WELCOMING AMSTERDAM | LAYER ANALYSIS BOOKLET WITH MAPS OF THE LAYERED ANALYSIS | THE NETWORK LAYER APPROACH



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WELCOMING AMSTERDAM | LAYER ANALYSIS

Booklet with maps of the layered analysis - the network layer approach Case study Amsterdam, the Netherlands

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Graduation thesis P5 report additional booklet

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COLOPHON

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ABSTRACT

This booklet is meant as an addition to the report Welcoming Amsterdam: A spatial strategy for a growing touristic region, explaining the role of the layered analysis from Gabriel Dupuy (1981) in relation to the current situation of the region, city and city center of Amsterdam. The layered analysis approach played a large role in the understanding of the context related to tourism to identify potential intervention areas. Links are made between the two booklets to show relations between on the one hand the problem statement, strategy and design and on the other hand the layers of the analysis of the thesis. By the means of two booklets the analysis and the information of the layers can be kept on the side while reading the report to continuously review the material.

The report aims to answer the research question: how can the full socioeconomic potential of tourism be incorporated in a resilient regional strategy for the growing touristic European region Amsterdam, while minimizing possible negative impacts? with especially a focus on sub research question 2: where are the problematic links between the different layers of the structure of Amsterdam in dealing with tourism, related to history, governance, technical, economic and social operators in the city?

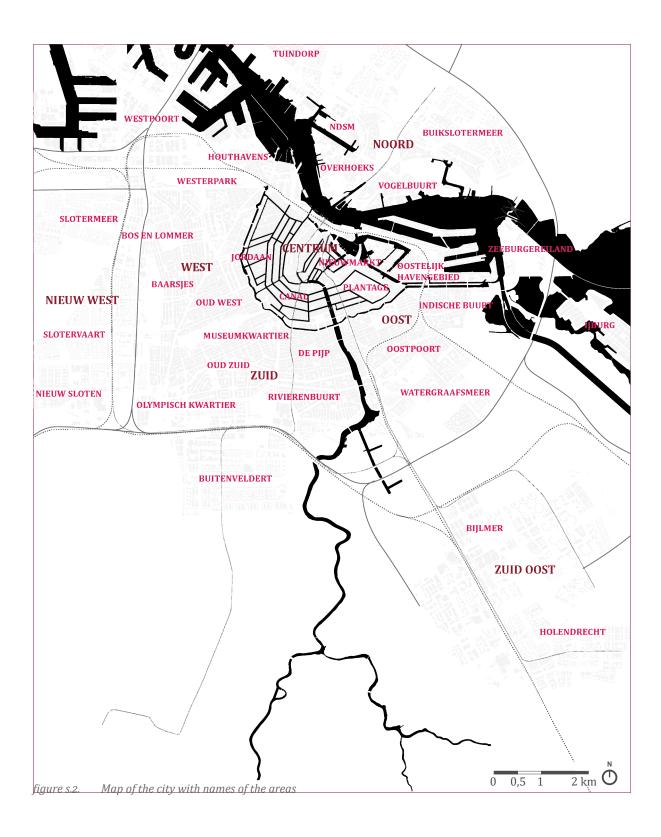
INTRODUCING THE AREA

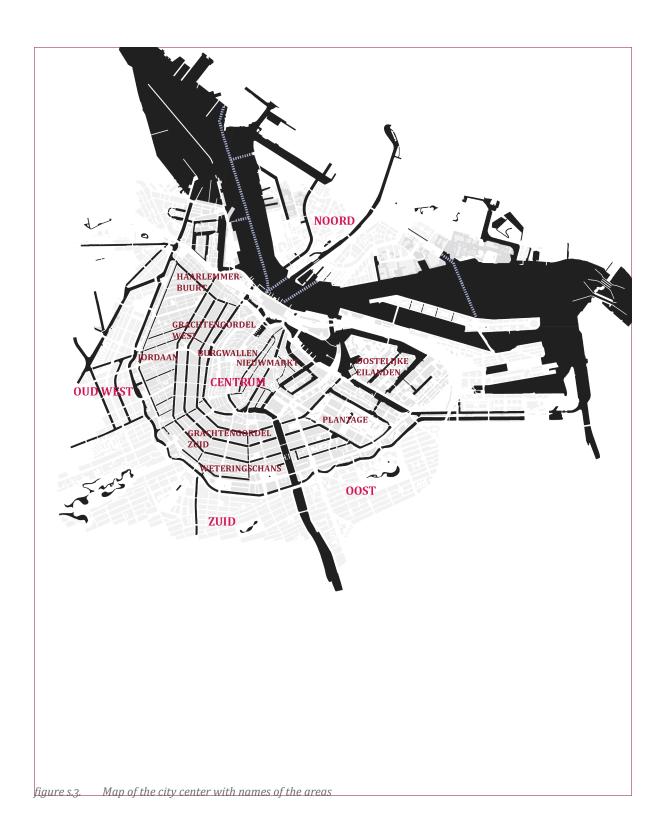
The city of Amsterdam is the capital of the Netherlands, and the main city of the Amsterdam Metropolitan region. In the report a short introduction is given on the facts and figures of the social condition of the city of Amsterdam: the number of inhabitants, visitors, hotel beds and pressure of visitors on citizens.

However, the report will name several cities, villages, districts or areas through the process, and therefore the location of these places will be shown in the maps of three different scales: the region, city and city center. It is necessary to know the location of these places to understand the strategy for the region of Amsterdam.









LAYERED ANALYSIS

A detailed analysis of all 5 operators - history, governance, technical, economic and social - is elaborated on three scales - metropolitan, city and center - in this explanatory booklet, before the second sub research question can be answered:

SQ2: Where are the problematic links between the different layers of the structure of Amsterdam in dealing with tourism, related to history, governance, technical, economic and social operators in the city?

Each of the layers represent a different operator of the city related to tourism. This booklet shows an overview of all operators and their conclusions, first explained through a theory paper on the methodology of the layered analysis, elaborating on the relations between the operators and the multiscalarity.

The network analysis of the layers social, economic, technical, governance and history will be performed on three scales: the regional, city and neighbourhood scale. For every scale the networks will represent different aspects of the city, where on the neighbourhood scale more detailed elements are showed like locations of facilities and walking routes, while on the regional scale larger flows and economic centers will be analysed. By combining two or more layers on the same scale, problematic nodes or lines can be found. These places will be analysed by the means of a SWOT in more detail and interventions will be proposed to create a more coherent and evenly distributed region, connected through a well-defined system of networks: points and nodes of attractive places linked by lines or connections for users to move through the region.

The focus of the report and the end products will be on the city scale, since the municipality's efforts are mostly found in the spreading of tourists to the region, while the city scale potential has not been fully integrated. Results in relation to the distribution of tourists visiting the region is improving, so a certain level of progress is achieved (Veldhuizen, 2017), hence there is more opportunity to look for potential places in the city's urban fabric. Therefore, the linking analysis will concentrate mostly on the city scale.

