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*In
Between
Territories*







In between territories

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Abstract

The Spoorzone in Delft is an area that was once occupied by the railway. The historic city grew organically, and later expanded around this transportation hub. Nowadays, the railway is situated in a tunnel underground. Leaving behind a substantial vacant plot in the middle of the city waiting to be reterritorialized.

Given the fact that we live in a rapid changing society, the question arises how to develop a substantial plot in the city in a durable way. How to approach a design project on a site that once was a border in between territories and is able to keep up with rapid changes that characterize our time. This research proposes a shift in thinking to approach the design as a dynamic process rather than a final image. This research is about thinking in territories.

The goal of this research is to see architecture as dynamic. The main question therefore reads as follows: 'How can an architect change its view on architecture from static to dynamic, and become able to trigger a perpetual re-assembling of space, by using territoriality as a working concept?' The answer to this question will be explored by two ways of working. A theoretical and practical one. The practical part will be examined in the design project. This paper is the theoretical part and consist of a literature review in the field of philosophy (focussing on Deleuze and Guattari) and design studies. Concepts as territory and in-between are examined in detail to gain a basic understanding and help the reader to approach architecture from a different angle.

The main finding is that a building can be approached as subject producing. Encounters between the subject and the building are affective and determine what a body can do and what it can undergo. By thinking in territories, it is possible to discover affects and to open up multiple possible outcomes of encounters between



subject and physical environment. By being able to see architecture as dynamic, a building can be seen as durable, because of being able to trigger a perpetual re-assembling of use of a space.

The research is organized along a structure that moves from explaining the tiniest ingredients of a territory to the reassembling in new circumstances. This is done by breaking down, including and excluding, and finally re-assembling the components of a territory. The structure serves as a method for the design project. The transition to the design will be made by constantly following these steps and evaluating them.

Keywords

territory, in-between, assemblage, change, occupy, expressive, Deleuze and Guattari, Delft, Spoorzone, architecture



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Introduction

We live in a time which is characterized with rapid changes in our society. Throwaway economy, fast fashion, globalization and digitalization characterize our time. We are used to adapt quickly to new technologies and to the increasing speed in communication.

Yet, architecture feels so static. It is made out of bricks and concrete and it often takes many years to create and it will last even more. Architecture and urban planning are in a phase in which a place can be imagined from scratch. Buildings and urban plans can be induced from above as a fixed image that proposes the ideal situation. The problem that arises, is that such fabricated landscapes, urban plans or buildings tend to have lifetimes that are relatively short (Raffestin, 2012). Once a space does not longer satisfy our needs, the whole area will be transformed. Large scale transformations or demolitions as a result of expired lifetimes produces a lot of waste and consumes energy and materials. Of course, waste and energy consumption do not contribute to the circular economy and the climate goals the Government (The Ministry of Infrastructure and the Environment and the Ministry of Economic Affairs, 2016) is now aiming for.

In the past decades, we have seen that architects have tried to find solutions in adaptability and transformations of buildings, for example: (Brand, 1994; Price, 2003). Also in the Dutch architecture tradition it was very common to address this problem, for example: Habraken (1961) in his book 'Supports an Alternative to Mass Housing', Leupen (2002: 2005) in his dissertation 'Frame and Generic Space' and book 'Time-based Architecture', and Kronenburg (2007) with 'Architecture that Responds to Change' (see chapter 'Notes'). These studies are still relevant and some design principles are still applied today. However, most of the time these studies and designs focus on a physical transformation of the building, because the building

does not fit to the users' needs anymore. It is more interesting is to go a step further than proposing physical adaptability, namely to explore why a building can't keep up with our needs in the first place. How do we perceive a space and why are we willing to use it and keep using it in the future. Is it really necessary to physically transform a space, or could another way of seeing architecture help us to create new opportunities to use a space?

What would it mean to go beyond representation and explore what a building does and keep doing to its users every time the user is introduced into new circumstances. How to change one's view on architecture from seeing it as static to seeing it as dynamic.

Architecture would then be seen in its full proximity and intimacy with the system of forces that give shape and rhythm to the everyday life of the body. Thus the object ...would be defined now not by how it appears, but rather by practices: those it partakes of and those that take place within it. (Kwinter, 2002, p. 14)

Spoorzone in Delft

In between east and west, in between what it was and what it can become, in between neighbourhoods and city centre, in between comings and goings, in between inside and outside; the Spoorzone is in transition.

The Spoorzone in Delft is an area under construction for more than a decade. Since 1840, Delft has been marked by the railway crossing the city from North to South. The railway was seen as a border, dividing the city in East and West. What was once seen as innovative and a fast way of traveling, became a grievance for the city. The city decided to replace the railway viaduct by a railway tunnel and to redesign the whole area. Since 2015 the train has vanished from the urban landscape, and instead runs underground in a tunnel. Today, a long period of planning and urban designing is finally followed up by a transformation of the area that was once occupied by the railway.

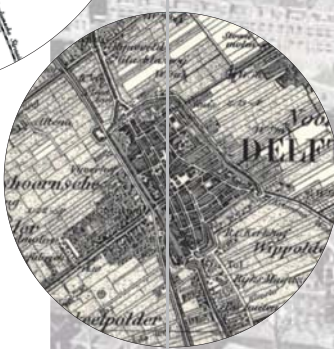
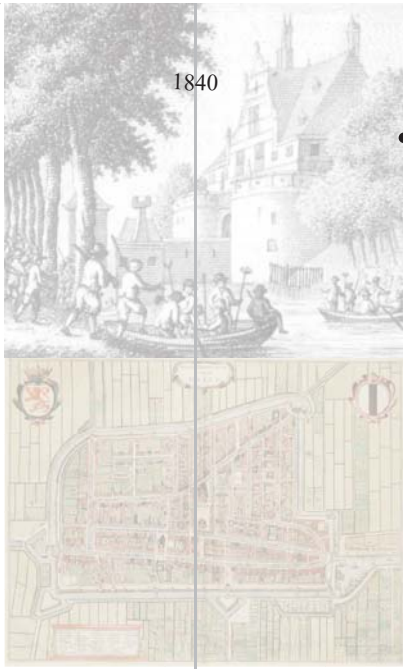
The taking away of the railway has created substantial vacant lot in the urban structure of Delft. In in the previous decade a new design for the Spoorzone was made. Urban designer Joan Busquets (1998) proposed a new urban texture

that approached the area as a white canvas. Unfortunately, the new urban plan for the Spoorzone in Delft was already outdated before the tunnel was even made. The proposed plan was not able to cope with changes in time and didn't contain enough freedom for future developments. The newest urban plan by Palmbout tries to avoid this problem by designing a structure that can be filled in over time. Delft chose for organic way of urban design. That means that the Spoorzone will always be in development, but also will always be finished. There is no final image. The area to be developed will go under the name of Nieuw Delft, which main goal is to reunify West and East of Delft and create highly urban atmosphere that is part of the Randstad. Herewith, Delft hopes to attract knowledge workers and creatives to stay in the city (Bothof, Pijpers, & Burgers, 2015; Gemeente Delft & Ontwikkelingsbedrijf Spoorzone Delft B.V., 2013).

Thinking in territories

A transformation of a substantial area in the city does not only influence the plot itself. A much wider area than a piece of land with determined borders is affected, i.e. the influence of a building does not stop at the aesthetics of the façade. By the radical taking away of the railway, a whole set of daily routines of the citizens are affected. The change in relations between the physical and social environment goes hand in hand with a supply of territory that has lost its function and a demand for territory to take part in new activities (Raffestin, 2012). Pre-existent functions are reorganized into new functions and a new territory appears (Brighenti, 2006). The processes that are at stake are deterritorialization and reterritorialization. Sometimes a reassembly of a territory is partial, sometimes total. The developments in the Spoorzone could best be described as a large scale de-territorialization, waiting to be reassembled.

Territory is a concept that is used in different disciplines. The mainstream view, as used in the political and legal sciences, defines territory as a piece of land under the authority of an agency, for example a government or home owner. The concept of territory as examined in this paper considers territory as "*a series of relational phenomena*" (Brighenti, 2006, p. 66). In this context the physical-spatial dimension, land, is at most its container or support. Territory is used by Deleuze and Guattari to describe "*how living beings create a space for themselves to maintain*



inhabitans

1840

1870

1900

1930



Illustration 1: development of the railway in relation to urban development and to the amount of inhabitants

their existence” (Kleinherenbrink, 2015, p. 210). Deleuze and Guattari elaborated on Spinoza’s philosophy, that things can never be seen separate from their relations, by connecting it to an ecological thinking applied to human beings (Thrift, 2008). The theory of ethologist Jakob von Uexküll was an important source of influence for the duo. Uexküll’s work focused on animals and their perception of the world, which he called an Umwelt. Deleuze and Guattari applied this thought to human beings.

Rather than a piece of land, territory is considered as virtual and imagined; as a mode of organization; as an order that comes in different scales and visibilities and mixes human and non-human relations; as an act, as action and reaction between human beings and their environment; as a way of marking ownership and occupation; as a processes of including and excluding. Territory is therefore utterly relational and social. The most important aspect of a territory is territorial openness. A territory is always incomplete. A territory is bounded but cannot be delimited. Sometimes boundaries are implicit or invisible, but a territory can never exist without.

The ‘becoming’ or ‘emergence’ of the interaction of functions and expressive markers producing the feeling of being at home. (Bonta & Protevi, 2004, p. 158)

A territory is never a territory on its own. Territorial assemblages can be seen as complex networks of relations, which are always in a state of flux and reassembling in different ways. Deleuze and Guattari developed the concept of assemblage (primarily in *A Thousand Plateaus*, 1980) to urge us to think of reality as a patchwork of assemblages, in which each territorial assemblage is always already passing into other assemblages. Territorial assemblages are formed by flows and relations between “*bodies (material systems that are themselves assemblages of organs at a lower level of analysis) and signs (triggers of change in those systems) to form ‘territories’ or systems of habit*” (Bonta & Protevi, 2004, p. 54). The territorial assemblage is organised along two axes. The horizontal axis contains content and expression, the vertical one deterritorialization and reterritorialization (Deleuze & Guattari, 1987). The flows of affective relations territorialise individuals. In fact, they territorialise a bodies capacity to desire, which determines what a body can do and what it can undergo. To understand this, one

has to approach desire not as a lack of an object or person, but as a bodies potential to affect or be affected upon (act, create, experiment). According to Deleuze and Guattari “*assemblages are passionate, they are compositions of desire*” (Deleuze & Guattari, 1987, p. 399). Desire does not come spontaneously, but is assembled, ready to territorialize our bodies.

