Research Plan

Borders and Territories Graduation Studio

AR3A010 Research Plan MSc Architecture, Technische Universiteit Delft

Weiming Yin 5255252

Academic year 2021/2022

Supervisors: dr. ir. Marc Schoonderbeek dr. ir. Negar Sanaan Bensi dr.ir. Heidi Sohn

Table of Contents

Abstract	3
Keywords	3
Introduction	4
Problem Statement	4
Theoretical framework	5
Research Questions	6
Methodology	6
Reflection	7
Bibliography	8

The threshold of time: places where different space-time experiences intersect in the case of Marseille

Abstract

Supported by a ceaseless exchange of matter and information, modern cities operate at a speed beyond what is humanly perceptible and understandable. In his extensive research, the French philosopher and urbanist Paul Virilio has identified the different flows of speed and their collision as the primary factors driving the city.¹ In the case of Marseille, as a transit city, its urban history and landscape are largely defined by the continuous movement of people, resources and goods. Inspired by Virilio's speed theory, this research focuses on the moments when the dynamics of these flows experience transient changes, and the vessels that carry these changes are defined as the threshold of time. By examining the extension in time of such transit vessels, the research will trace how Marseille has adapted and transformed its urban landscape which is extensively defined by topography and mobility.

Keywords

space-time; threshold of time; urban gateway; dromology; cultural topology;

¹ Paul Virilio, Speed and Politics, trans. Mark Polizzotti (New York, USA: Semiotext(e), 2006).

Introduction

In the collective research plan of the Marseille group, the transitional nature of Marseille as a port city is the starting point for its multiplicity of interpretations. "Other spaces" such as ports, quarries and electricity stations have defined the ways in which ideas and materials are exchanged in the city. Inspired by the entangled relationships and flows in Marseille, the interest of this study is deeply anchored in the crucial nodes that control these exchanges.

Problem Statement

In *Speed and Politics*, Paul Virilio creates the term *dromology* to describe the "study and analysis of the increasing speed of transport and communications on the development of land-use".² Considering speed as the sole driven factor of modern civilisation, Virilio analyses the transition places in the city like tollbooths where the "restless logistics" switch speeds.³ These transition places, defined as "threshold of time" in this research, can be seen as lenses that amplify the various flows, exchanges and conflicts that drive the operation of the city. As Virilio puts it, these thresholds are all "uncertain places because they are situated between two speeds of transit, acting as brakes against the acceleration of penetration".⁴ While seen as the valve for urban governance, the thresholds of time are often the grounds where radical change takes place in the city, from the reshaping of the topography to the inflow of migrants.

As a transit city with a long history, a large number of thresholds where different speeds meet have defined the border conditions in Marseille. For instance, the Marseille Transporter Bridge, as the physical embodiment of Marseille's role as the gate of France to the Orient, was used as an example by Sigfried Giedion to "embody new perceptual experiences of fragmentation and discontinuity in modern architecture".⁵ This early modernist idea of a fragmented space-time experience is further distorted today with the spread of global transportation and logistics networks. Understanding the city of Marseille as a hub of exchange of matter, energy and ideas, this research investigates how Marseille has shaped and reshaped its urban landscape as a major gateway along the New Silk Road through the space-time relation of speed collisions.

Examples of threshold of time abound in Marseille. Containers travel at a constantly switching speed through the logistics network of the port. The roundhouse of the train station slowly intercepts trains moving at high speed. Hundreds of millions of years of slow-forming rocks are moved from the quarries that spread across the edge of the city to the busy construction site of social housing. The vast amounts of data generated by social media are transferred at the speed of light to the data centre in the heart of the city and are sealed in hard drives. These seemingly unrelated spaces of speed conflict, nurtured by modern

² Paul Virilio, Speed and Politics, 8.

³ Ibid, 33.

⁴ Ibid.

⁵ Gearóid Barry, "Mediterranean Crossroads: Marseille and Modern Architecture," H-France Review Vol. 13, no. 84 (2013): pp. 1-4, 1.

technology, have not yet been sufficiently examined while having ecological-social consequences that cannot be ignored.

Theoretical framework

To anchor the notion of "threshold of time" into architectural discourse, the following interrelated texts concerning space-time relations together build up the theoretical framework of this research. Firstly, *Architecture of Time* by Sanford Kwinter, which starts from the spatialisation of time, depicts the notion of a fluid and plastic space-time relation driven by movement since modernism.⁶ To follow, *Speed and Politics* by Paul Virilio, which introduces the term *dromology*, examines how flows of speed penetrates and dominates every aspect of the operation of today's city while manipulated in a space-time context.⁷ Lastly, *Spatial Questions: Cultural Topologies and Social Spatialisations* by Rob Shields, which deals with the social spatializations in time through the scope of topology, offers a model for "mapping the dynamics of spatial manifold as well as time".⁸

While *Architecture of Time* introduces the "spatialisation of time" through the measurable and manageable time in modern society, *Speed and Politics* points to the replacement of space by time which could be considered as the "temporalisation of space".⁹ These two opposing positions reflect the ubiquitous but often neglected production-transportation networks in the modern city. As a tool for coordination, the topological approach offered by *Spatial Questions* provides a potential to consider the concepts of time and space in parallel (figure 1).¹⁰



Figure 1. The time-space compression of the French territory caused by the new means of transportation.¹¹

⁶ Sanford Kwinter, Architectures of Time: Toward a Theory of the Event in Modernist Culture (Cambridge, USA: The MIT Press, 2003), 4, 21.