THEORY

Theoretical framework for the methodology

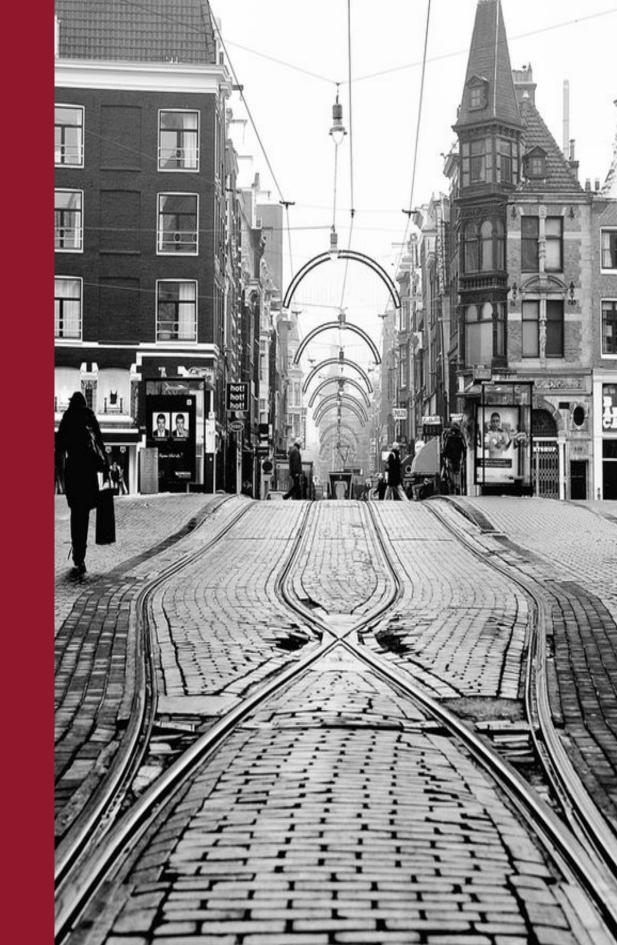
TOURISM IN NETWORKING AMSTERDAM

A networked layer approach as tourism analysis strategy

Abstract - Due to the growing touristic movements worldwide, cities and landscapes start to experience or are already experiencing negative socio-spatial impacts, resulting in for example a decreased liveability and overcrowding. In Amsterdam there are many proposed strategies to minimize these impacts, but still little results are notable. Since the tourism sector will grow even more in the future, there is a need to understand this complex issue through multiple scales, to see relations between different layers/networks present in the city related to tourism: social, economic, technical, governmental and historical. This paper will try to answer the question how the network layer approach of Gabriel Dupuy can be adapted to be used for the graduation thesis to find problematic links between the networks within the tourism sector. This is necessary to be able to propose possible interventions to minimize negative tourism impacts and create a more inclusive and adaptive strategy for Amsterdam and its region. This paper proposes an adapted version of the network layer approach of Dupuy that fills in the gaps of the model with network theory to analyse both socially and spatially the (touristic) structure of the metropolitan region.

Key words: Tourism growth, European heritage cities, negative tourism impacts, network layer approach analysis.

Figure s.4. Street's of Amsterdam (Novozhilov, 2011).



INTRODUCTION

Tourism is recently growing very fast due to trends like globalisation and economic wellbeing. The forecast is that this will even increase with almost 50% from 2010 to 2030. Europe is the continent with the highest international tourist arrivals (48% of the total outbound of the world (UNWTO, 2017)). In the past, European regions have been trying to attract more visitors by branding and adding touristic attractions. Recently there is a switch in the way experts, citizens and visitors themselves are thinking about the effects of tourism on the public space, experience, liveability and capital of a city. One of the most recognized problems is crowding (Popp. 2012: Neuts & Nijkamp. 2012: Ouinn. 2007). The touristic sector is not anymore only thought of as a provider of job opportunities and new capital for the city and society but also as a negative impact on the liveability and variation of facilities of the place. This is also found by Pinkster and Boterman in their research on tourism in the canal district of Amsterdam: "Fuelled by economic, financial and cultural globalisation, the international tourism industry is redefining historic city centers into objects of cultural consumption, process that is not always evaluated positively by locals" (Pinkster & Boterman, 2017). Extreme examples are Venice and Barcelona, where people are protesting against and moving out of the city because of tourism and its effects like gentrification. In the case of Amsterdam in the Netherlands the city center can barely cope with the amount of visitors, make citizens complain about crowding and loss of identity in their neighbourhoods. Pinkster writes that "[In Amsterdam] tourism is fast becoming one of the most debated and contentious issues in the city". Especially the group of "long-term, upper-middleclass residents of the historic canal district, who express their frustration about tourism-related

nuisances and developments in a continuous stream of newspaper letters, at public events and in municipal settings". She explains that tourists are searching for the most local experiences of the place they visit, what triggers the "processes of commodification as some aspects of local identity and culture are exploited for profit". With the future growth of tourism in mind these problems will only increase.

This issue needs a better understanding of how to deal with (the growth of) touristic flows and what strategy contributes to a more inclusive and resilient region for both the citizen and visitor. The resiliency in the strategy is needed to be able to make a proposal that is applicable for a long term, taking into account the factor of growth in tourism predicted by the UNWTO. The network and system of the city needs to be adaptive to the changes in users, technologies and lifestyles. Inclusiveness in this sense means to include both groups of people in the strategy and future proposal for the region; the citizen and the visitor. The city should be and stay attractive for the inhabitant to keep the soul of the city in place (Kruyswijk, 2016b). Without this, the center itself would become like a touristic attraction, and this would lead to a case of homogenization. In his book (2017) Rossi explains the existence of global capitalism, related to globalisation and the homogenization of culture and contemporary urban life. He names three phenomena that "have brought to life this idea of homogenization": McDonaldization, Disneyfication Guggenheimization. McDonaldization is understood as the "process of homogenization of consumer culture in capitalist societies with the tendency to make social processes efficient, foreseeable, and measurable" (Rossi, 2017), while

"Disneyfication implies the internationalisation of the entertainment values of US mass culture. It is the idea of bigger, faster, and better entertainment with an overarching sense of uniformity worldwide" (Campbell et al. in Matusitz & Palermo, 2014). Guggenheimization is most noticeable in the case of Amsterdam, where a "softer manifestation of cultural homogenization" (Rossi) is visible than the in the other phenomena. This way of urban development is named the "Guggenheim effect, particularly in terms of tourism attraction but also of imposition of a strictly consumptionoriented pattern of culture-led regeneration". The uniformity and homogeneity relates to the identity or authenticity that the citizens are losing in their neighbourhoods. Big international, global franchises are put in place, replacing the local and traditional stores which the citizens are attached to.

To understand this problem more thorough, the separate aspects related to tourism need to be analysed, like the system and structure of the network, the production and consumption (touristic facilities and accommodation), the social system and the tourism related policies of the municipality and region. This paper will propose an approach based on the theories from Dupuy, Schaick, Wright, Rooij and others to analyse these networks present in the city of Amsterdam.

DUPUY'S LAYER APPROACH

"Networks of infrastructures are channels used for many purposes, that interconnect places along lines and pathways" (Rooij, 2005b, p.171). He sees networks as an aspect of Urbanism that should recognize the people using and moving through the connections made between points in the urban

fabric, and how they reach their destinations. One of the theories for network thinking is the Network City by Gabriel Dupuy (figure xx). He sees the overall structure of networks as a triple layered framework, where he refers to the layers as operators (Dupuy, 2008).

The first level represents the technical networks or physical elements, like streets, cables, sewage and highways. The second level contains the suppliers of functional networks, using the physical connections made by level one and providing services to level three. Level three illustrates the people using the other two levels in their daily life. They use specific parts of the other layers to create their own personal network by linking activity places, spaces, services, desires and needs. Each operator is highly dependent on the other, shown in the scheme with (dotted) arrows between the separate layers. This means that the social aspect is highly integrated in this model. The model shows that social and spatial structures cannot be threated as two different, and fully separate systems.