We will call an assemblage every constellation of singularities and traits deducted from the flow – selected, organized, stratified – in such a way as to converge (consistency) artificially and naturally; an assemblage in this sense, is a veritable invention. (Deleuze & Guattari, 1987, p. 406)

Thinking in territorial assemblages is not common day practice in architecture. Raffestin even states in his article Space, Territory, and Territoriality: “*In the past we made territory first and landscape came afterwards. Today, landscape is drawn first and transformed into territory afterwards. The situation is inverted*” (2012, p. 132). This came extremely visible in short life-time projects in the last decades (examples are Vinex neighbourhoods or Plan Busquets). Although there are plenty examples of demolitions and transformation projects, we have also seen some steps in a more durable direction. The “*traditional blueprint planning that pushes an ideal final situation to the fore*” is losing ground, and “*current practice tends to search for strategies for the initiation of self-organisation and self-development processes*” (Avermaete, Havik, Meijsmans, & Teerds, 2009, p. 1). Thinking in territories is maybe easier on the scale of urbanism (plan Palmbout for example) and landscape architecture, than on the scale of the building. In these professions it is more evident to think in natural, political and cultural processes and future changes. However, on the scale of the building the focus still lies too much on aesthetics and name of the architect.

Theorists like Grosz, Raffestin and Thrift, suggest that the cause for these short life-times of buildings and the focus on aesthetics has to do with division between nature and culture. Which should, according to them, not be seen as opposites. Architecture should unify the natural and cultural and use territorialization, deterritorialization and reterritorialization as a theoretical insight to explore openness to possibilities. Projects that affect the city, like in the Spoorzone, should pay more attention to relation between the physical and social

environment. Which means that architects should not only examine aesthetics, sight lines, and program of requirements, but not forget about the relations and processes in the city.

It is central to the future of architecture that the question of time, change, and emergence become more integral to the processes of design and construction. (Grosz, 2001, p. xix)

Research objective and questions

Territorial assemblage theory provides an framework to move architecture away from a focus on fixed form, and instead think of architecture as dynamic and that architecture is a medium operating in a constant state of flux. This research must give an insight in how an architect can contribute to the composition of territories in which we feel at home and can keep feeling at home.

Research questions

How can an architect change its view on architecture from static to dynamic, and become able to trigger a perpetual re-assembling of space, by using territoriality as a working concept?

The concept used in the research question are explained below:

- Architecture: Guattari in his essay Architectural Enunciation (1989) advocates for a new understanding of architecture and the architect which serves as source of inspiration for this research. The ‘reinvention of architecture’ under today’s condition as he describes, will not be a new style, school, but the re-composing of architectural enunciation:

Once it is no longer the goal of the architect to be the artist of built forms but to offer his services in revealing the virtual desires of space, places, trajectories and territories, he will have to undertake the analysis of the relations of individual and collective corporeality by constantly singularizing his approach. Moreover, he will have to become an intercessor between these desires, brought to light, and

the interest that they thwart. In other words, he will have to become an artist and an artisan of sensible and relational lived experience. (Guattari, 1989, p. 232)

- Trigger: trigger in this context refers to Guattari and his essay Architectural Enunciation, in which he describes his vision on the architectural profession as: *“a catalytic operator triggering chain reactions at the heart of modes of semi-otization that make us escape from ourselves and open us up to original fields of possibility”* (Guattari, 1989, p. 238). ‘Open us up to original fields of possibility’, means that the very nature of architecture is to provide new opportunities to use a space. Architects should trigger those different uses of a single space by composing components from which users glean meaning (i.e. that work as a sign). Depending on changing circumstances with time, meanings of components change and new possibilities arise.
- Perpetual re-assembling: seeing space not as an finished image, but rather as a continuous reproduction of encounters, acts and occupations and should be able to sustain possibilities.
- Territoriality: the process of gaining the feeling of being at home through territorialization. Territorialization is followed up by deterritorialization and reterritorialization. De- and reterritorialization mean: *“the always complex process by which bodies leave a territorial assemblage following the lines of flight that are constitutive of that assemblage and ‘reterritorialize’, that is form new assemblages (there is never an simple escape or simple return to the old territory”* (Bonta & Protevi, 2004, p. 78).
- Working concept: using a concept, in this case a philosophical one, and turning it into a methodology or a productive tool. *“A tool is something we use to achieve a desired end; it mediates a process of production. What is at stake is not truth but usefulness”* (Dovey, 2013, p. 132).

Sub-questions

The research question actually consisted of two parts, a theoretical and practical one. The last part of the question, the practical one, gives away that I assume the answer is to be found in territoriality. To test this hypothesis, the first part consist of a theoretical research in the field of territory. The first part of the research question reads as follows: ‘How can an architect change its view on architecture from static to dynamic, and become able to trigger a perpetual re-assembling of space?’. In

order to examine the first part of the research question in depth, the question is divided into sub-questions each represented in a chapter.

- From what is a territory built up and how does a territory work?
- What is the role of the in-between?
- How can a territory be re-assembled?

The second part of the research question: ‘... by using territoriality as a working concept?’ is examined in the design studies and in the last chapter with next steps for the design project.

Methodology

The methodology used to answer the first part of the research question is a literature study on concepts relating to territoriality, such as: territorialization, deterritorialization, assemblages, in-between, affects and, relations. The literature study mainly focussed on the work of Deleuze and Guattari. But also included the work of theorists that inspired them, such as: Spinoza and Uexküll, and one’s who were inspired by them, such as: Elizabeth Grosz, Claude Raffestin, Andrea Brighenti, Anne Sauvagnargues and Nigel Thrift. I am aware of the fact that one can write endlessly just on one of those concepts. However, this paper focusses on a gaining a basis understanding of the processes that are at stake in order to be useful for (young) architects. After gaining a basic understanding of territory, I will try to relate it to architecture. I will do this partly in the literature study, but also by doing practical studies related to the chosen site, the Spoorzone in Delft. The analysis and design studies relate to the structure of the research, which is explained below.

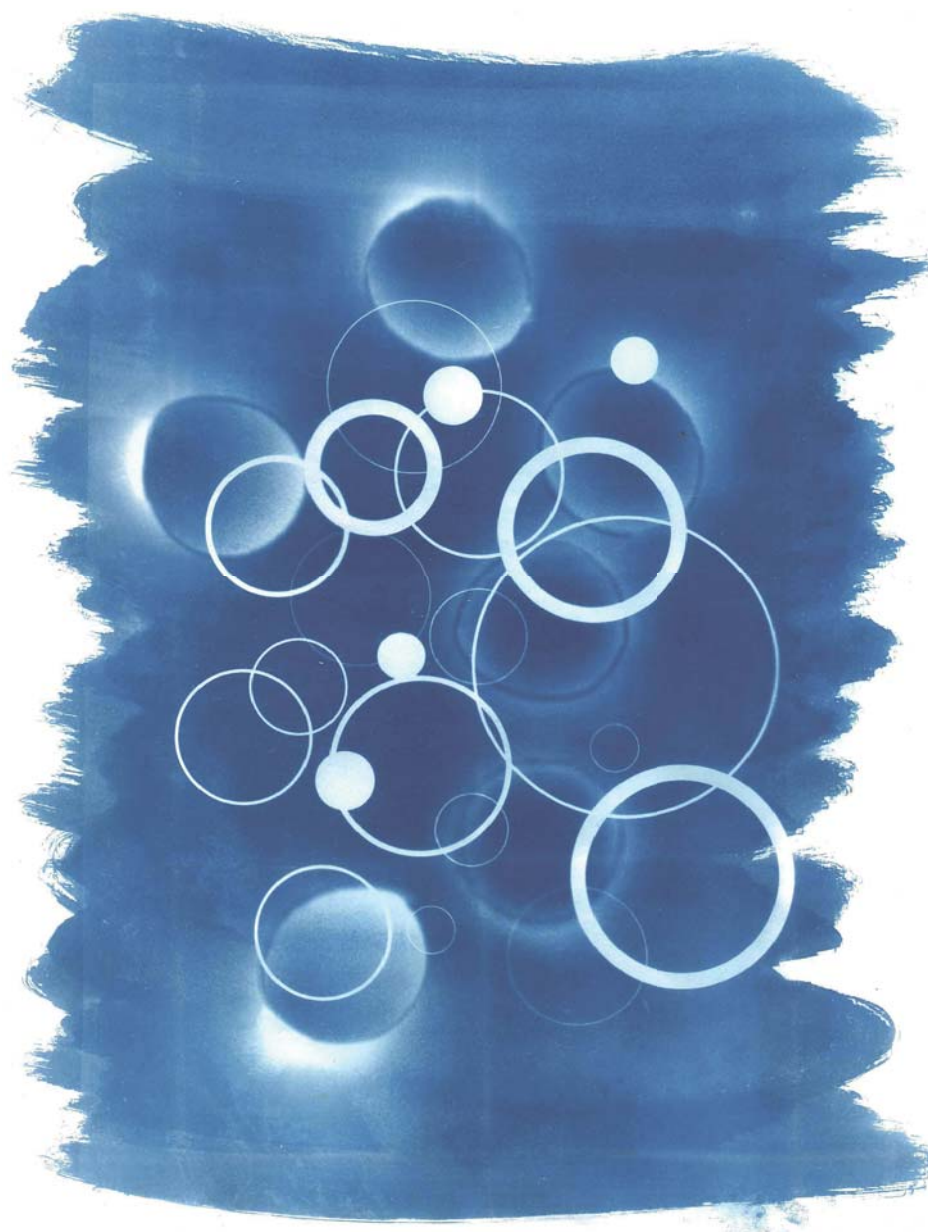
Structure of the research

To be able to explore the posed research question, I drew inspiration from a citation of Rajchman as published in ‘The Deleuze Connections on the philosophy of Deleuze’ (2000). The way I approach this project, both research and design, could best be described according to these steps:

“We might then imagine Deleuze’s philosophy as built up in a way such as this: there are different conceptual “bits,” each initially introduced in relation to a particular problem, then reintroduced into

new contexts, seen from new perspectives. The coherence among the various bits shifts from one work to the next as new concepts are added, fresh problems addressed; it is not given by “logical consistency” among propositions, but rather by the “series” or “plateaus” into which the conceptual pieces enter or settle along the web of their interrelations. There are new “encounters” with problems that arise in the arts or sciences, or with events that “problematize” the way politics is conducted or society held together, introducing new questions that call for a rethinking or reinvention. The bits thus don’t work together like parts in a well-formed organism or a purposeful mechanism or a well-formed narrative – the whole is not given, and things are always starting up again in the middle, falling together in another looser way. As one thus passes from one zone or “plateau” to another and back again, one thus has nothing of the sense of a well-planned itinerary; on the contrary, one is taken on a sort of conceptual trip for which there pre-exists no map – a voyage for which one must leave one’s usual discourse behind and never be quite sure where one will land.” pp. 21-22

The way of working and structuring the research according to this citation is described below: The first step is to break everything down into small bits, the ingredients, in order to reintroduce them into new problems later in the process. This corresponding chapter shows from which ingredients a territory is established. It continues with an explanation on how those bits, or ingredients, can be part of territory or territorial assemblage, and more importantly how those bits can escape a territorial assemblage. The accompanying analysis study breaks down the desired affects and site analysis into tiny bits. The second chapter focusses on the in-between, the ‘space’ where transformations happen. The place where the bits are introduced to new problems. The accompanying study shows what the relations between the components can be. After we’ve seen where transformations happen, the last part explains how these transformations happen. In other words, how are the bits put back together in a new way? The research ends with a conclusion and next steps and objectives for the design project.



