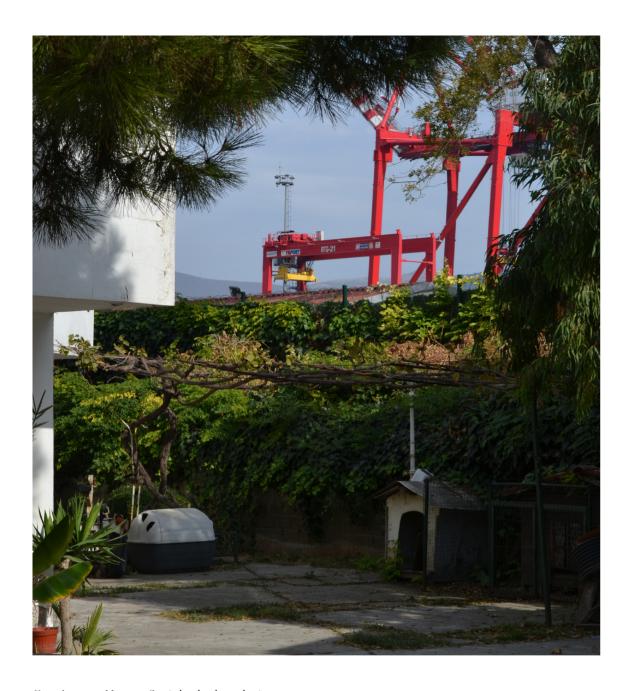
2022 - 2023



'MARITIME TRADE AND THE CLOSED SPACE'

THE SCENOGRAPHY OF A MACHINE

Marilou van Dalen



Container port Marmara Sea (taken by the author)

INTRODUCTION

"The Ocean, tat expanse of war water which antiquity describes as the immense, the infinite, bounded only by the heavens, parent of all things...the ocean which.. can neither be seized nor enclosed; ay which rather possesses the earth than is possessed." Hugo Grotius¹

An Introduction to the Marmara region, a transit area for maritime trade

The international shipping industry is responsible for the carriage of around 90% of world trade and with maritime trade volumes set triple by 2050. ² Shipping is the crux of the global economy and provides important linkages in the network of supply-chains. It is woven into our daily lives, and people have made themselves dependent on it without always realising it. The apple in the supermarket, the car people use every day, and the

telephone that people have become so dependent on, have all been made possible by international trade and shipping.

Because of the strategic geographic location of Turkey, by connecting Asia and Europe, it has become an increasingly important part of the global supply chain. The main mode of import and export in Turkey goes via maritime lines. On cost-effectiveness maritime transportation is compared to other transpiration modes more convenient since it can transport products with larger volumes and because of the lower freight costs. ³

When one looks at the maritime world empires nowadays, one can state that China is playing a major role in the global maritime trade. The Belt and Road Initiative which China introduced in 2013 aims to revitalise the historical Silk Road with an emphasis on the seaway route. China has already

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¹Grotius, H. & Magoffin, D. R. V. (1916). The Freedom of the Seas: Or, the Right Which Belongs to the Dutch to Take Part in the East Indian Trade: A Dissertation (1608ste editie). New York: Oxford University Press p.37

^aShipping and World Trade: Largest beneficial ownership countries. (z.d.). Retrieved from van https://www.ics-shipping.org/shipping-fact/shipping-and-world-trade-largest-beneficial-owner-ship-countries/

³Dördüncü, H. (2022). The Analysis of Turkey's Foreign Trade Based on the Modes of Transportation and the Marmara Region Impact on Foreign Trade Taşıma Modlarma Göre Türkiye'de Dış Ticaretin Analizi ve Marmara Bölgesi'nin Dış Ticarete Etkisi (article). Urban Academy.

claimed ownership of a big part of the Mediterranean shores. 4 For China the Eastern Mediterranean functions as a channel for it's maritime and land-based supply chains from China towards destinations in Europe like Brussels, Berlin, Budapest, Roma and Rotterdam. Turkey is the second country in which China has the highest trade volume after Russia. 5 Therefore, approaching the notion of marine trade with reference to infrastructure and infrastructure space, will substitute to the understanding the Marmara region.

This paper will investigate maritime trade,- and the role of ports. It provides a deeper understanding of the infrastructure of the maritime trade networks, the position of ports within the territorial space of maritime trade, and how these themes are relevant in relation to contemporary architectural discourse. To begin with, it is essential to understand the deeper meaning of infrastructure and to give the graduation project a theoretical framework this paper will provide different theoretical perspectives. To analyse the topic of

infrastructure and spatial products within the scope of maritime trade, three different academic perspectives will be examined. In the first chapter, the notion of infrastructure space will be introduced. The various zones of exemption which are formed around these infrastructure space will be examined. The second chapter jumps to another scale within Keller Easterlings infrastructure theory. It addresses the notion and importance of the container port and its structures, a port seen as a spatial product. The third chapter conceives the sea, a new form of global city as the logistic city.