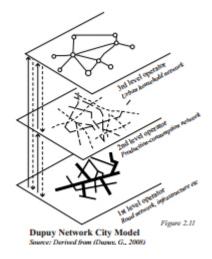


figure s.5. Dupuy Network City Model (Dupuy, 2008)

COHERENCE SOCIAL AND SPATIAL NETWORKS

"To represent the interrelated co-existence of social and physical subsystems, networkthinking in general might offer a coherent framework" (Schaick, 2005). Rooij states that the first two layers are representing a certain degree of objectivity, while the third is mostly subjective, because of the personal choices made by the operators. In his model, Dupuy talks about the third level operator as the urban household, but the citizen is not the only one using this network. "The spatial reach of our daily activities and contacts has expanded from the local to the global scale" (Fernández-Maldonado, 2005). She refers to the globalisation trend, where our connections and movements became global, also connected to the growing movements of tourism. Hence, the operator of the global city is not only the citizen, but can also be seen as the visitors. They use the same networks and connections as the citizens of the city like roads, public transport, internet, services, facilities and public spaces, although in a different way, quantity and time span, since the visitor is a temporal stayer at the location with other goals, needs and pleasures. This results in an increase of commercial facilities mainly focussed on the tourists like souvenir shops, hot-dog stands, platforms for boat tours and tuc-tucs, which are not used by the citizens. When there is nothing left to come to the center for anymore, in combination with the crowded streets of these popular places, citizens will start to avoid it.

Rooij describes that changes in the network by spatial interventions can only be made in the first two layers of the technical and functional networks, since the subjective actions of people cannot be controlled. It can be influenced by changes in the first two layers, so the citizens and tourists will adapt their daily life. "However, knowledge of the characteristics of the third level is very important in order to shape better a respondent environment supporting a real possibility of choice for people" (Rooij, 2005b). When our analytical focus centers on how the wires, ducts, tunnels, conduits, streets, highways and technical networks that interlace and infuse cities are constructed and used, modern urbanism emerges as an extraordinarily complex and dynamic sociotechnical process (Graham & Marvin, 2001). Here it becomes clear that both the social system and technical/spatial appearance of the city are important in this process of the network city, especially when focussing on the topic of tourism, where interaction between groups with different needs and desires are coming together in the same spaces and networks.

TWO ADDITIONAL LAYERS: HISTORY AND THE GOVERNMENT

The layer approach of Dupuy integrates the social and spatial aspects of a city in one model, but using this to analyse tourism in the case of Amsterdam - a heritage city - there are two layers that should be added to make it complete. Kritika Sha (2017) explains in her thesis that the aspects of governance and the historical context are introduced "to be able to evaluate the spatial planning principles and policy making (Rocco in Sha, 2017)" of the specific location (figure xx). The same can be applied to the case of Amsterdam and its tourism sector.

The history layer, in Kritika's model the historical evolution, will try to perceive two aspects of the city. First, it will analyse the origin of the city and how

is became a touristic destination. Within this layer the culture and identity will be studied to perceive the loss of identity felt by the citizens, concerning the social system. Second, the spatial appearance of the structure and streets of the city will show the perception of crowding and how the urban form is not able to cope with the recent demand of the society anymore. These parts of the city were built in a different time with a contrasting society, technology and spatial structure. The other layer governance – is incorporated in the analysis because of the policy making to distinguish the current state of the region and municipality on implemented strategies working on tourism, to be able to propose changes in the policies to substantiate the strategy for the region. Recently implemented policies like the accommodation policy (overnachtingsbeleid), the stop on touristic facilities and the movement of the touringcar outside of the city center are part of this governance layer. In general it has a big impact on how the city is constructed and is dealing with tourism at present.

A MULTI-SCALAR APPROACH

Tourism is related to several scales, thinking about the very local interaction of tourists and citizens, crowding and the production-consumption of the local economy, with on the other hand the existence of regional or municipal policies, non-local actors and international movements and relations that is affecting it as well. The negative effects of tourism are usually felt on the local scale like the perception of loss of identity and overcrowding. This means that the complex state of tourism in cities cannot be understood without looking into several scales. "Contemporary urban life is revealed as a ceaseless and mobile interplay between many different

scales, from the body to the globe" (Graham & Marvin, 2001). In this quote of Graham and Marvin, the life of a citizen (but also the tourists), are explained through engaging in urban life: at home (local) but also taking part in society. In this sense the person is participating in several scales. The multi-scalar approach has been acknowledged by various writers within various topics of interest (Roy Chowdhury, 2011; Demuzere and all., 2014; Yigitcanlar, 2015). The approach of Dupuy is also working with this multi-scalar approach, comparing them with each other on these different scales. This makes it impossible to study the layers and see relations to the other. "The relation [between the layers] becomes meaningless by the discontinuity

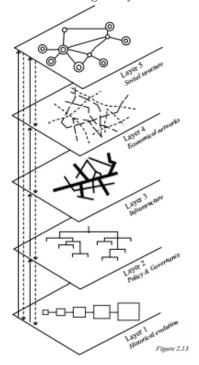


figure s.6. Analytical Framework for Dharavi (Sha, 2017)

of the scales between the layers" (Schaick, 2005). To be able to overlay the networks in the Dupuy approach the scaling should be redefined, by using the same scales on every layer, and zooming in and out to perceive specific or more general elements of every operator, as shown in figure xx. This way the separate layers can be compared without making it elusive in a multi-layered approach. Related to the theme of tourism this is relevant due to the many scales that this sector is involved in; from the international scale because of traveling, to the very local by local consumption and use of the public space. This has big impacts on the built environment, people and economic sector of the host city.

TIME AND HIERARCHY IN THE NETWORK CITY

Taking into account the temporary nature of tourism, temporality and time are very important aspects. Drewe (2005) explains that time comes back on level three; the territory of the urban household and so in this thesis also the visitors. Here, people use the network to be able to move through the city as fast as possible. Tourists don't want to lose time with traveling between for example their accommodation and attractions, resulting in a high concentration of hotels and other forms of accommodation in the most touristic places like the city center in the case of Amsterdam. The "points" are much closer to each other, so short connections are made possible. In many cases this means that the travel time is also shorter. At the same time this results in only a small area of Amsterdam where these connections take place, resulting in crowding of specific streets in this area. Redefining the networks in Amsterdam by construction of new or improved connections could create a more spread out and polycentric situation where crowding does not affect the public spaces and liveability so much anymore. This means that "points" should be changed, moved, added or adjusted to a network system with new connections and flows through the city.

In the layer approach and its different scales exists a hierarchical order between them. Rooij (2005b) explains that the places where the connections in different infrastructures, on different hierarchical levels, come together are amidst of the most attractive places in the city:

Within the hierarchies of these various networks, transport nodes, the places where (different) hierarchies and levels of scale of infrastructures come together, are (potentially) among the most interesting locations within the Network City. The nodes of the network, such as public squares, stations, park-and-ride facilities, motorway access and exit points etc., are situated on the field of tension between 'place' and 'flow', where the 'space occupied by flows' meets the 'space occupied by places'. In and around the transport nodes, the network is linked to the geographical surface and environment. Here, new development potentials, new possibilities, but also new threats arise. (Rooij, 2005b).

This is significant because of the link made between the transport and movement, the topological place and the spatial appearance of these nodes. The flow of people, traffic, products and information meet the place where activities happen. These places have many opportunities such as economic activities, but can also be threatened by events like crowding, safety issues and traffic jams. The networks coming together in the nodes work on several scales and are all very complex because of many overlaying flows and points crossing and running parallel to each other. When these networks grow, they have to follow certain rules. Rooij names one of these rules hierarchy, where the smaller scale has to be determined before the larger scales are formed. The small scale elements must together form the larger scale and connect to the other small scale elements.