Constitution and demolition of a territory

During the transformation of the Spoorzone, the feeling of being at home for inhabitants of Delft is harmed. Relations among citizens and the physical environment changed. By taking away the railway, the Spoorzone is deterritorialized, but simultaneously made place for a reterritorialization of the area. In other words, a supply of territory in the city has lost its function and in turn demands for a reterritorialization of the freed components.

Rather than giving a more elaborated definition of territory, this chapter explains from what a territory is made, how it is build up and how it can collapse. The first section of this chapter focusses on the bits. It contains an explanation about the components that are necessary to build a territory. The second section shows how the bits, the components of a territory, form and leave a territory. The last section, the design study, relates the ingredients of a territory to architecture and shows an example how I applied the theory to my design project.

Ingredients of a territory

Chaos

By creating a feeling of home, a territory is in fact slowing down chaos. Therefore I ‘start’ with chaos (without speaking of a real starting point). There are unpredictable forces of movement in the universe. In this chaotic universe, the emergence of a home is possible. This happens when a fragile point in the chaos becomes a centre around a calm and stable pace can be created. Which in his turn can escape from the chaos. The world as we know, is built up from an overflow of forces of chaos. A living body selects components of this chaos to that temporally maintain its

existence and should keep selecting and extracting forces in order to be maintained. But, components can always return to chaos, a home can always fall apart (Deleuze & Guattari, 1987; Kleinherenbrink, 2015).

Milieu and Rhythms

Milieu and rhythm are constructed of forces of chaos. Deleuze and Guattari use milieu and rhythm as the building blocks of territory and ritornello (see next paragraph). A milieu can be seen as a semi-stable selection of chaos and it introduces a degree of coherence by drawing together heterogeneous components. A milieu is always coded, which means that it has meaning (Kleinherenbrink, 2015).

A milieu consists of an interior, exterior and annexed milieu. The latter can also be called associated milieu or in-between. A milieu's exterior is formed by the relevant components in the close material surroundings of an entity. Every milieu is dependent on material input from the outside, but those inputs do not have to be attuned for a specific milieu. The interior of a milieu, the inside, consists of internal components and regulatory principles. The third aspect, annexed milieu or associated milieu, is the zone where components pass from one milieu into another, from exterior to interior and the other way round (Kleinherenbrink, 2015). As Deleuze and Guattari sum up: *"the living thing has an exterior milieu of materials, an interior milieu of composing elements and composed substances, and an annexed milieu of energy sources and actions-perceptions"* (Deleuze & Guattari, 1987, p. 313).

The annexed or associated milieu makes the milieu open to chaos. The way Deleuze and Guattari handle this threat, is to introduce rhythm. The term rhythm is used *"whenever there is a transcoded passage from one milieu to another"* (Deleuze & Guattari, 1987, p. 313), or in other words when there is communication between milieus. Rhythm refers to variation and discontinuity in comings and goings within a milieu (see next chapter: 'The in-between'). *"If milieus concern what happens where, rhythms are about how and when things within and between milieus happen, hence the flexibility and survivability of a milieu are a rhythmic concern"* (Kleinherenbrink, 2015, p. 215).

Territory and ritornello

Milieus and rhythms do not yet form a territory. A territory takes parts of milieus

and rhythms as its building blocks. But the difference is that those parts have become expressive. An expressive component is called 'Ritornello'. In the English translation of 'A Thousand Plateaus' of Massumi a ritornello is called 'a Refrain'.

Expressivity emerges through three aspects constructing a single thing, the ritornello. Because ritornello takes the rhythm between milieus for its elements, it has a comparable emergence out of chaos as a rhythm. The first aspect for expressivity to emerge is the creation of a centre. A point or expression, from which a 'calm and stable pace' (Deleuze & Guattari, 1987, p. 312) in the heart of chaos can be created. The ritornello takes rhythm and parts of milieus as its components, but never really controls them. Secondly, after the creation of the centre, the annexed milieu will be established to organize the space. The components organize the space and keep organizing the space to construct a home. Forces of chaos have to be selected, eliminated and extracted in order to protect the territory. Thirdly, those components have certain autonomy and can always break away. A territory is therefore always open to the outside. The breaking away of components is called: a line of flight. These aspects can happen at the same time or mixed, sometime they do, sometimes they don't.

When milieus and rhythms become expressive, are territorialized, a territory will be the result: "*a territory is an act that affects milieus and rhythms, that "territorializes" them*" (Deleuze & Guattari, 1987, p. 314). In more detail: a territory takes components from a milieu, bites into them, but on the other hand will always be vulnerable for disturbances. A component can be anything a milieu has to offer, what is interesting for it, for example: materials, organic products, states of the limit, sources of energy etc. One can only speak of a territory when components of a milieu have become qualitative to become expressive or when rhythms have become expressive. Ritornellos are rhythms that have become expressive and became a sign or mark for other living beings. Ritornellos are rhythms which are in a certain way activated and function as a sign for the subject (Deleuze & Guattari, 1987; Kleinherenbrink, 2015).

A territory is build up from the same three features of an milieu: "*an exterior milieu, an interior milieu, and an annexed milieu. It has the interior zone of a residence or shelter; the exterior zone of its domain, more or less retractable limits or membranes, intermediary or even neutralized zones, and energy reserves or annexes*" (Deleuze & Guattari, 1987, p. 314).

Territorialization

The components are discussed, now we can take a closer look about on how the ingredients construct a territory. How do the small bits come together and how are they able to leave?

A territory is a mode of organization, it creates a centre in which bodies have their habits, this is what makes territory an act instead of a bounded place (as explained in the introduction). Whereas the milieu has its code and is always transcoding, a territory on the other hand arises in a free margin from the code at a certain level of decoding. Coding does not exist without decoding, which frees material to enter a new body or assemblage (see de-territorialization). However, coding does not correspond only to territorialization and decoding not only to deterritorialization; a code may be deterritorialization and a decoding on this turn territorialization. When a species expresses himself (within the margins of the code), it marks its territory with signs: *“Territorialization concerns a lodging onto the margins of the code of a single species and giving the separate representatives of that species the possibility of differentiating”* (Deleuze & Guattari, 1987, p. 322). Marks creates the territory as result of an expressive act. The expressive territorialization is made possible by the available qualities that are de-territorialized and ready to be taken up in a new assemblage. Territorialization emerges from a system of territorial signs, also called indexes (Deleuze & Guattari, 1987). It is through marking and signing that we become a subject, and it is the territory that determines who you are. It is not the subject that creates a territory out of the chaos, instead *“subjectivity can only emerge from the interrelation of expressive qualities that constitute a territory”* (Kleinherenbrink, 2015, p. 220).

Matters of expression

When matters of expression, ritornellos, constitute a territory a few things happen: *“territorializing marks simultaneously develop into motifs and counterpoints, and reorganize functions and regroup forces”* (Deleuze & Guattari, 1987)p322.

The first part of the sentence ‘territorializing marks simultaneously develop into motifs and counterpoints’ refers to the relations expressive components have with the internal relations in the territory. As Kleinherenbrink (2015) explains, motifs occurs inside a territory and counterpoints are located outside the territory

and operate on their own. Deleuze and Guattari put emphasize on the fact that this is an act of those qualities:

Expressive qualities entertain variable or constant relations with one another (that is what matter of expression DO); they no longer constitute placards that mark a territory, but motifs and counterpoint that express the relation of the territory to interior impulses or exterior circumstances, whether or not they are given. (1987, p. 318)

A territorial motif is constituted by internal relations of expressive qualities. Territorial counterpoints, in their turn, refer to the way in which expressive qualities constitute other internal relations in the territory that place the circumstances of the external milieu in counterpoint (Deleuze & Guattari, 1987). In simpler words, a construction of relations with those external points in mind. When motifs and counterpoints, in fact components of milieu and rhythms, are related, these two become a style. A style determines “*what happens where in which way and for what reasons (when)*” (Kleinherenbrink, 2015, p. 218).

The other part of the sentence, is the ‘reorganization of functions and the regrouping of forces’ which belong to the territory. The reorganization of functions concern functional activities, which can be interpret for example as the creation of buildings and infrastructure. “*When functional activities are territorialized they necessarily change pace*” (Deleuze & Guattari, 1987, p. 320). Reorganization of those functions relates to occupations and trades, because this territorialization of functions controls who and what can enter a certain space. Regrouping of forces does not relate to occupations, but rather rites and religions. Deleuze and Guattari describe this as: “*the territory groups all the forces of the different milieus together in a single sheaf constituted by the forces of the earth*” (Deleuze & Guattari, 1987, p. 321). By which they mean that the heterogenous aspects of a territory get a certain unity by the forces of the earth. And indeed forces of the earth, not of chaos. Forces of the earth are: “*the materials and the capacities of the living being and its territory, and these forces perpetually remain up for change*” (Kleinherenbrink, 2015, p. 219). At the deepest level of the territory, the forces of the interior and exterior are not separated, but go hand-in-hand. Both are linked to an intense centre which are the forces of the earth (Deleuze & Guattari, 1987).

This breaking down of territorialization into related components, helps to understand that a territory is not a place with its boundaries, but rather an act. It puts relations among subjects at the core of the territory instead of objects or space.

Territoriality as a system of relations is also a system of exchanges and, consequently, a system of flux of all sorts between exteriority (the physical environment) and alterity (the social environment). (Raffestin, 2012, p. 129)

Deterritorialization

A territory or home is not permanent or static, nor is it ever fully closed in upon itself. The reason it can exist in continuity is the result of work and change. The success of continuous existence of a territory or a home is *“its capacity (and that of those dwelling within it) to interact and change with its environment, not according to a preconceived plan, but in a contingent play of negotiation and incorporation”* (Kleinherenbrink, 2015, p. 223). Territorial openness is essential, a territory is always already moving from its own assemblages into interassemblage. This implies that components of a territory can also be part of other ritornellos. One territory can be built up from multiple ritornellos. But also one ritornello can be part of multiple territories. Territories are therefore always intertwined with other territories, which come in different scales and visibilities and can be stacked upon each other. This changing of territories is called deterritorialization and this process frees material from the assemblage, *“it is the movement by which ‘one’ leaves the territory, a line of flight”* (Deleuze & Guattari, 1987, p.508). This process is followed by re-territorialization which takes up the material in a new assemblage. The including and excluding of components is what enables territories to return to the chaos from which they were temporarily emerged and to become something *“what it was not before, perhaps even becoming something entirely new”* (Kleinherenbrink, 2015, p. 222).

Deleuze and Guattari state that a territory is always directed to an intense centre outside the territory. This force to the outside is what drives or motivates the territory to renew itself with components from the outside. For example food in the case of animals and humans, sun in the case of plants. This continuous

de-territorialization towards an outside centre is what makes the territory linked to the forces of the cosmos. The territory is constant coming across other territorial assemblages, and have encounters with other rhythms and milieus. Because of this non-static character of a territory, a territory is fragile. Chaos is always knocking at the door. Kleinherenbrink (2015) describes Deleuze's and Guattari's three most possible scenes in which a territory can fall apart. First of all, a component may rot, wear or collapse. Secondly, the threat or component from outside can disrupt or destroy a territory. Thirdly, since no component is ready-made, thus no component belongs to a territory naturally, there is always the possibility that a component leaves a territory out of surplus value or autonomy.