This theoretical research contemplates several concepts and perspectives on infrastructure and spatial products that interrogate the notion of maritime trade and container ports. By using the theoretical framework to unfold the characteristics of maritime trade and container ports it could help with gaining knowledge for the next project steps.

_INFRASTRUCTURE SPACE

The word "infrastructure" typically conjures associations with physical networks for transportation, utilities. communication. or Infrastructure is considered to be a hidden substrate, the binding medium or current between objects of positive consequence, shape and law. Yet today, the shared standards and ideas that control everything from technical objects to management styles also constitute an infrastructure. Far from hidden, infrastructure is now the overt point of contact and access between us all—the rules governing the space of everyday life'. 6

Infrastructure space, in the scale of global trade network Behind all parts that form the world around us, like parking places, driveways, resorts, cash machines and container ports, lies a matrix of details a repeatable formulas that generate most of the space in the world. Easterling calls it infrastructure space. ⁵ It behaves like a spatial software, and it became a medium of information. Although we do not always see the agency of

Container port Marmara Sea (taken by the author)



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^{&#}x27;Turkey is the second country in which China has the highest trade volume after Russia'

⁴Erdogan, O. & Cetin, O. (2021). The Effects of Maritime Transport on the Turkish Economy. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3880804

⁵Turkey leads world in exports to Russia since start of war - NY Times. (2022, October 31). Retrieved from https://ahvalnews.com/russia/turkey-leads-world-exports-russia-start-war-my-times

⁶ Easterling, K. (2016). Extrastatecraft: The power of Infrastructure space (Reprint ed.) Verso. p.1

all the static objects and spaces in urban space, it is still part of a bigger operating system that is shaping the city. It is not per se the content but the content manager that is dictating the rules of the game in the urban milieu. The infrastructure space is an updating platform that is constantly reacting on new circumstances. 5 Keller Easterling discusses largescale spatial organisations like infrastructure projects, as a site of multiple overlapping, or nested forms of sovereignty, where domestic an transnational jurisdictions collide , infrastructure space becomes a medium of what might be called

extrastatecraft. 7 Hence, she calls the dominant software making urban space nowadays as 'the free zone' a formula that operates under authorities indecent form the domestic laws of its host country, the zone typically provides premium utilities and a set of incentives, - tax expeditions, foreign ownership of property, streamlined customs, cheap labor and deregulation of labor or environmental laws - to entice business. 8 It is here that the global power players are hidden to play their game in the free zone. Yet, it is this place where the state is interested in, fundamental to partner with it so it can benefit from the same systems to serve as a camouflage for activities off the radar.

The Free Trade Zones, is used by container ports and other developments to bypass the jurisdictional power of the state. Since the 1970s the zone had become a more thoroughly abstract and formulaic instrument now distinct form the maritime spaces that had previously shaped trade. 9 The zone has been the ground for the so called 3D jobs (dirty, dangerous, and demanding).10 Countries use it to compete in the race for the most 'attractive' working environment, enabling companies to earn the most money out handling commodity. In the next chapter infrastructure space will be unfolded into spatial products, where it will be implemented in the notion of ports and as being spatial products.

_SPATIAL PRODUCTS

"Spatial products aspire to establish worlds or global regimes - domains of logic that are given franchise to expend their territory with non national sovereignty, they desire to be worlds unto themselves. Self reflexive and innocent of politics. They exist outside normal constituencies

and jurisdictions - in difficult political situations around the world." ¹¹

How container ports embody spatial products and can be unfold as worlds designed with software.

In the study of architecture spatial products are often treated as banal or not responding to the architectural language. And indeed, argued by Easterling these formats are often only a by-product of data and logistics. Yet, when they are adopted by rogue nations, cults, diplomats and other impresarios, even the most perfunctory spatial products are imbued with maths, desires and symbolic capital. They main gain entry into any situation. 12 In the context of the world of maritime trade the port as being a spatial product could be a relevant object to be studied. As an architectural student this study could be seen as a non architectural direction. However, this is foolish, as Keller Easterling states, architecture presumably has more to learn than to teach in the study of global politics. It could contribute to some vivid evidence of another set of mechanisms, perhaps as telling as financial and political indicators in characterising the market's weakness, resilience, or violence. 13