"A city is successful seen from a spatial, social, economic and ecological perspective when there is a positive emotional connection between human beings and their environment and it capitalises upon its competitive advantages" (2005a). The first point is very dependent on the small scale. As stated in the introduction tourism can cause negative impacts on this emotional connection between humans and their environment. They start to experience negative encounters with other people, the changing identity, raising rent prices and a loss of belonging. This means that from

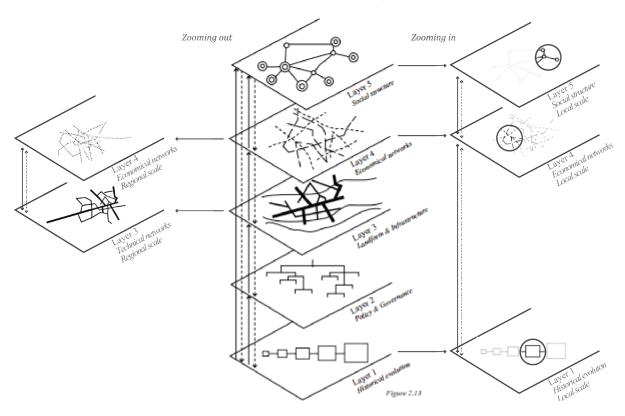


figure s.7. Multi-scalar approach on the model of Gabriel Dupuy and Kritika Sha, own image.

the perspective of Rooij the city is not successful anymore in all perspectives. In line with this he also writes: "local connections are the strongest. Small scale elements are necessary, not only to carry out the function for which they arose, but also because of their secondary role in linking other (higher order) elements". In this sense the small scale connections, analysed in the zoomed in area of the adapted network approach are very important to link this network to the higher scales.

The tourism strategy for Amsterdam can conduct of a number of small-scale elements linking other networks on other scales to each other to create a space where these small-scale personal interactions can and will take place. Successful cities provide spatial quality in this human scale where citizens and visitors come together. On the other hand the local elements should be linked through a well-structured network of technical and economic connections to be able to provide this spatial quality and interactions.

CONCLUSION

The network approach for analysing the socialspatial state of tourism in the region of Amsterdam is effective with two additions: the multi-scaler approach as presented by Dupuy extended with the two extra layers Governance and History, to understand the specific current state of a heritage European city like Amsterdam. The city can only be understood by analysing the operators on the same scales - differently presented by Dupuy in his model by mixing scales - to be able to overlay different aspects related to tourism and see problematic links between them. At the same time the problematic of the industry needs to be viewed at different scales to understand the complexity on several scales. varying from the local to the regional. With this knowledge, interventions can be proposed to create a more comprehensive, multi-layered network for the city. The spatial interventions can only be applied in the first two (technical and economic) layers of the Dupuy approach and the governance layer of the adapted version. The other two are there to provide useful information to propose changes in the networks and are not convertible themselves. since the social laver is subjective and consists out of personal actions of the people and the history layer is fixed and in some cases protected. However, the social layer can be influenced by the changes in the other layers resulting in people to change their daily life actions, use of public spaces and facilities and the way of moving through the city.

In order to improve the current conditions of the liveability related to tourism in the context of Amsterdam, the change in the use of the public space by the visitors is necessary for the citizens to accept the received interactions. This means that the technical, economic and governance interventions will support the changes to advance the social layer. To create an attractive region for the visitor and citizen, the network should consist of a number of well-connected small-scale elements to provide places where the interactions and public life can take place in a comprehensive network strategy for the entire region.

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HISTORY

GOVERNANCE

The layers that are part of the analysis, explained by the theory in the paper Tourism in Networking Amsterdam, are history, governance, technical, economic and social. Each of them brings to light different information on three different scales: metropolitan area, city and the center of Amsterdam. The following pages give the maps of each layer on these three scales, relating to the conclusions made in the report Welcoming Amsterdam: incorporating tourist and citizen in a strategy for growing touristic regions. The layers are directly on each following page and structured by the same layout so links can be identified between the scales and networks.

As stated in the paper, the layers are very much related to each other and by overlaying them problematic links can be found to identify intervention areas. The images showing the results of the linking can be found in the layered analysis chapter on page 42.

A short explanation of each layer can be found here. For a more detailed description, see the report page 56 and annex 2.

The history layer reveals the origin of the region with its important historical elements like the polders, beaches, defence line, monuments, public buildings and iconic/identical elements. These places can be related to cultural tourism since visitors are looking to experience the place and its history by sight-seeing.

Also the history is crucial for citizens to feel attached to their living environment. A historical event or traditions can create a form of place identity. As an result of extraordinary features or events a place can become popular for both citizens and visitors. Examples of this are the city center of Amsterdam with its canal district and houses and Zaanse Schans featuring Dutch windmills.

Large parts of the region are protected by being listed as UNESCO world heritage, to preserve the historical conditions and its image.

Tourism affecting many stakeholders, different experiencing both negative and impacts. Especially positive for the citizens to decrease the feeling of a loss of identity the municipality set up 2 policies and a spreading strategy. Opening new touristic shops in the city center is not allowed and hotels are only approved in designated areas in the city to control the development. touristic spreading strategy has the aim of distributing tourists more evenly through the region to relieve the pressure on the city center. Also in collaboration with Amsterdam Marketing the municipality started a neighborhood campaign, attracting visitors and citizens to surrounding districts.

Through these kind of strategies and policies the municipality tries to control the situation by restrictions and encouragements. It is clear that there is a need for further research and an improved strategy accompanied by policies to manage the growing number of visitors coming to the region.

TECHNICAL

The physical situation is dominated by the technical networks in form of roads, canals, bicycle lanes, pedestrian streets and public transport. It provides service to the two layers social and economic to connect "points" and centers and facilitates movement of flows of the city. On each scale the monocentrality plays a role: the roads and public transport connections on the metropolitan

scale mainly lead to Amsterdam,

on the city scale to the center and

in the center scale to the Dam and

Central Station.

The cycling network is very well represented through the whole region, since it is one of the main modes of transport and a leisure activity.

However, one of the most important transport mode is by foot, especially for tourists, since it the best way to experience the city.

It is important to improve the connections between touristic areas to provide a fast, safe and interesting journey.

ECONOMIC

The economic layer is the link between connections and places. Places like facilities, attractions and accommodations are linked to the movement of commercial activity and suppliers of functional networks. It is using the physical connections of the technical layer and providing services to the social one.

Visitors are searching for the most local experience, what triggers the process of cultural commodification: "some aspects of local identity and culture [that] are exploited for profit" (Pinkster & Boterman, 2017). The tourism sector is following main trends of touristic consumerism, followed by big franchises replacing the local economy.

The city center contains the highest number of facilities, with many hotels and touristic attractions. This, and the famous canal district's city scape makes visitors to generally spend their eintire stay in this small area of the region. For the area of activity, see the social layer.

SOCIAL

The social layer is about activities, individuals and groups of people, interactions and places where this takes place. These operators use the other layers for their daily life: consumption, movements through the city, are steered by policies and have the history as their cultural background. Sometimes the people living in the city have a strong connection to its history: a feeling of belonging to the place.

As mentioned in the economic layer, the highest concentration of touristic activity is situated in the city center. However, for the citizens this activity is spread out more, but stays generally inside of the ring road area. The most problematic streets within the city center follow the north-south axis: from the Central Station of Amsterdam, along the Dam square, Leidsestraat, Leidseplein to the Museumplein.