(De-)territorialization and architecture

The act that makes rhythms and milieus become expressive is art. Any becoming-expressive is directly artistic. According to Deleuze and Guattari, architecture can be seen as the first of the arts, because when a person marks the boundaries of his territory, he is being artistic.

Can this becoming, this emergence, be called Art? That would make the territory a result of art. The artist: the first person to set out a boundary stone, or to make a mark. Property, collective or individual, is derived from that even when it is in the service of war and oppression. Property is fundamentally artistic because art is fundamentally poster, placard. (Deleuze and Guattari, 1987, 316)

The difference between art (incl. architecture) and (artistic) commodities is that the first has impact on our nervous system and generates sensation in our bodies. The latter can also generate sensation, but that sensation is always known in advance, it is guaranteed to affect in a particular way (Grosz, 2008, p. 3). An artistic act, for example the of ordering and composing materials, is able to intensify and change bodies through sensation. Be it the ordering of paint on canvas for the painter or stone and glass for the architect, it has the same effect on the body. With an artistic act a person or animal marks its territory and thereby gives others a sign. *"The constitution of a territory is the fabrication of a space in which sensation may*

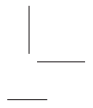
emerge, from which a rhythm, a tone, colouring, weight, texture may be extracted and moved elsewhere, may function for its own sake, may resonate for the sake of intensity alone” (Grosz, 2008, p. 12). Not less important, art and thus architecture are also capable of destroying territories. Art can enable components to go back to chaos form which they were temporarily extracted.

Analysis study: Breaking down

To change an architects view on the build environment, one should revise the way the analysis of the site is done. This analysis study is done next to the traditional site analysis of tracing traffic routes, surrounding functions, water, and green structures. The goal of this design study is to gain an idea of the processes that are at work in the Spoorzone in Delft and which ones will dominate the site in the future. With processes, I mean for example habits of inhabitants, ecological structures, and other relations between the build environment and people or animals using it. This study includes processes that are visible and obvious, as well as processes that are invisible and rare.

The following two diagrams break down components that are present on the site now, and in the future into tiny bits. The first diagram is called rhythm, and analyses the processes that are already present at the site. The inner ring represents the categories that I examined. The middle ring, shows the coming and going on the site in the specific categories. The outer ring gives a impression on how that affects people and how it can be affected. The second diagram, called desires, has the same structure, but represents the desired ‘program’ for the site. The scheme has an extra middle ring to give more examples of what the components could be. The lines that are drawn between the components in both diagrams show which components have a (strong) impact on each other.



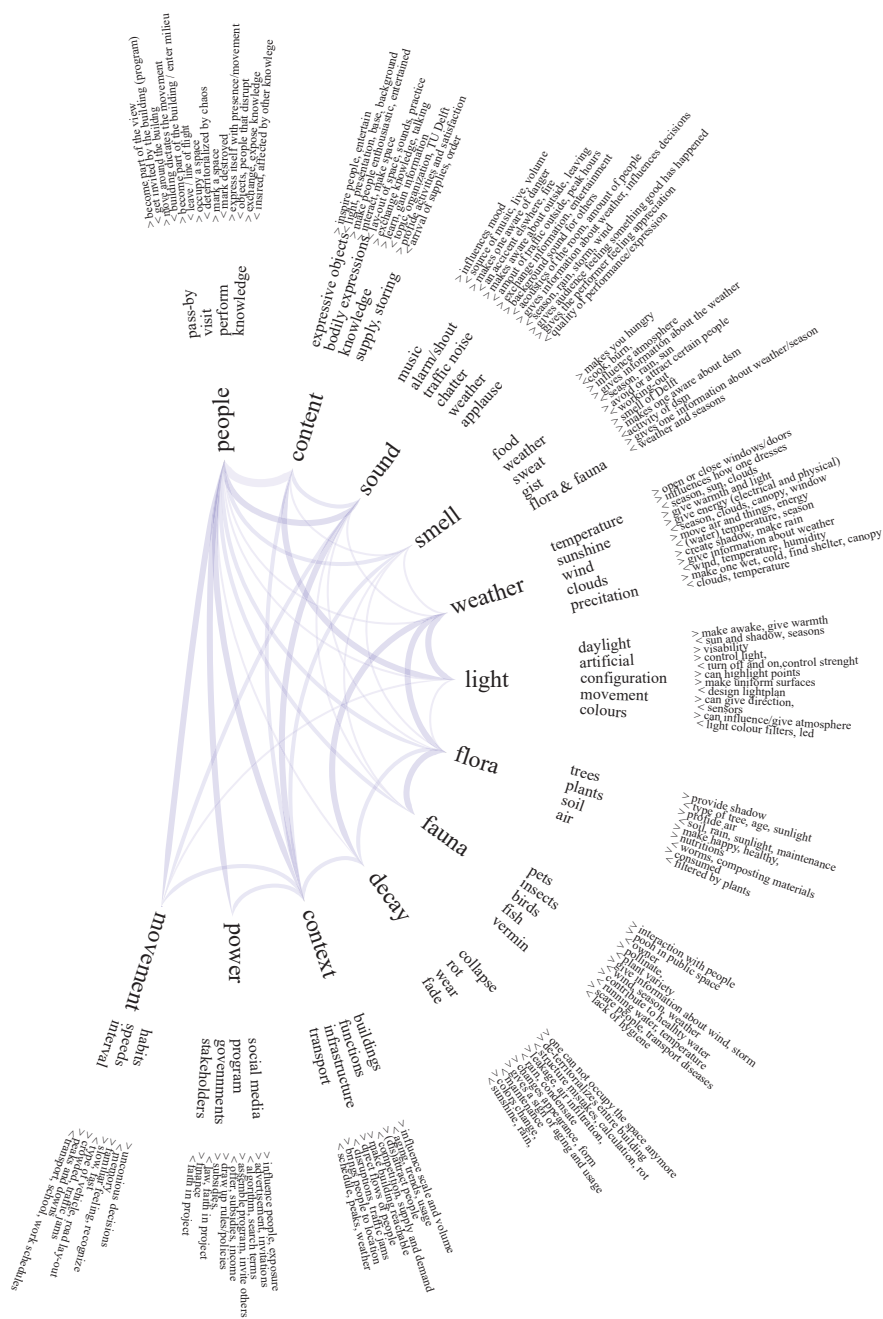


affects

comings/
goings

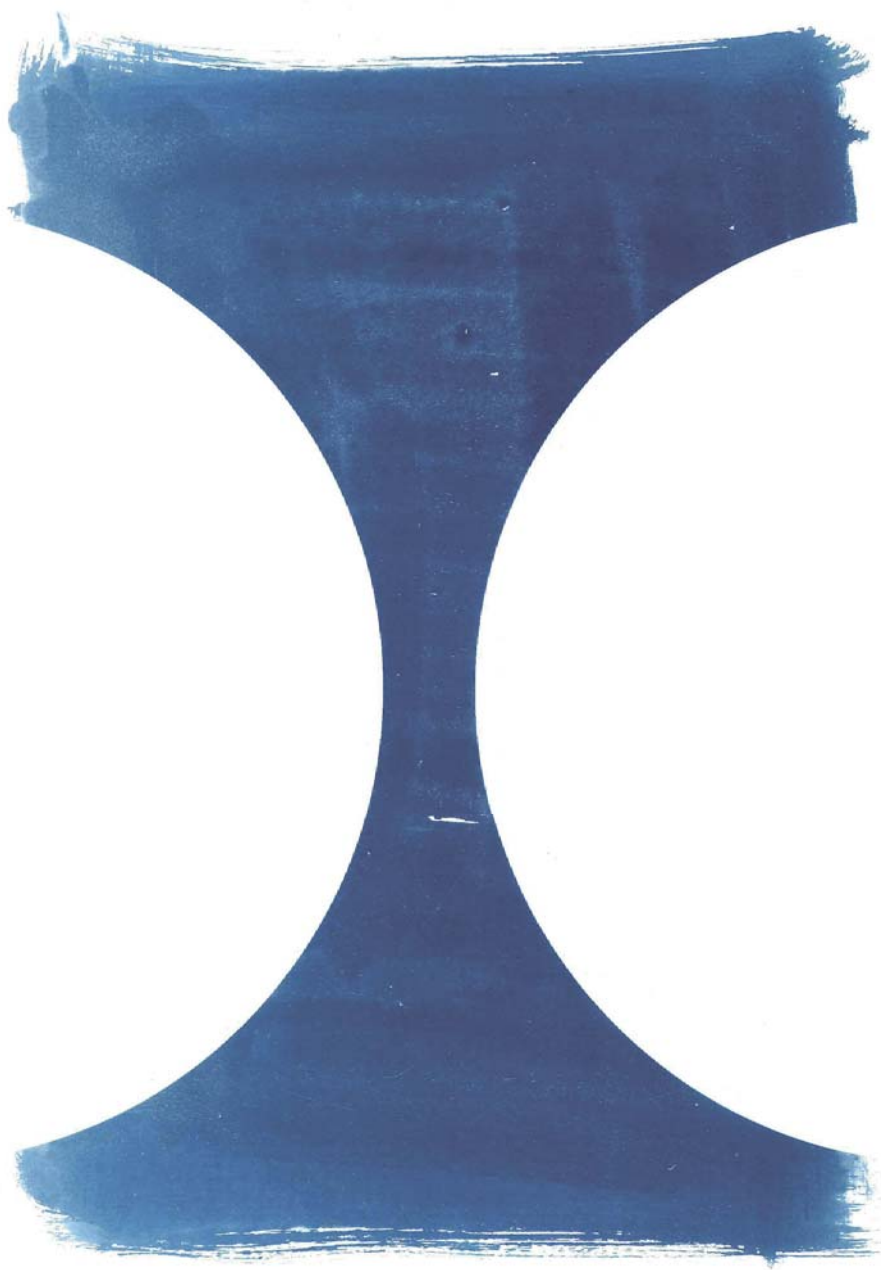
rhythms





desired affects 'components'/
requirements components **Desire**





The in-between

Territorialization, de-territorialization and reterritorialization are processes of including and excluding components. De-territorialized components are no longer part of the territory, they are at the outside. As Grosz (2001) argues, the outside, the exterior of a territory, is both paradoxical and perverse. Paradoxical for the reason that being outside a territory can only make sense in relation to the inside of a territory. Despite that it goes hand in hand with an inside, it is perverse because it has nothing to do with the consistency of the inside. While the inside is about occupation, the outside can never be fully occupied or controlled. Moreover, to be outside offers the possibility to look from a certain distance to the inside and critically evaluate it and compare it, which is not possible to do from the inside. Nevertheless this goes under the condition that it is unable to experience this inside from the outside.

*“To be outside something is always to be inside something else”
(Grosz, 2001).*

This chapter zooms in on the in-between of territories, the place between inside and outside. The place where transformations happen. The first section introduces the in-between and explains what the in-between is. In the second part, the chapter elaborates on characteristics of the in-between.