⁷ Paul Virilio, Speed and Politics, trans. Mark Polizzotti (New York, USA: Semiotext(e), 2006).

⁸ Rob Shields, Spatial Questions: Cultural Topologies and Social Spatialisations (Los Angeles, USA: Sage, 2013); Rob Shields, "Cultural Topology: The Seven Bridges of Königsburg, 1736," Theory, Culture & Society 29, no. 4-5 (2012): pp. 43-57, https://doi.org/10.1177/0263276412451161, 43.

⁹ Kwinter, Architectures of Time; Virilio, Speed and Politics.

¹⁰ Shields, Spatial Questions

¹¹ Christophe Mimeur, "Evolution des distorsions spatiales par l'accessibilité à Paris entre 1860 et 1930," in "Les traces de la vitesse entre réseau et territoire: approche géohistorique de la croissance du réseau ferroviaire français," (PhD diss., Université de Bourgogne, 2016), 268.

Research Questions

- 1. How do the cumulative speed collisions in these thresholds shape and reshape the urban landscape of Marseille? Have these intense collisions caused the emergence of new boundary conditions?
- 2. Do these thresholds of time work together (or separately) as a network of valves for the urban governance in Marseille? In what crucial places and times do these valves emerge? What do they identify, filter, accelerate and decelerate?
- 3. What role do the architectural elements of these thresholds play in the radical transformation of the city of Marseille through the manipulation of speed? Are they accelerators, brakes, or gateways? By what mechanism do they operate and what consequences do they lead to?



Figure 2. Research design diagram.

Methodology

In the group mapping previously conducted, the facilities that act as gateways in terms of migration, logistics and transport are key factors in defining Marseille today. Through the fore mentioned theoretical framework, the city of Marseille is further understood as a manifold that has been continuously reshaped throughout history, with the thresholds of time playing a role as mediator. Consequently, the flows of speed in a temporal-topological perspective becomes the entry point for this research. In order to examine the themes addressed in the problem statement and research questions, several major research methodologies are adopted. Firstly, phenomenology and praxeology are used to investigate people's perception of the thresholds network as well as their behaviour within it. Next, semiology allows for the investigation of the role of architectural elements in these thresholds. Finally, topology helps to capture the interaction between thresholds of time and urban landscape in a dynamic space-time setting.

Along with the research methodologies mentioned above, in the second phase of the semester, a parallel written theory paper will define a critical position for the research. In the individual mapping, particular attention will be paid to the processes of speed change of

the various flows as they pass through the threshold of time, which stresses on the depiction of how they are decelerated, captured, released, and then accelerated. As a closing mark for the semester, MODI OPERANDI workshop will turn the lens of research to more physical elements, providing a reflective transition from research to design proposal (figure 2).

Reflection

In *Ninety Percent of Everything*, Rose George reveals the never-ending network of shipping hidden at the edge of today's cities.¹² Globalization, nurtured and supported by shipping and the Internet, has triggered newly surfaced space-time flows in the city, the speed and scale of which have far exceeded the context in which Paul Virilio proposed his dromology theory in the 1980s. This study attempts to expand Virilio's position in a contemporary context by reflecting on the mechanisms and consequences of speed racing in different flows when faced with switching controls, through the case of Marseille. However, it is worth reflecting on how to look at those "loopholes in the system". Are the people, materials and vehicles that have escaped those thresholds of time being left behind by the speed racing? Or have they actually developed a different regulatory mechanism than the "official" one?

¹² Rose George, Ninety Percent of Everything (New York, USA: Metropolitan Books, 2013).

Bibliography

Appleyard, Donald, Kevin Lynch, and John Randolph Myer. *The View from the Road*. Cambridge, USA: The MIT Press, 1971.

Barry, Gearóid. "Mediterranean Crossroads: Marseille and Modern Architecture." *H-France Review* Vol. 13, no. 84 (2013): 1–4.

Cosgrove, Denis. "Landscape and Landschaft." *Spatial Turn in History*. Lecture presented at the German Historical Institute, Washington, USA, 2004.

George, Rose. Ninety Percent of Everything. New York, USA: Metropolitan Books, 2013.

Kwinter, Sanford. *Architectures of Time: Toward a Theory of the Event in Modernist Culture*. Cambridge, USA: The MIT Press, 2003.

Mimeur, Christophe. *"Les traces de la vitesse entre réseau et territoire: approche géohistorique de la croissance du réseau ferroviaire français."* PhD diss., Université de Bourgogne, 2016.

Shields, Rob. "Cultural Topology: The Seven Bridges of Königsburg, 1736." *Theory, Culture & Society* 29, no. 4-5 (2012): 43–57. https://doi.org/10.1177/0263276412451161.

Shields, Rob. *Spatial Questions: Cultural Topologies and Social Spatialisations*. Los Angeles, USA: Sage, 2013.

Teyssot, Georges. *A Topology of Everyday Constellations*. Cambridge, USA: The MIT Press, 2013.

Virilio, Paul. *Negative Horizon: An Essay in Dromoscopy*. Translated by Michael Degener. New York, USA: Continuum, 2008.

Virilio, Paul. *Speed and Politics*. Translated by Mark Polizzotti. New York, USA: Semiotext(e), 2006.

Source of figures

Figure 1. Mimeur, Christophe. "Evolution des distorsions spatiales par l'accessibilité à Paris entre 1860 et 1930," in "*Les traces de la vitesse entre réseau et territoire: approche géohistorique de la croissance du réseau ferroviaire français,*" 268. PhD diss., Université de Bourgogne, 2016.

Figure 2. "Research design diagram," figure by author, 2021.