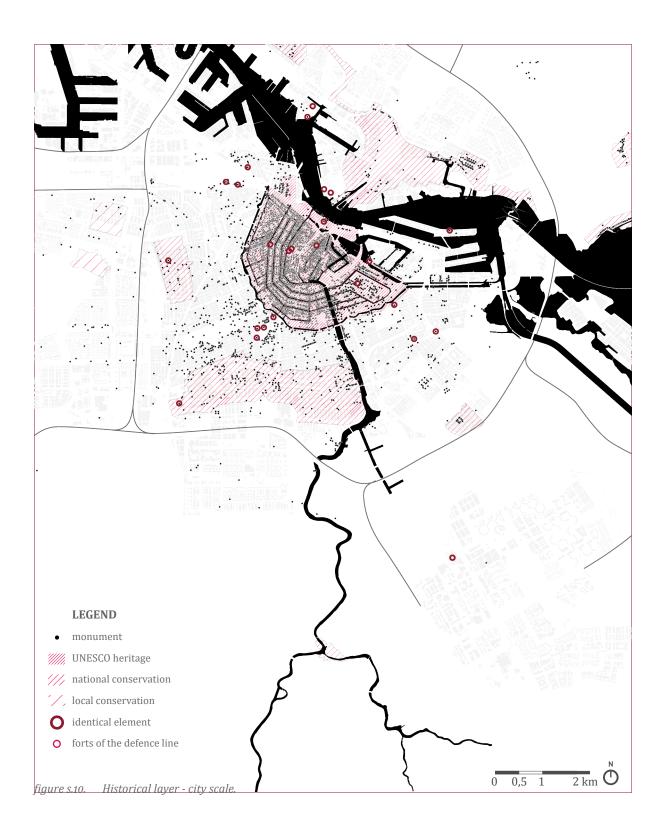
To relieve the pressure on this area a strategy is needed to distribute visitors to a larger area of the city and region.



HISTORY



figure s.8. Historical layer - Metropolitan area. figure s.9. Historical layer - city center.





GOVERNANCE

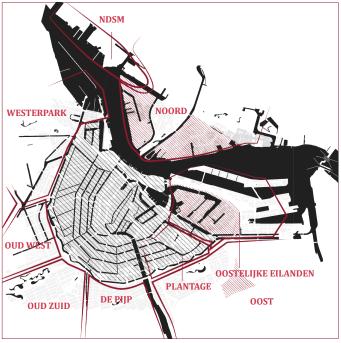
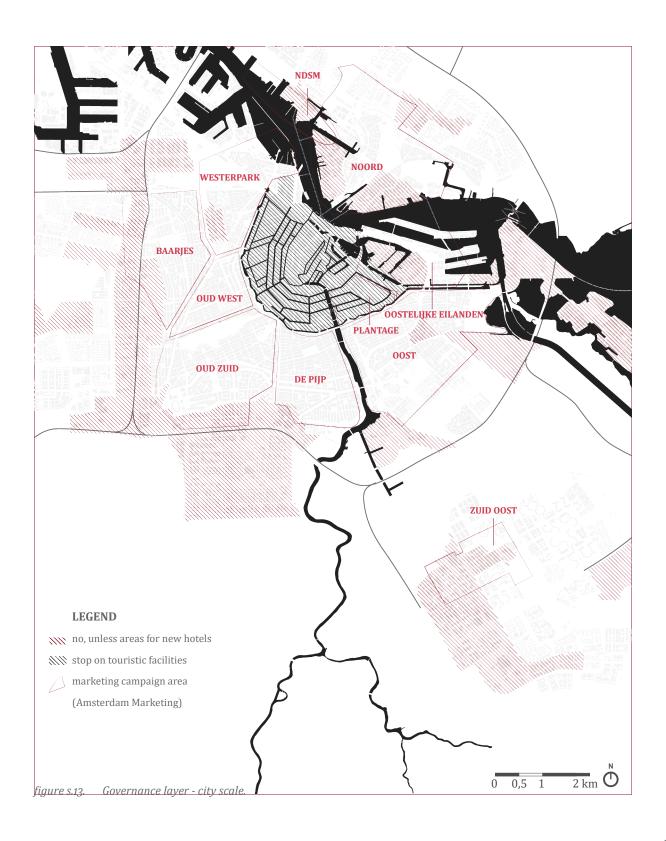


figure s.11. Governance layer - Metropolitan area. figure s.12. Governance layer - city center.

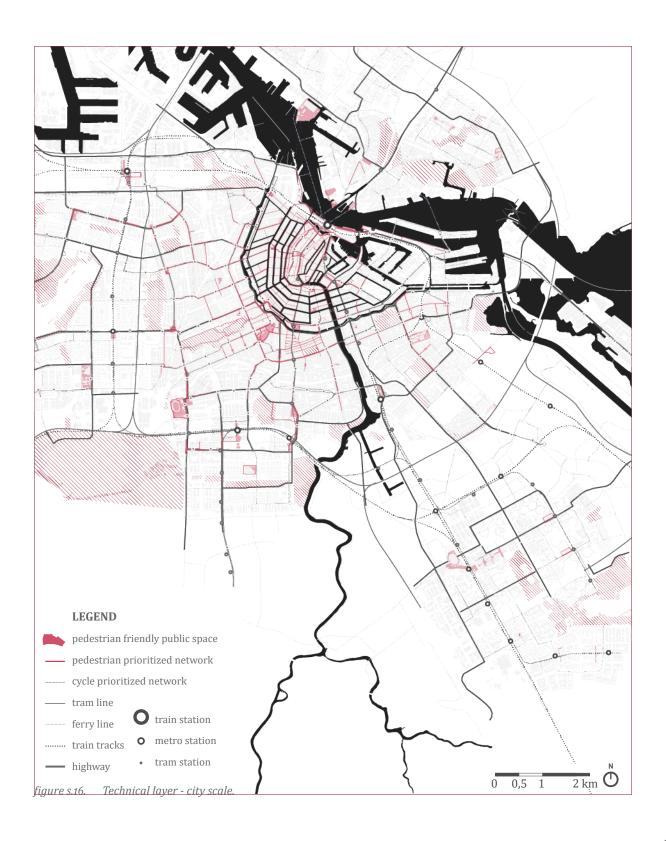




TECHNICAL



figure s.14. Technicla layer - Metropolitan area. figure s.15. Technical layer - city center.