A place of transformations

The in-between creates a division between what is inside and what is perceived to be outside. It produces a process of including and excluding of forces of chaos in a territory. This means that the in-between is a condition for a territory, without there can be no territory. In other words, an in-between, is needed to establish a territory out of the chaos. The in-between can select, eliminate and extract components of chaos, which can become expressive so that they can intensify and change living bodies. The in-between is what constitutes 'the other' to switch from being the other of the one to its own becoming (Grosz, 2001; Grosz, 2008).

What is the in-between?

As said before, a territory consists out of three features: inside, outside and an in-between. The space between interior and exterior "*is the membrane that regulates the exchanges and transformations in organization and that defines the formal relations*" (Deleuze & Guattari, 1987, p. 50). Grosz's argument, in her essay on the 'In-between', focusses on the idea that the in-between can be seen as a posthumanist understanding of temporality and identity, which is closely related to seeing movement, change and space and time as transformations and realignments of the relations between identities and elements (2001). The in-between space offers a place for social, cultural and natural transformations. It makes transformations in the territories from which it constitutes possible. In this way it can generate the new which enables the future to be possible. This can happen because the in-between is the only space where chaos passes into or out of the territory, the in-between is therefore the only place where becoming, openness to futurity, or even novelty can happen and therefore change a territory. Although calling it the only space where transformations happen, the in-between is not a space of its own, its form is established from the outside of other territories. It is the space around identities and between identities or around territories and between territories where they shred each other, where chaos can come in or components can leave (Grosz, 2001).

The in-between or limit of milieus is described by Deleuze and Guattari as: "*the associated milieu is thus defined by the capture of energy sources (respiration in the most general sense), by the discernment of materials, the sensing of their presence or absence (perception), and by the fabrication or nonfabrication of*

the corresponding compounds (response, reaction)” (Deleuze & Guattari, 1987, p. 51). So, the in-between is where surrounding materials, chaos that is at the outside, interact (capture, discernment, response) with internal components. This conversation between milieus is called rhythm, and exchange codes from one milieu to the other. This is called transcoding. The in-between is thus the space where chaos becomes rhythm, not inevitably, but the only place where it has the chance to become rhythm. A distinction has to be made between rhythm and that which has rhythm. Rhythm cannot be on the same plane as that which has rhythm, because that which has rhythm (an action) happens in a milieu and rhythm is located between milieus (Deleuze & Guattari, 1987).

Since territories have the same three layers as milieus, the in-between has a comparable function: *“perceptions and actions in an associated milieu, even those on a molecular level, construct or produce territorial signs (indexes)”* (Deleuze & Guattari, 1987, p. 54). It is the space of the in-between where expressivity emerges, and where rhythm becomes ritornello.

Multiple terms for the same concept

Within the last decades multiple words are used for the in-between. Deleuze often speaks of the annex-milieu, the associated milieu or the limit. In Deleuze and Geophilosophy written by Bonta and Protevi the limit is defined as: *“The membrane separating the interior and exterior of a stratified body. ‘Limit’ is synonymous with ‘intermediary milieu’ of an organism. The ‘limit’ as that within which a body or assemblage maintains its identity is thus opposed to a ‘threshold’ as the point at which a system changes”* (2004, p. 105).

The concept of the in-between originally derived from Jakob von Uexküll and his notion of Umwelt. Von Uexküll sees the Umwelt as the system formed by the animal and its environment. The term was popularized and introduced in the Uexkülls book ‘The Environment and Inner World of Animals’ in 1909. His usage of Umwelt elaborates on Kants notion that *“all reality is subjective appearance”* and *“the universe ... is merely a human form of perception”* (as cited in Buchanan, 2008, p. 21). Von Uexküll sees the world as a wide diversity of Umwelten, in which each organism has its own Umwelt, rather than an image of just one real world. His favourite metaphor for Umwelt is the soap bubble surrounding every living being (Buchanan, 2008).

French philosopher Gilbert Simondon, also a source of inspiration for Deleuze, used the term membrane to describe the same element in between milieus and territories (this will be elaborated below). The architect Bernard Cache, follows Deleuze's and Bergson's thoughts and introduces the frame as the element between inside and outside territories (this will be elaborated below).

Characteristics of the in-between

It is possible for components of milieus to enter and leave the territory because of the special characteristics of the membrane. There are multiple ways in which a membrane can include or exclude forces of chaos into or out of a territory such as: selection, elimination and extraction. Below follow two elaborations of the functions of the in-between.

Gilbert Simondon's analysis of the concept 'membrane'

According to the French philosopher Gilbert Simondon, life depends on two spatiotemporal conditions. The first is folding, which is an spatial determination. Simondon uses this term to make clear that life does not emerge suddenly out of nothing, but comes forth out of a 'torsion of materiality' (Sauvagnargues, 2012, p. 66). Second condition is the consequence of the first condition for the development of organisms. Which is the establishment of a temporal difference between inside and outside. Life thus proceeds on a specific property, which functions as a limit with a selective porousness: the membrane. The membrane (i.e. limit or in-between) is a condition for life (Sauvagnargues, 2012).

'the living lives at the limit, on the borders' (Simondon, as cited in Sauvagnargues, 2012, p. 67)

That the living lives at the limit is clearly demonstrated in examples from nature. A beach is a boundary insofar it separates sea and land. However, for turtles, birds or fishermen a beach is the place where water and land are merged into a single territory and make life possible (Brighenti, 2006). Another example is the edge of a wood, a place where shelter and openness come together, which functions as a life-dependent conditions for animals.

In the work of Simondon, the membrane has two functions: selective porosity and polarity. The selective porosity allows certain elements to pass through and gives the surface of the milieu a functional metastable property. Metastable is a state in which something is far from stability, but full of potential. The second characteristic of the membrane is that the porosity is polar. That means, that what passes through by the selection, has an opposition that not passes through. It is very important to understand that the membrane is not a lifeless and fixed limit of the interior milieu, but instead, the membrane should be understood as what differentiates the interior from the exterior. Not as a stable state of what is included or excluded, but rather as a process of including and excluding. So, the interior and exterior are metastable, which makes them extremely relational (Sauvagnargues, 2012).

A good example to illustrate the relational characteristics of the membrane is the human body (illustration 2). The body, a multicellular organism, has several levels of interior and exterior which complicates to think of a straightforward inside and outside, as would be the case in an Euclidean model:

...thus an internal secretion gland pours the products of its activity into the blood or another organic liquid: in relation to this gland, the interior milieu of the general organism is in fact a milieu of exteriority. By the same token, the intestinal cavity is an exterior milieu for the assimilating cells which assure selective absorption along the length of the intestinal tract. (Simondon, 1964, p. 223)

In this way the human body is a continuous membrane that folds many times to fulfil different properties and it is impossible to make a clear distinction between exterior and interior milieu. The in-between concerns not only spatial issues but also temporal ones. Sauvagnargues describes a second consequence that Simondon assigns to the membrane, and which follows after the separation of the interior from the exterior: “the polarized membrane differentiates the fluxes of temporality and creates the interiority of lived time” (Sauvagnargues, 2012, p. 68). This happens in two streams. On the exterior side of the membrane, the present emerges. It provokes encounters by catalysing action and intervening with the future possibilities. On the interior side of the membrane, the memory of the living being settles, identity is gained. From this second consequence, Simondon’s statement, often cited by

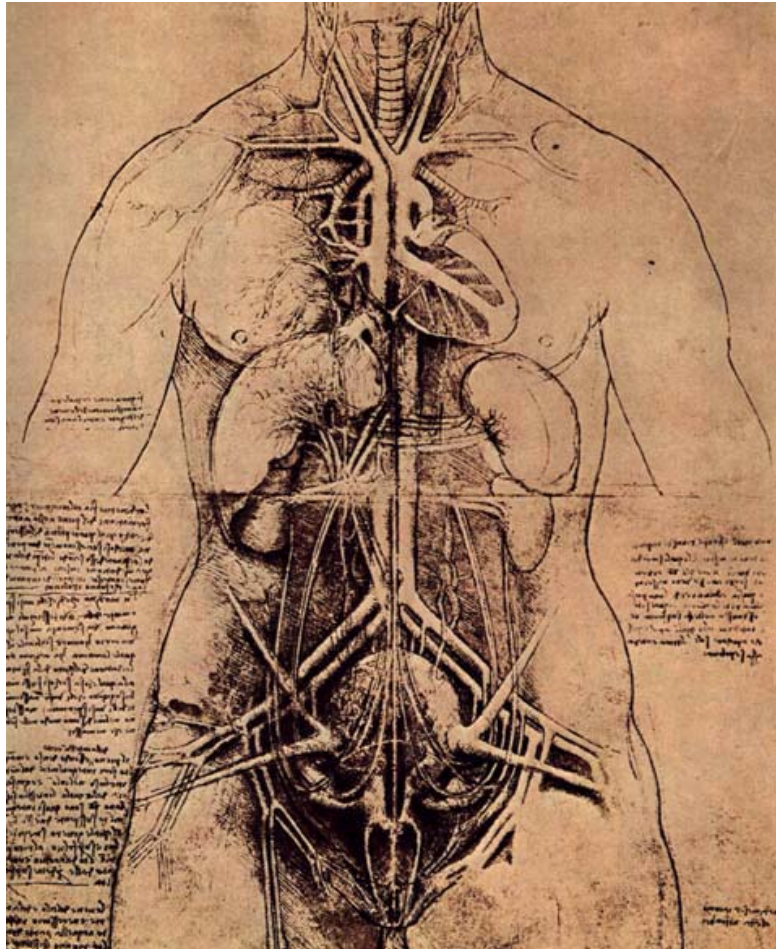


Illustration 2: The human body, Da Vinci

Deleuze stems: “*at the level of the polarised membrane, the interior past and the exterior future face one another*” (Simondon, 1964, p. 226). Using this second consequence of the membrane, Simondon is able to move his view from ‘being in the world’ or ‘way of being’ to ‘becoming in the world’ or ‘moment of being’.

Bernard Cache and his analysis of the frame

In ‘Earth Moves’, Cache introduces his concept of the frame to explain architecture's relation to territory. Cache recognizes that a territory or home is not constructed according to a ‘preconceived plan’ and that a territory is not referring to the context of borders of the land. However, for the in-between he uses a different word, namely the ‘frame’ and he claims that architecture is “*the art of the frame*” and “*the architectural in things is how they are framed*” (Boyman, 1995). Following Cache and Grosz's elaboration of his work, territorialisation and deterritorialization through sensation becomes framing and de-framing within art and architecture. Framing is composing chaos and making it sensory. De-framing is its opposite, giving some elements back to chaos (Grosz, 2008).

Architecture does little other than design and construct frames; these are its basic forms of expression. (Grosz, 2008, p. 13)

Cache uses the philosophy of Eugène Dupréel, a Belgian philosopher, to reformulate the rationalist theory of architecture. The theory of Dupréel says that the interval between cause and effect must be filled and this is what makes unexpected events possible. Dupréel describes the set of causes, that produce an effect, as frames of probability. It is impossible to know how the interval will be filled. Otherwise all that is known about the interval should already be in the cause, which only makes the frame of probability more restricted. The cause, then, would be identical to the effect and no change would occur at all. Just as rhythm cannot be on the same plane as that which has rhythm, the frame of probability cannot be the same as the effect that it produces in it, there is a difference between frame and the function, which is “*always subject to variations and is only probable*” (Cache, 1995, p. 29).