Ports of all sizes and importance, together with the sea as territory, form the global network of maritime trade. Therefore it is not a unique object on itself. Although it has is own specific characteristics, to dismantle the port and seeing it as a spatial product and part of infrastructure space, it is evident to conceive the design as a software. The designer of this software, as Keller Easterling calls the 'new orgman', designs the software of every game off spatial production in a way that it can be played the same way on every location. 14 Genius loci is ignored. This software is designed on the basis of statistics like flight distances, weather forecast, labor costs, and cargo characteristics. Félix Guattari argues that architecture is a technology - the medium of open platform storing both structure and content. The information it stores as, both data and persuasion, is literally a product, property, or currency.¹⁵ Hence, implying this on a container port, it could be identified as a spatial product that contains a

⁷Easterling, K. (2016). Extrastate eraft: The power of Infrastructure space (Reprint ed.) Verso. p.13

⁸ Easterling, K. (2016). Extrastatecraft: The power of Infrastructure space (Reprint ed.) Verso. p.14
⁹ Easterling, K. (2016). Extrastatecraft: The power of Infrastructure space (Reprint ed.) Verso. p.25

¹⁰Easterling, K. (2016). Extrastatecraft: The Power of Infrastructure Space (Reprint ed.). Verso. P42

 $[\]label{lem:mass} \begin{tabular}{l} "Easlinterg, K. (2007). {\it Enduring Innocence: Global Architecture and Its Political Masquerades} (The MIT Press) (Illustrated). The MIT Press. p.4 \\ \end{tabular}$

¹² Easterling, K. (2007). Enduring Innocence: Global Architecture and Its Political Masquerades (The MIT Press) (Illustrated). The MIT Press. p.1

 $^{^{13}}$ Easterling, K. (2007). Enduring Innocence: Global Architecture and Its Political Masquerades (The MIT Press) (Illustrated). The MIT Press, p.1

¹⁴ Easterling, K. (2007). Enduring Innocence: Global Architecture and Its Political Masquerades (The MIT Press) (Illustrated). The MIT Press, 1 p.2

⁶ Easterling, K. (2007). Enduring Innocence: Global Architecture and Its Political Masquerades (The MIT Press.) (Illustrated). The MIT Press. 1p.2-3

 $^{^{16}}$ Easterling, K. (2007). Enduring Innocence: Global Architecture and Its Political Masquerades (The MIT Press) (Illustrated). The MIT Press. 1 p.4



Container port Marmara Sea (taken by the author)

software which is composed by data and statistics. Data of amounts of cargo it needs to load-, and unload, data of how deep the ships lay in the water, or data of how profitable owning a terminal could be. If one would use it as a computer and play the spatial game it could control and manipulate the data which could have major importance.

Worlds

'World is a plural condition. There is no one world - only many worlds' Keller Easterling Spatial products aspire to establish worlds or global regimes - domains of logic that are given franchise to expand their territory with non national sovereignty. ¹⁶ The boundaries of these worlds deserve a critical perspective, they include - but also exclude, they are capable of expanding, extending but also when necessary tighten. ¹⁷ The territory where various worlds hit each other is where the friction and

segregation is happening. These spaces formed by fences, and uneven developments, are to be ought of value for understanding the territory of 'worlds and spatial products'.

_WHOEVER CONTROLS THE SEA RULES THE WORLD

The cargo containers are everywhere, mobile and anonymous: 'coffins of remote labour-power', carrying goods manufactured by invisible workers on the other side of the globe. For apologists of globalization, this flow is indispensable for the continued prosperity of the West and for the deferred prosperity of those who labour, so far away. But perhaps this is a case for Pandora—or for her more clairvoyant sister, Cassandra.' ¹⁸ How the sea functions as territory hosting a mechanism for the global spread of capitalism

The sea, no longer the peripheral territory of the state, shapes a new form of global city- the logistic city. Keller Easterling designates the headquarters of this logistic city as "parks" or materializations of digital capital that resides on the network side the computer screen. She names the aggregate units of this new global conurbation the "distriparks", such as the automated enclaves that sort and redistribute the contents of containers for e-commerce. 19 Within the notion of the logistic city, the automated devices are necessary for the seamless and increasingly efficient movements of goods and rapid transit to achieve omnidirectional movement.20 Most of the system is automated nowadays, like an increasingly automated machine. Everything in the sake of efficiency, because time is money and is it not the motive of this machine, that spreads capitalism. The industry entitled "materials handling" is deployed by Automated Guided Vehicles (AGVs), which are matured in the military, are now devised of logistics. 21 The megaships that inhabit the ports have nearly doubled it's capacity as a consequence this demands for increase in efficiency. To fulfil this

demand, ports are surrounded by "distriparks". Moreover they attract intelligence office space, export processing centres and IT campuses. A good example is the SMART Port, Rotterdams so called 'rock-solid combination of Global Hub and Europe's Industrial Cluster - both leading in the field of efficiency, quality and sustainability'.22 Their goal is to be the smartest and first in class port worldwide in 2030. Several distriparks form a hub of partnership between the Port of Rotterdam Authority, Deltalings, the Municipality of Rotterdam, the Erasmus University, Delft University of Technology, TNO and Deltares. The logistic city tries to stay off the radar of political jurisdiction. This is not done by locality but its positioning within a global network of identical enclaves managed by autonomous infrastructure. One could say that they are places of exemption, but surely not free of lewd practices, like piracy, tax sheltering and labor exploitation. Therefore it is a powerful entity susceptible to be subject of political discussions.