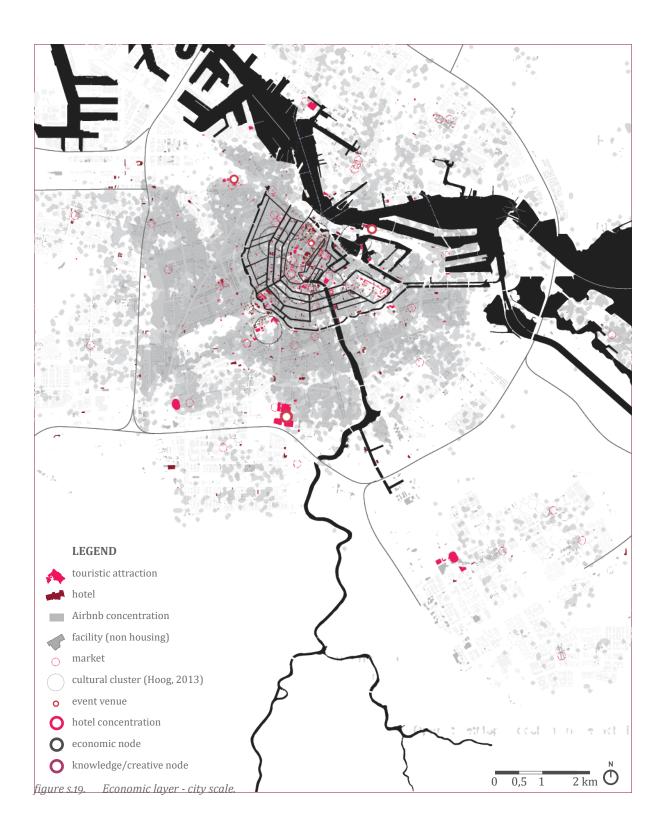


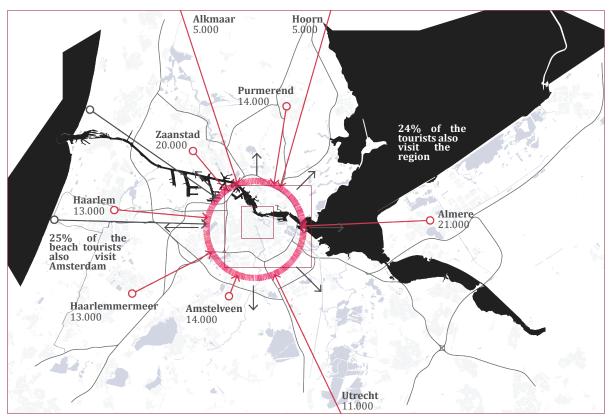


ECONOMIC



figure s.17. Economic layer - Metropolitan area. Economic layer - city center.



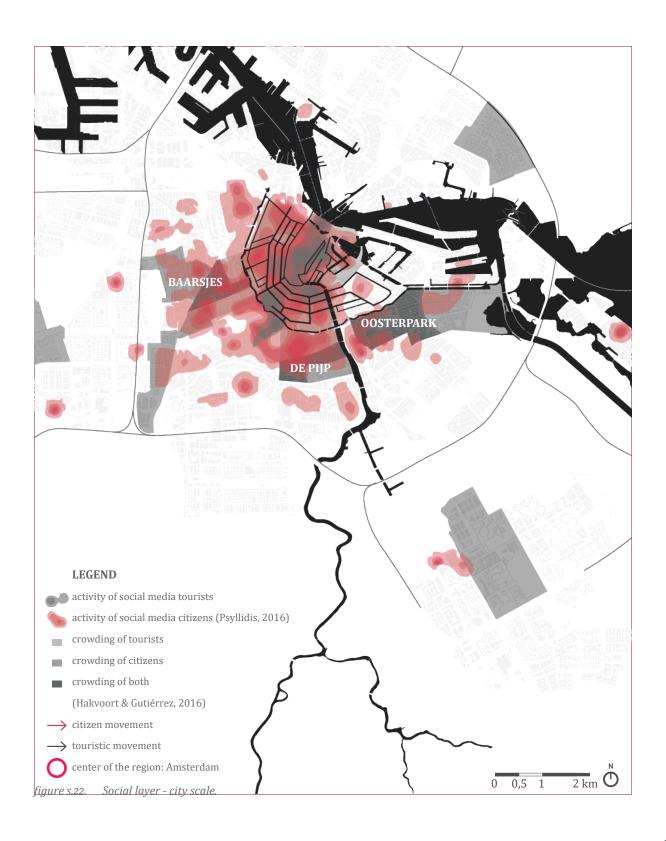


SOCIAL

The metropolitan area contains 2 frames, showing the surface of the other scales: city and center. Each of them gives a different detail and set of information about the region related to tourism.



figure s.20. Social layer - Metropolitan area. figure s.21. Social layer - city center.



PROBLEMATIC LINKS BETWEEN THE OPERATORS

With the detailed analysis of the operators in the city center, city and region the second sub research question can be answered:

SQ2: Where are the problematic links between the different layers of the structure of Amsterdam in dealing with tourism, related to history, governance, technical, economic and social operators in the city?

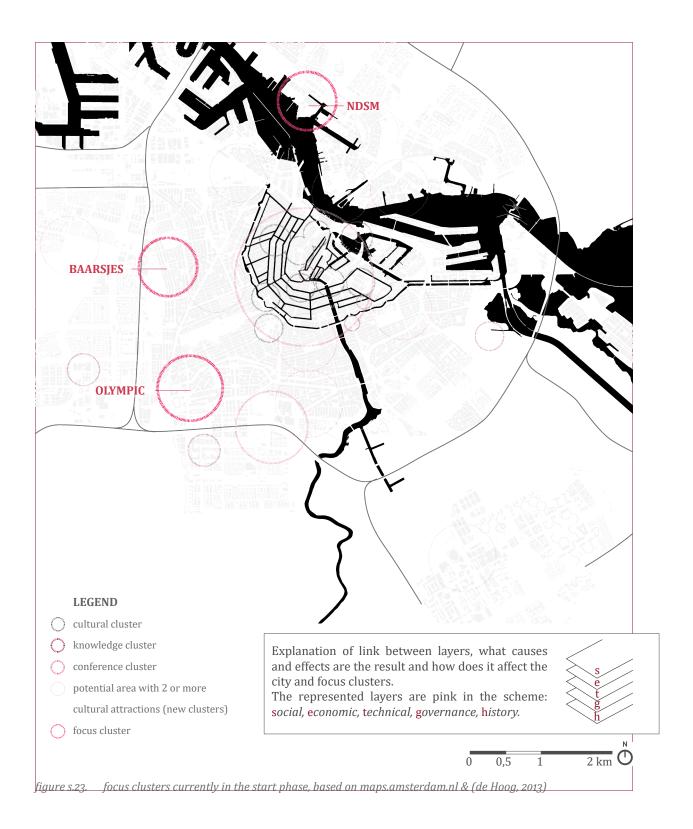
Combined with the theory on cultural clusters from de Hoog a focus will be put on three of the potential clusters in the city to determine the cluster with the highest potential to elaborate on the requirements to create an attractive touristic area. The design is not meant as a detailed plan for the site, but as an illustration of the elements needed to start the process in developing the clusters as part of the larger spatial strategy including the network of nodes and connections.

LAYERED ANALYSIS

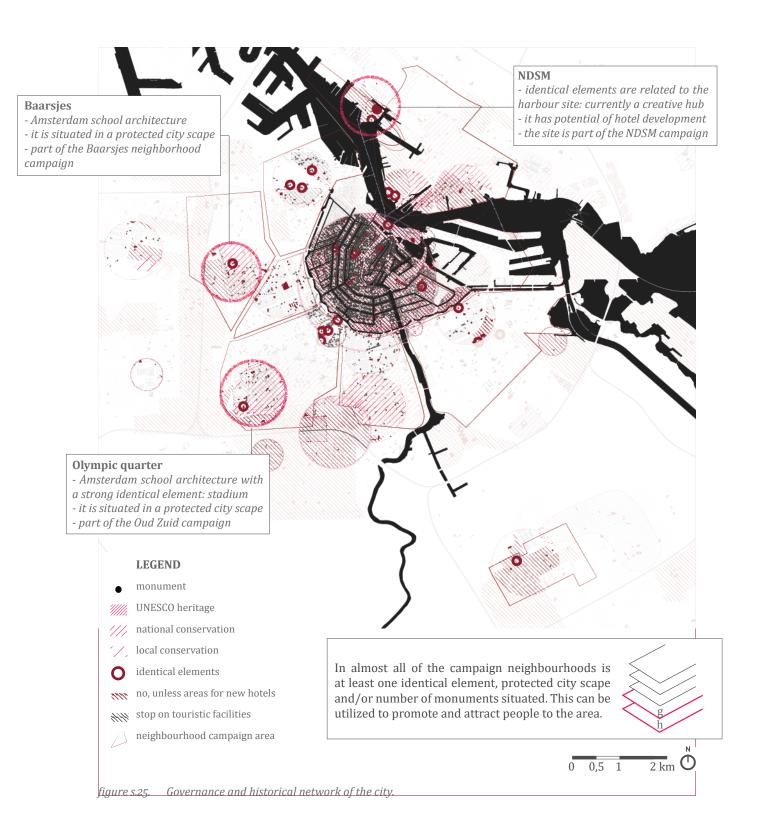
To promote distribution of tourists through the city, it is important to develop the clusters in the more quiet areas which are more distanced from the city center and its pressure on the citizens there. The most promising clusters, and most interesting for the investigation in this thesis, are found in the start/new cluster phase named on the previous two pages, since there is most potential for development. Also they currently facilitate little visitors, so the capacity is higher. Therefore, the choice of examining the potential of the clusters has been focussed on the three clusters in Figure 82: the NDSM wharf, the Baarsjes and the Olympic area. The three potential clusters are positioned in different images of the city with their own specific context and identity.