The relation with architecture that Cache introduces is: “*architecture would be the art of introducing intervals in a territory in order to construct frames of probability. This presupposes that the architectural frame fulfils at least three*

functions, whatever the concrete purpose of a building might be” (Cache, 1995, p. 23). Those three functions are: delimit (or separate), select, and rarefy. The building components Cache assigns them to are respectively wall, window and floor. The first function is separation. A frame cuts into a space. Therefore, the functional element can be seen as the wall. The cutting of a wall or screen offers a provisional ordering of chaos, it slows chaos down into a space and time. The wall constitutes the possibility of an inside and outside, it creates an shelter on one side and on the other side a new world. This separation also enables new relations. The second function of the frame is selection. This function of the frame can be seen as the window that carefully selects the exterior. It brings in the outside into the territory. The third function is to rarefy. The functional element is the floor, that needs to be smooth and constant to let territorialization take place. Seen together, the functions wall, window and floor can all divide and select each other as well as their shared outside. The roof is not considered as a function of a frame and it is no interval or cause, but it encloses an effect. The form of the roof has the task of becoming a place, a geometrical form that gains identity (Cache, 1995; Grosz, 2008). By assigning building components to the functions of the frame it becomes easier to think of a building as something that frames the world. But, the disadvantage in the context of this research, is that it limits the freedom of the architect to think of the frame in different appearances or even ones that are not visible at all.

The in-between and architecture

The in-between concerns architecture, because the in-between is the place of transformations, movement and speed, and therefore utterly spatial and temporal. Openness to the future is a challenge that face architects as well as other disciplines in arts, sciences, and social studies. In the last decades, thinking of relations between fixed identities, slowly made place for seeing the in-between as the only space of potential, openness, and becoming (Grosz, 2001).

Nature and culture in architecture

The oppositional duo ‘nature’ and ‘culture’ plays an important role in the theory of the in-between and architecture. In the current architectural and cultural debate, culture dominates nature. Nature is seen as something that generates site specificity

and material resources, or on the other hand as something that is a romanticized hideout from culture. Grosz, in her essay on the in-between, even claims that nature became irrelevant and something that must be overcome: *“in a certain sense, it is nature that falls into the space “between” or before the juxtaposition and coincidence of the urban, the architectural, and the cultural”* (2001, p. 98).

Instead, Grosz argues, following Darwin, Nietzsche, Deleuze, and Simondon, that nature must be understood as open to history, to transformation, to becoming. The natural are the unpredictable forces, and thus is not static or fixed. Nature is the ‘stuff’ of the culture and thus of architecture. The relation between architecture and nature is not subservient to the relation between architecture and culture. The task of architecture, among other things, is to negotiate between a *“nature that poses itself as resistance and a culture that represent itself as limit”* (Grosz, 2001, p. 100). Which means that there should be a more balanced relation between the two; in which culture represents the economic limits and aesthetics trends; and in which nature relies on a double nature of material reserve and of becoming or evolution. The dynamic forces of nature enliven culture and all cultural productions. These forces are essential to move away from the desire of fixed form and make the unknown possible (Grosz, 2001).

Design study: Including and excluding

We’ve seen some examples of the characteristics of the in-between in nature: the beach and the edge of a wood and the human body. But how does the in-between demonstrates itself in the build environment? For me, the in-between, or frame, is not a building component in the way Cache describes, but more a space of including and excluding components. The characteristics of the membrane decide what can happen in a space, its works as a certain limit for future possibilities.

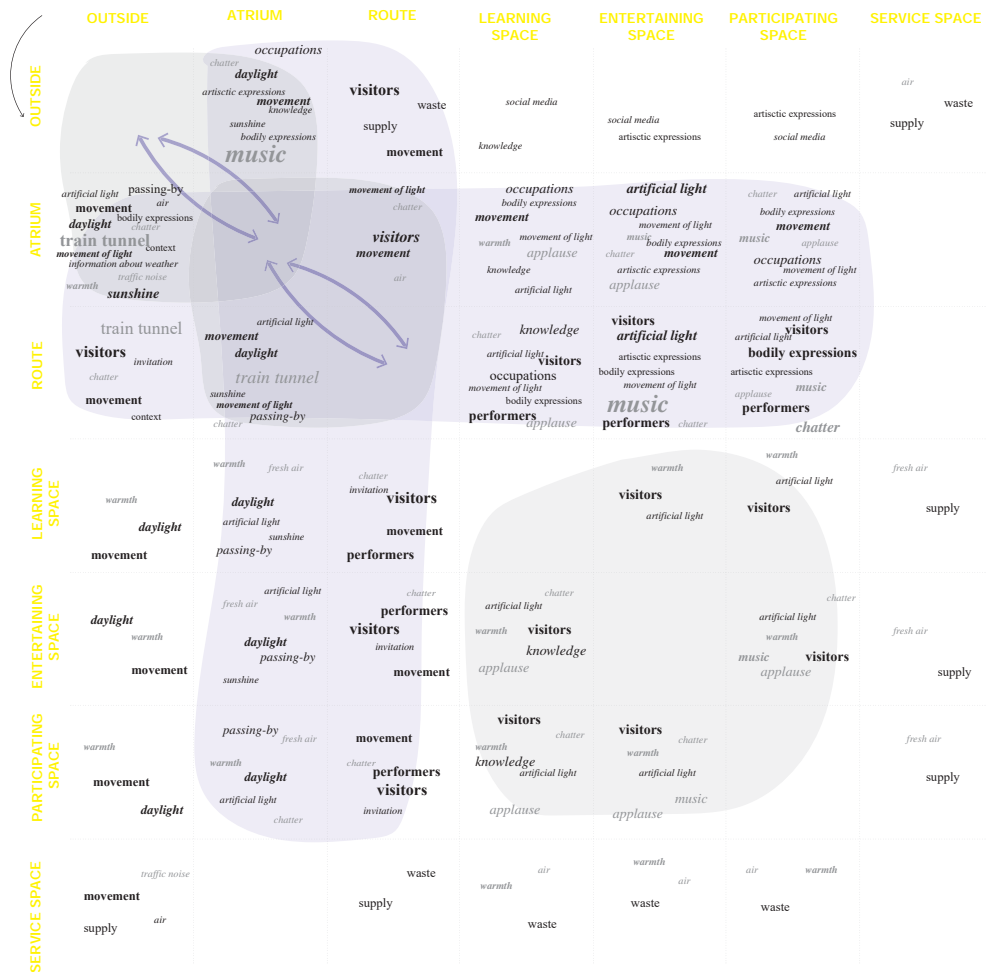
The following diagrams therefore show the relations between the spaces in my design for the site in the Spoorzone. The question that I asked myself was: what may pass through the membrane? On the horizontal and vertical axes are the spaces that are part of the building program. The content of the first diagram, ‘m’, show which rhythms and/or affects may pass from a space on the horizontal axis to a space on the vertical axis. The second diagram, ‘M’, shows the function of the space and what the membrane could look like.

rhythms m

italic = intouchable

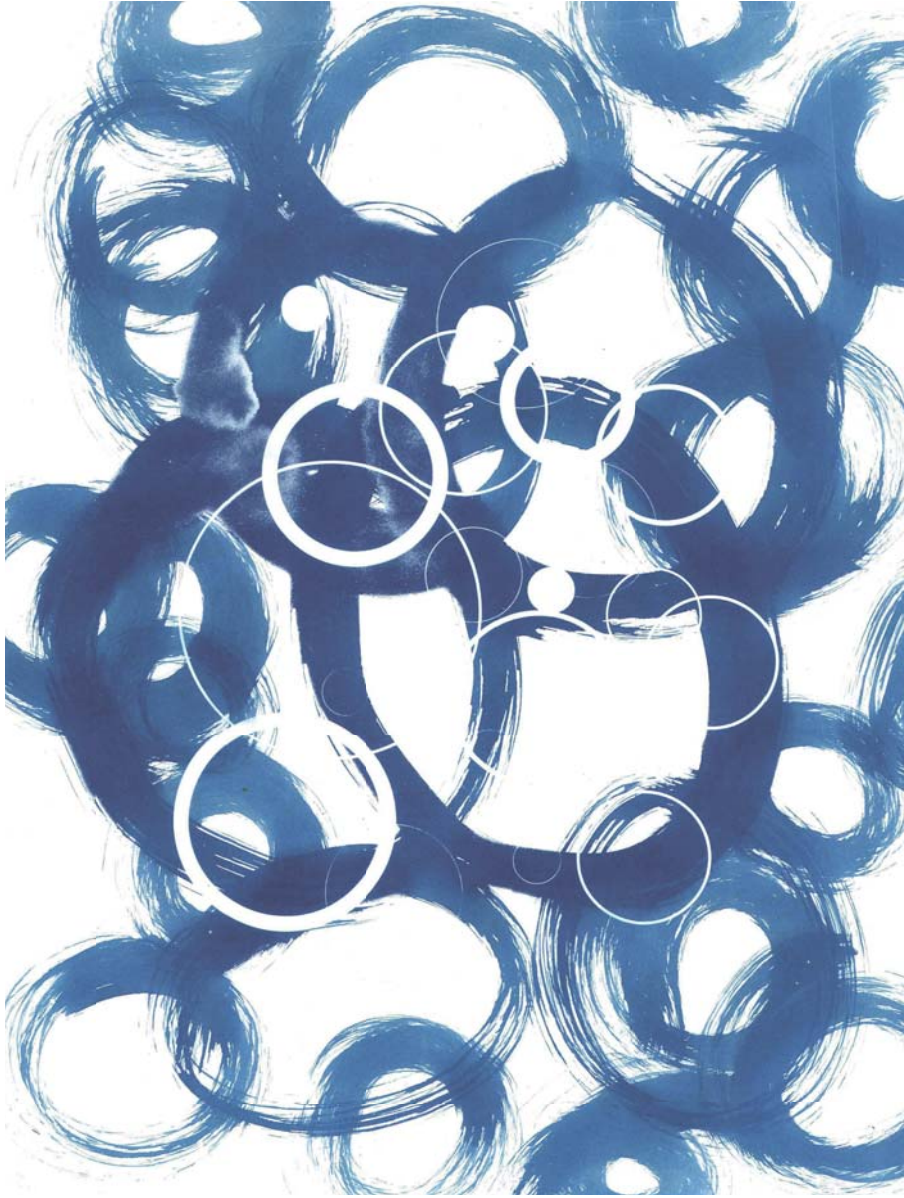
grey = invisible

bold = important



rhythms M





Re-assemble

The last chapter examines how the territorial assemblage is re-assembled. Relations among bodies and milieus are affected by or affect others in the assemblage. The conceptual bits, which we saw in the introduction, are passing from one assemblage to the next and never coming back the same.

The first section of the chapter is about affects. Thrift (2008) argues that affect is the most important factor to look at while studying the city. This section will explain why affect is an essential concept to understand how architecture can be seen as dynamic. The second part dives into Simondon's theory on individuation to zoom in on how a body goes from one state to the next.