Coming back to efficiency, in the case of maritime trade, one can juxtapose this with the obsession for

sorting and stacking behaviour. All major container ports try to compete with one another, Rotterdam, Shanghai, Los Angeles, Hamburg and Antwerp all admire to be at the top of the ranking. The terminals are over regulated, completely wired, producing and correlating data about every aspect of shipping. The stacking cranes work day and night on the maximum speed of handling cargo. They are automated but observed by a small team in a control tower.23 This extreme form of efficiency and over achievement is to meet the needs of the highly competitive commodity chains. Commodity chains compete with each other by looking for the cheapest labor, and efficient material handling. 23 As a result, parts and raw materials are first shipped around the world to be processed and manufactured as cheap as possible in countries where labor costs are low. To eventually end up in prosperous countries as an end product. This means that the supply chain becomes extremely long and large shipping distances are covered.

To store all cargo, container ports are equipped with enormous warehouses. They behave like machines where storage is easily

¹⁷Easterling, K. (2007). Enduring Innocence: Global Architecture and Its Political Masquerades (The MIT Press) (Illustrated). The MIT Press. 1 p.5

^{**} Sekula, A., & Burch, N. (2011). The Forgotten Space: Notes for a Film. New Left Review, 69, p.17
** Easterling, K. (2007). Enduring Innocence: Global Architecture and Its Political Masquerades (The MIT Press) (Illustrated). The MIT Press. 1 p.99

²⁰ Easterling, K. (2007). Enduring Innocence: Global Architecture and Its Political Masquerades (The MIT Press) (Illustrated). The MIT Press. 1 p.100

³¹ Easterling, K. (2007). Enduring Innocence: Global Architecture and Its Political Masquerades (The MIT Press) (Illustrated). The MIT Press. 1 p.100

²² About us. (2021, 16 november). Geraadpleegd van https://smartport.nl/en/over-ons/

³³ Easterling, K. (2007). Enduring Innocence: Global Architecture and Its Political Masquerades (The MIT Press) (Illustrated). The MIT Press, 1 p.102

 $^{^{\}rm 24}$ Easterling, K. (2007). Enduring Innocence: Global Architecture and Its Political Masquerades (The MIT Press.) (Illustrated). The MIT Press. 1 p.104

stacked and sorted by stacking devices moving in horizontal en vertical ways. Warehouses no longer consist of standard floors but the floors are designed to work with robotic gantries and are part of an intelligent navigation system. As Keller Easterling describes, these automatic warehouses also literally perform like the motherboard of a computer, combining and redistributing goods as bytes and containers like software containers.²⁴

_CONCLUSION

It is not about good or bad. It is about the notion of the expansion of this enormous network of maritime trade and all related developments. We can not ignore the spatial,- social,- and political impact of this extremely automated global machine. Therefore, having a better understanding of it could perhaps help with awareness and making the right choices. Ships, containers, barges, train, ports and trucks all connect the international supply chain. When we order something only or buy a shirt in the shop are we aware of the world that lies behind it. It is inevitable that these metal boxes of containers will stay floating on the horizons of the sea. But if we design the software of the machine in the right way it could perhaps decrease the negative side effects. Like the shady business happening in the free zones. But is it truly possible to solve these problems and is it even is it even necessary to oppose this. Allan Sekula calls it "a forgotten space". But is it really forgotten or is the leaders of the global trade network whom try to make

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p.37

The graduation studio 'Border Conditions along the New Silk Road' focusses on sites where spatial conditions have emerged that are 'teeming with suggestive meanings and unexpected potential' but are hardly analysed within contemporary architectural discourse. The studio investigates contemporary border conditions within the larger urban and territorial scale, with a special emphasis on the relationship between architecture and its socio-political context(s). B&T views the

contemporary city as an 'urban universe' of spatial conditions, which consists of constellations of elements seemingly without any relative weight. To think of an 'architectural project' in such a context means to engage in a speculative approach directed to alternative formulations of architecture, all based on a fundamental understanding of fragmentation and complexity. In the graduation studio, these new reformulations are instigated by, and at the same time applied to the controversial 'New Silk Road'.