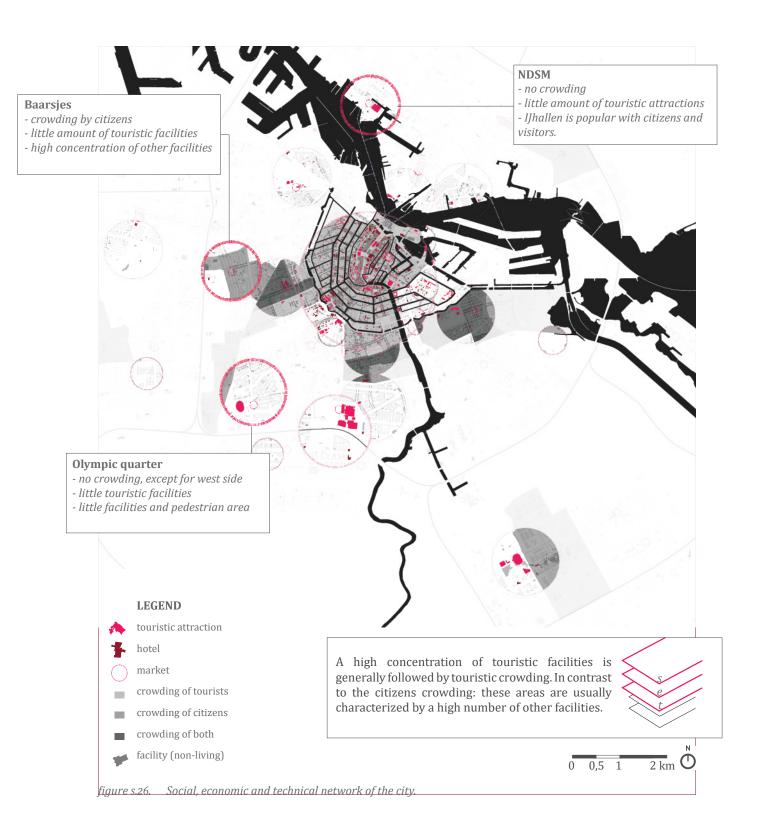
On the following pages different aspects of the 5 layers are combined with a focus on the three clusters to analyse the situation related to history, governance, technical, economic and social operators in each of them. Conclusions will be formed using a confrontation matrix to perceive the strengths, weaknesses, opportunities and threats coming from the layered analysis. From this comparison one cluster will be chosen with the highest potential to show the elaboration of the design interventions in more detail.

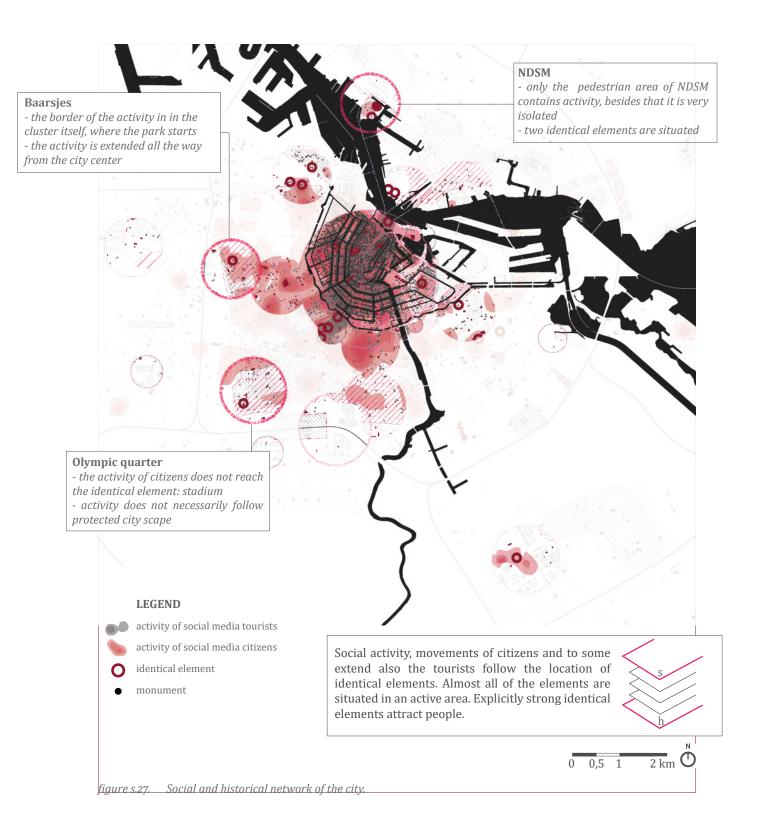
In the right bottom corner of every page is indicated which layers are put forward, to find problematic links between the layers in the focus clusters. Following maps are presented of the city center and region, with the same approach, looking for intervention areas on the other scales.