Affect

As Nigel Thrift explains in 'Non-Representational Theory: Space | Politics | Affect', there is no single stable definition which best describe affect (2008). Additionally, affect is not to be confused with words like emotion, feeling, anger and fear, rather should be understood "*as a form of thinking*" (Thrift, 2008, p. 175). Affect has a long and complex history and has multiple definitions (Darwin, Aristoteles etc.). The definition I am referring to would be the one of Spinoza, later elaborated by Deleuze. This notion of affect derives from their naturalistic approach in a world of constant becoming. Spinoza believed in a world in which everything is part of the same 'thing' and everything is a variation or a mode of unfolding of that thing. An individual's thinking and doing are part of the same thing, but expressed in a different way. This means that thinking is corresponding with bodily encounters. Individual bodies, which are complex bodies in itself, have

encounters with other things and with things in the complex body. Because of the constantly different encounters there are different relations between individuals and their milieus and with themselves. These encounters produce new modifications of that 'one' thing. Thus *"an individual may be characterized by a fixed number of definite properties (extensive and qualitative) and yet possess an indefinite number of capacities to affect and be affected by other individuals"* (De Landa, 2002, p. 62). For Spinoza and Deleuze affect is the active outcome of an encounter which influences the body and mind alike to act, both positive or negative. Affect in this way is *"the capacity of interaction that is akin to a natural force of emergent"* (Thrift, 2008, p. 182).

Affect/affection: Neither word denotes a personal feeling (sentiment in Deleuze and Guattari). L'affect (Spinoza's affectus) is an ability to affect and be affected. It is a prepersonal intensity corresponding to the passage from one experiential state of the body to another and implying an augmentation or diminution in that body's capacity to act. L'affection (Spinoza's affectio) is each such state considered as an encounter between the affected body and a second, affecting, body (with body taken in its broadest possible sense to include "mental" or ideal bodies). (Massumi, 1987, p. xvi)

The term Simondon uses for affect is affectivity, which he explains in 'L'Individuation Psychique et Collective' (1989). The term affectivity is about the *"relation between an individualized being and the pre-individual milieu"* (Adkins, 2007). Affects are thus preconscious forces that are experienced prior to consciousness emotions (Shavero, 2006). Simondon makes a distinction between perceptive worlds and affective worlds, the first concerns bodily experiences that are known, but the second can bring unpredictable forces forward. *"Art is the art of affect more than representation, a system of dynamized forces rather than a system of unique images that function under the regime of signs"* (Grosz, 2008, p. 3). Architecture, seen as one of the arts, produces affects. Which makes a building, just as a painting, open and dynamic.

To explore the notion of affect one has to make a distinction between content and expression (Eckersley, 2014). Or in other words, between the molecular 'beneath' the molar. The molecular being understood as content and the molar being

expression. In ‘A Thousand Plateaus’, Deleuze and Guattari write that the molecular can be interpreted as an adaptable term or individual flexible movements within the molar. The molar refers to the larger more restricted organization of a structure, but does not only concern physical configurations. A painting of Rothko for example, can be described as moving, touching and thereby affects a bodies behaviour or feelings. In ‘Deleuze and the Schizoanalysis of Visual Art’, Eckersley describes the distinction between molecular and molar by means of a painting:

... it may be argued that it is this molecularity that is observable in the relationship of and on the surfaces that make up a painting, both intensive and extensive. The painting in its totality can be understood as molar, and the surfaces that constitute the painting can be understood as molecular processes by which this molarity emerges.
(2014, p. 214)

Architecture, being one of the arts, can affect people just as paintings can do. It is the molecular level that moves the viewer, which affects, or as Deleuze and Guattari state: “*all becoming is molecular*” (Deleuze & Guattari, 1987, p. 308.) However, the molecular cannot exist without the molar.

As we have seen in the previous chapter, the in-between is the place of transformations. It is affectivity that comes in the in-between, between inside and outside and makes these transformations possible. Affective relations in the in-between make the individual open to change, having the possibility to continually become.

Becoming affected

Simondon’s theory of individuation helps to understand how transformations happen in the in-between and why individuals can never be fully closed. Sauvagnargues and Grosz, both elaborate on Simondon’s theory in ‘Gilbert Simondon: Being and Technology’ (2012). Sauvagnargues summarizes the relevance of individuation as:

Individuation will no longer concern individuating being, but rather the becoming of individuation. ... At issue is a shift between phases and not states. Simondon compels us to conceive of individuation as a series of dynamic transformations, marshalling our capacity to theorize change. (Sauvagnargues, 2012, p. 59).

Individuation

Individuation is the emergence and structuration of an individual without a final outcome. Simondon introduces pre-individual forces, which are forces that are not yet individuated. The pre-individual forces are the condition for existence and are able to produce individuals of various kinds. Being individual is only a phase of the whole concept of being. The individual always has the potential to undergo further changes that are embedded in the pre-individual state. Individuation also constitute the milieu in which the individual is located, which provide the individual virtualities to involve with. It is important to understand that pre-individual, individuating and individuated are all at the same time Being. They are not causes, instead “*it becomes something, something emerges or erupts, but it leaves in its context or milieu a residue or excess that is the condition for future becomings*” (Grosz, 2012, p38).

The relation between becoming and pre-individual state is that the latter is the resource by which beings emerge from becoming. These resources consist of a wide range of disparate forces (see next section), which the being can actualize. Becoming is a dimension of being, that is out of phase, and uses a bit of pre-individual forces to resolve itself and then becomes an individual. The pre-individual state is not static, but metastable and generates ongoing types of ever-new and unactualized virtualities (Grosz, 2012). So, becoming is not made up out of two terms, milieu and singularity, given in advance, but those terms are produced in the course of its process. Simondon thus makes the shift from ‘individuating being’ to the ‘becoming of individuation’ (Sauvagnargues, 2012).

The pre-individual is ‘material’, it is material that is metastable. It is marked by singularities that are given, but not organized. It is still chaos. Matter has the potential to take on new forms, but not unlimited, because of the singularities. Individuations happen between matter and form, and therefore materialize new orders of information. During this process, matter and information mark each other, and at the same time change each other. Individuation is thus a process that uses disparate forces to draw together heterogenous materials (Grosz, 2012).

Transduction and disparation

Simondon calls the tensions or movements of becoming ‘transductive’, in other words the movement of individuation is ‘transduction’. Transductive forces temporarily structure the chaos of the pre-individual. Within the process of individuation, transduction is the process of generating a disparation. Disparity is a process by which the pre-individual forces double and move out of step with each other. The process of disparation works as follows: individuation doubles the pre-individual. This duplication of the forces of the real within the pre-individual, in its own unity, brings into being a new order. This new order, the singularity, produces both new levels and orders within the real and enables the individual produced to intervene in and transform the pre-individual as its milieu. This opening up of a possibility for the eruption of a new level, the production of a new order of metastability, happens only under the condition that two series, two events, two processes or images double each other with a minor difference. Disparity is essential in the process of becoming. Without the disparity between the processes of individuation and the individual they generate there would be no ongoing becoming of the being (Grosz, 2012).



It is no secret that Simondon inspired Deleuze and Guattari. Looking into the theory of individuation helps to understand how a milieu passes into another milieu and how rhythm is used as the communication between milieus. A milieu is coded, which means that it has meaning to a subject. Coding is a periodic repetition, a disparity, and also includes transcoding, the transformation of another coded thing. Transcoding is comparable to transduction and it is the way in which a milieu serves as the basis for another: *“a milieu does in fact exist by virtue of a periodic repetition, but one whose only effect is to produce a difference by which the milieu passes into another milieu. It is the difference that is rhythmic not the repetition”* (Deleuze & Guattari, 1987, p. 314).

Conclusion

The goal of this research was to move my view on architecture from being perceived as a static image to a dynamic process. To reach this goal, this research gave answer to the question: 'How can an architect change its view on architecture from static to dynamic, by using territoriality as a working concept?'

This research paper focussed on the first part of the research question: 'How can an architect change its view on architecture from static to dynamic, and become able to trigger a perpetual re-assembling of space'. To explore this question I did a literature study in the field of territoriality, a concept developed by Deleuze and Guattari (among others). The research was meant to get a basic understanding of the concepts related to territory. The second part of the research question: '...by using territoriality as a working concept?' cannot be answered only with a literature research. This part requires experimentation and will have different outcomes with every try. Some first steps are made in the design studies, and in the following chapter: 'Re-assemble Spoorzone in Delft'.

The research takes the reader a step closer to seeing the build environment as metastable. To make this shift, the story is slowly build up from the tiniest bits in chaos to the ritornello, the becoming expressive of components of milieu or rhythms. The research breaks down these ingredients of a territory and shows how they can be put back together and can fall apart. A territory is formed by relations between bodies, who also have an inner-territoriality, and signs or indexes, which are results of expressive acts. These flows of relations are affective and thereby territorialise individuals. Because of the periodic repetition of milieus, encounters between bodies and signs are never the same. Depending on changing circumstances with time, relations change and new possibilities arise.



Following these thoughts, a building can be approached as subject producing. Encounters between the subject and the building or part of the city are affective and determine what a body can do and what it can undergo. By thinking in territories, it is possible to discover affects and to open up multiple possible outcomes of encounters between subject and physical environment. To do this one has to go a level below representation, to the molecular beneath the molar. The most important message for architects is to also incorporate affects in designing, instead of only aesthetics. To see architecture as dynamic, it is essential to see a building not as a closed entity, as a fixed image, but as open for change in a world of continually becoming.

Design: Re-assemble Spoorzone in Delft

This chapter discusses the next steps that have to be taken to apply the theoretical part of the research in a specific design project, in this case the Spoorzone in Delft. The design project takes the components which are already there as a 'starting point' and adds a new structure to re-assemble the site as a new whole. The main goal of the design is to offer new perspectives in different scales and visibilities. To do this the site should not be approached as an empty white canvas, but as a canvas full of potential.

Living room for the city

The Spoorzone in Delft is an area that was once occupied by the railway. The historic city grew organically, and later expanded around this transportation hub. Nowadays, the railway is situated in a tunnel underground. Leaving behind a substantial vacant plot in the middle of the city waiting to be reterritorialized. On one side is the historic city centre and on the other many neighbourhoods with their own identities. The Spoorzone finds itself in between territories; in between old and new, west and east, city and neighbourhoods.

The biggest task is to design to reintegrate this part of the city in the daily processes of the inhabitants and other users of the city. The redevelopment of the site should intertwine with the existing territories, but also makes room for new possibilities. The task for an architect is to create a space in which people can feel at home and can mark the space with their activities, now and in the future. The program for the site will be a living room for the city, in which people can feel at home. The building has to frame new perspectives, offer a place for encounters, and show views that we haven't seen before.

Applying territorial thinking

The next step for this graduation project will be applying territorial thinking in the design process. The structure of the research (breaking down, include and exclude, and re-assemble) forms a basis to apply territorial thinking in the design. By means of the analyse and design study, a start was made. But to take the theory a step further in the design, the concept of the research, program and total structure should be in strong cohesion.

To achieve the posed design aims, the design project should meet the following criteria:

- The design should offer new perspectives in different scales and visibilities, such as usage, persons, building, Spoorzone and Delft.
- The design should be a phase in the total process of territorialization, deterritorialization and reterritorialization. It can be seen as the mark that functions as a starting point for new possibilities, new usages of the space, to happen. In this way the project tries to be open for change in a city that should be seen as a continued open ended process.
- The design should intertwine with the processes in the city that are already happening, as well as with potential activities and usages that can be activated via a spatial intervention.
- The design should be a sustainable intervention in the way that it sustains possibilities.
- Although the design is placed within the border of the site, it should affect people outside its borders.
- The architect should create a space that functions as a stage where others can mark their presence in the city.

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Images and schemes are personal work, unless otherwise stated.



Notes

Adaptable and transformable buildings

In the introduction some examples were given of architects and theories that advocate adaptable and transformable buildings. In these notes, a further elaboration on the references is made.

Stewart Brand

Publication: How buildings learn: What Happens After They're Built (1994)

Position: *"From the first drawings to the final demolition, buildings are shaped and reshaped by changing cultural currents, changing real-estate value, and changing usage"* (Brand, 1994, p. 2)

Summary: This book is written from a very realistic view on buildings and also takes economics and management into account. A building, according to Brand, exist out of 6 layers: 'six S's'. Site is the geographical setting, site is eternal. Structure is the foundation and load-bearing elements with a lifespan that ranges from 30-300 years, people not tend to change that quickly. Skin is the exterior surface with a lifespan of 20 years due to technology and fashion. Services are the working guts of a building with a lifespan of 7-15 years. Space plan contains the interior layout such as walls, doors and windows, it has different lifespans depending on usage. Last layer is Stuff, furniture can change very rapidly, from daily to yearly. An adaptive building has to allow slippage between the differently-paced systems of layers. *"Age plus adaptivity is what makes a building come to be loved. The buildings learn from the occupants and they learn from it"* p. 64. Brand states that all buildings are predictions and all predictions are wrong. Therefore Brand comes with a design solutions, not avoiding but softening what's

stated above. The tool he introduces is called scenario planning: *“scenario planning lead to a more versatile building. It takes advantage of the information developed by programming (detailed querying of building users) and offsets the major limitation of programming (over specificity to immediate desires). The building is treated as a strategy rather than just a plan”* p. 178.

Bernard Leupen

Dissertation: Kader en generieke ruimte: Een onderzoek naar de veranderbare woning op basis van het permanente (2002). In English: Frame and generic space.

Motivation: Long lifespan of homes (ca. 100 years) is in contradiction with radically and repeatedly changing households and habits.

Position: A frame is needed to generate freedom (i.e. changeability).

Summary: In ‘Frame and generic space’, Leupen takes the permanent as a departure-point. The permanent, or durable component of the house, is called the frame. The frame itself is specific and has qualities that determine the architecture for a long period of time. In this frame, change can take place. Leupen calls this generic space. This is inspired on the 3 terms of the French architect and philosopher Cache, who says that the functions of the frame are: separate, select and rarefy. Leupen adds a fourth one: freedom. In contradiction to what the name suggest, frame can be found in every building layer (structure, skin, scenery, servant elements, access). Depending on which layer holds the frame, Leupen defines three different manners in which change can take place: alterable, extendable, polyvalent. The book offers a wide range of examples, all illustrated with a schematic drawing of the separation between frame and generic space. The theory is mostly suitable to analyse buildings, but Leupen also offers a technique to design with it. Four series of combinations that can become the frame are given: basement, carcass, structural wall and façade. Though, a strong architectural expression is still needed to be flexible (Leupen, 2002).

Bernard Leupen, René Heijne and Jasper van Zwol

Book: Time-based Architecture (2005)

Motivation: *“During the 20th century it became increasingly clear that architecture is by no means a timeless medium. [...] Designing for the unknown, the unpredictable, is the new challenge facing architects today. ‘Form follows function’*

is giving way to concepts like polyvalence, changeability, flexibility, disassembly and semi-permanence. The design is becoming an innovative tool for developing new spatial and physical structures that generate freedom” (Leupen, Heijne, & Kirkpatrick, 2005, p. 9).

Summary: The book ‘Time-based architecture’ is a bundle of essays on time-based Architecture. The first essay is written by Leupen. The addresses the speed of modernization: “*The speed of modernization and the unpredictability inherent in the process makes it very difficult to establish reality for such a slow-moving medium as buildings.*” (Leupen, 2005). Leupen offers 3 categories of time-based Architecture, but also notes that not all buildings that allow change are able to place in these boxes. The first, make buildings polyvalent (used in different ways without adjustment to the way it is built). Second, make buildings that are part permanent and part changeable (frame concept, see ‘Frame and generic space’). Third, make semi-permanent buildings, e.g. ‘industrial, flexible and demountable’ buildings. The essay is followed by an elaboration and a few examples per category.

Cedric Price

Publication and design: Re:CP (2003); Fun Palace

Position: “*It is for the architect to move beyond these self-conscious set pieces and to devise, as in the best music scores, gaps of uncertainty in which the individual can participate*” (Price, 2003, p. 13).

Summary Re:CP: Price was a believer in ‘calculated uncertainty’ where adaptable, temporary structures were preferred. And all buildings should allow for planned obsolescence or complete change of use.

Summary Fun Palace: “*The Fun Palace was not a building in any conventional sense, but was instead a socially interactive machine, highly adaptable to the shifting cultural and social conditions of its time and place [...] adaptable to the varying needs and desires of the individual.*” (Mathews, 2005).

John Habraken

Publication: De dragers en de mensen. Het einde van de massawoningbouw (1985).

And his research on Open Buildings.

Motivation: Habraken questions the relation between dwelling shortage and uniformity in mass dwelling.

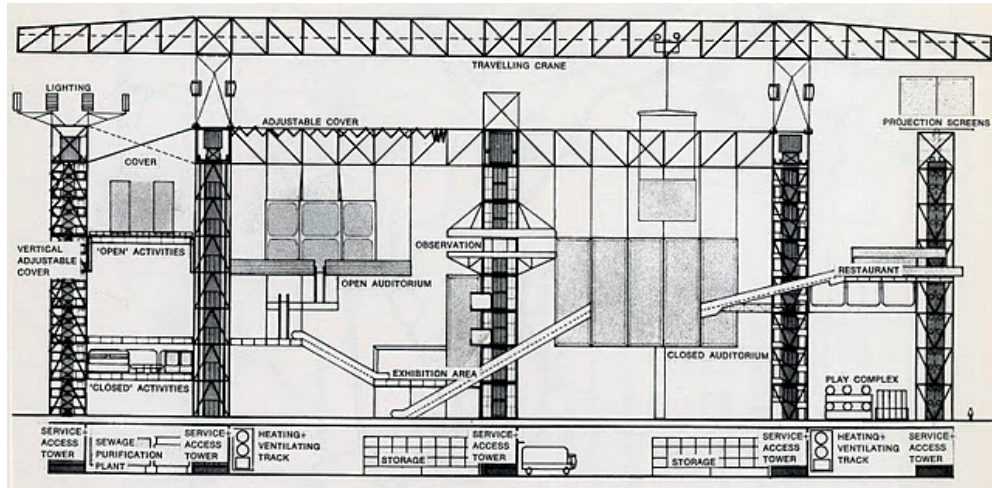


Illustration 3: The Fun Palace, Cedric Price (1964)

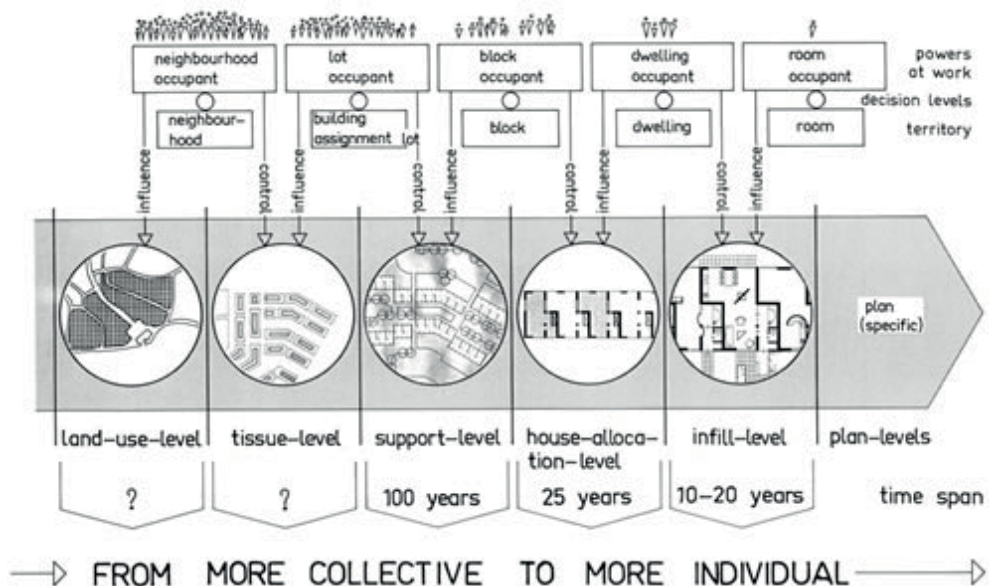


Illustration 4: Open building, Habraken (1961)

Position: *"The idea of distinct Levels of intervention in the built environment, such as those represented by 'support' and 'infill', or by urban design and architecture. The idea that users / inhabitants may make design decisions as well. The idea that, more generally, designing is a process with multiple participants also including different kinds of professionals. The idea that the interface between technical systems allows the replacement of one system with another performing the same function. (As with different fit-out systems applied in a same base building.) The idea that built environment is in constant transformation and change must be recognized and understood. The idea that built environment is the product of an ongoing, never ending, design process in which environment transforms part by part. Those who subscribe to the Open Building approach seek to formulate theories about the built environment seen in this dynamic way and to develop methods of design and building construction that are compatible with it."* (Habraken, n.d.)

Robert Kronenburg

Book: Flexible: Architecture that Responds to Change (2007)

Position: Mobile, adaptable and flexible design is well placed not only to solve a wide range of architectural problems, but to do it better than more conventional responses.

Motivation: Kronenburgs goal with this book is to challenge the general presumption that flexible buildings lack formal architectural credibility and are seen as less important than permanent, fixed architecture.

Summary: Flexible architecture is defined as buildings that are designed to respond easily to change throughout their lifetime. Part I of the book gives an overview of the flexible architecture in the historical context in housing as well as public building. In part II of the book, Kronenburg recognizes four themes in flexible buildings: adaption, transformation, movability and interaction. These themes can be combined in one building. The chapter 'Adapt' includes buildings that are designed to adjust to different function, users, and climate change. It is architecture that has a loose fit and is sometimes called 'open building'. This chapter recognizes that the future is not finite, that change is inevitable and that a framework is an important element in allowing that change to happen. The second theme is 'Transform', this chapter includes buildings that change shape, space, form or

appearance by the physical alteration of this structure, skin or internal surfaces. This type of architecture can open, close, expand and contract. Third theme is ‘Move’, these are buildings that can be relocated in order to fulfil the function better. It is architecture that rolls, flows or flies. The last theme is Interact and includes buildings that respond to user’s requirements in automatic or intuitive ways with sensors (Kronenburg, 2007).