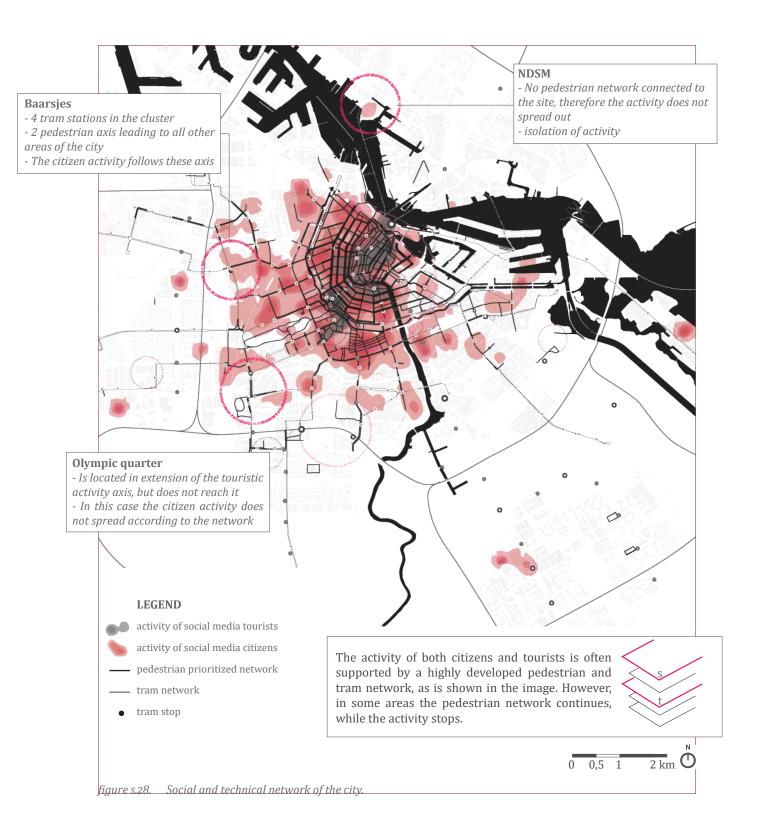


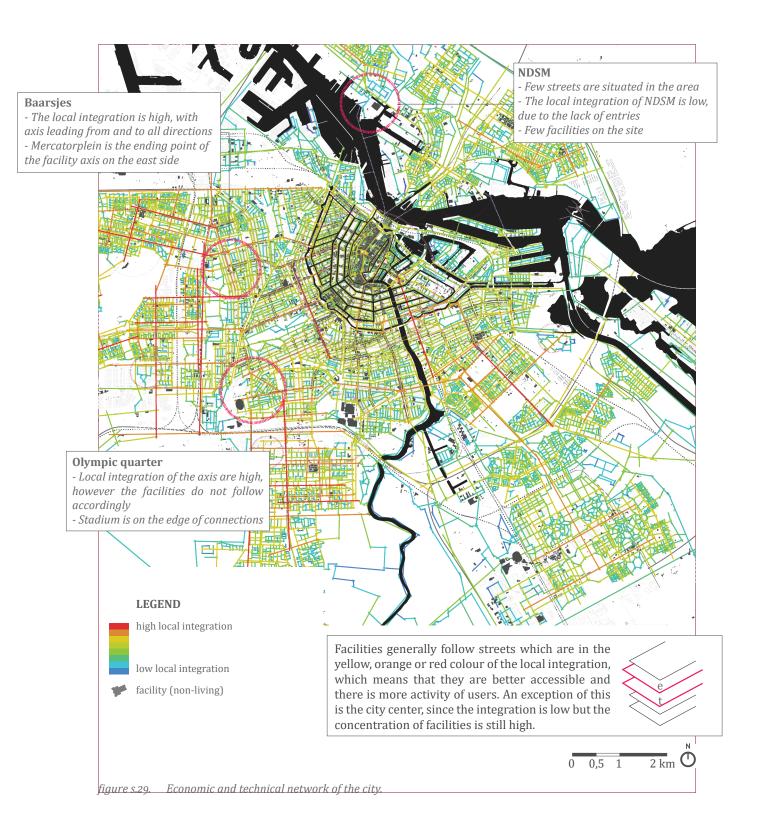












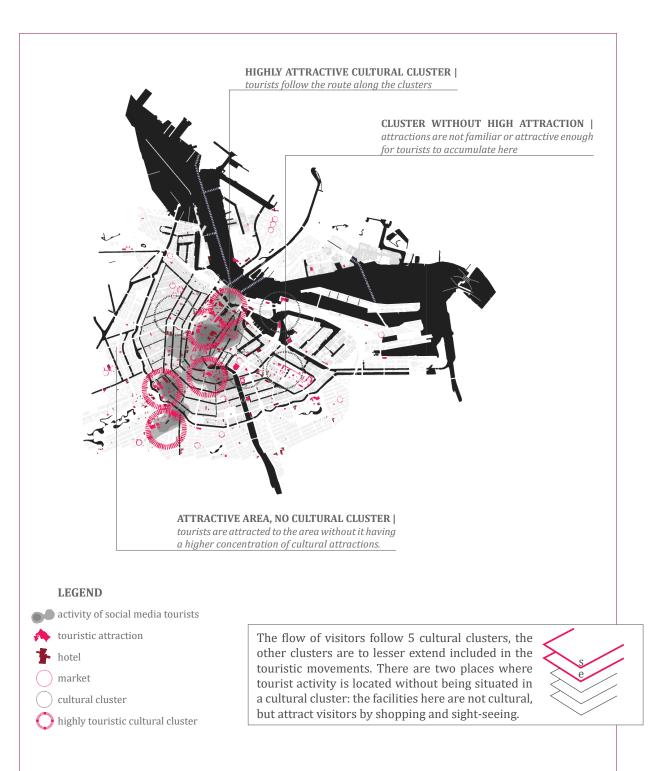


figure s.30. Social and economic network of the city center.

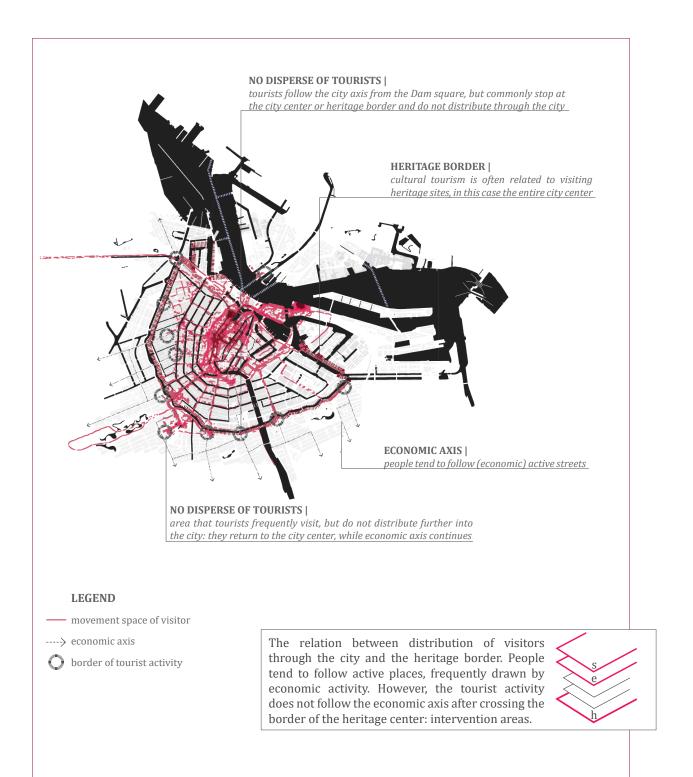


figure s.31. Social, economic and historical network of the city center.

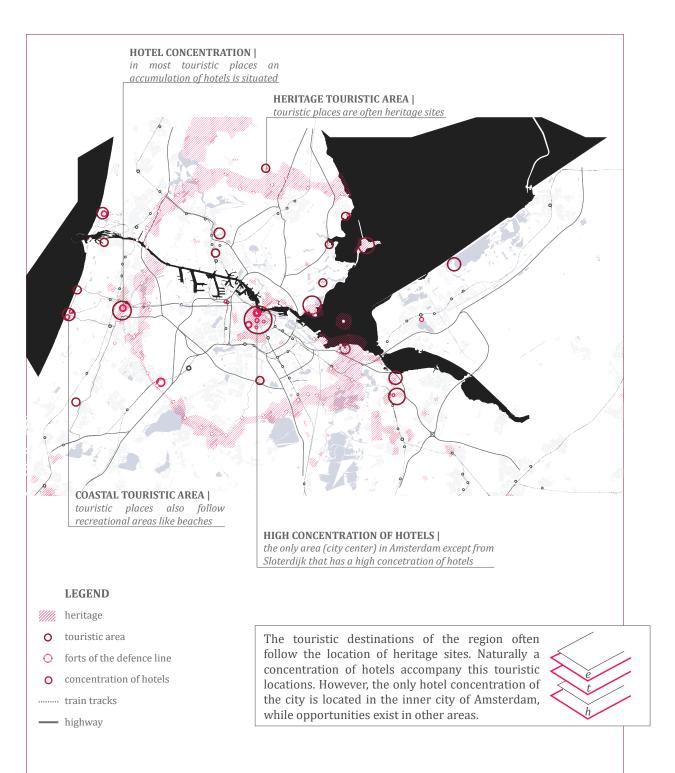


figure s.32. Economic, technical and history network of the metropolitan area.

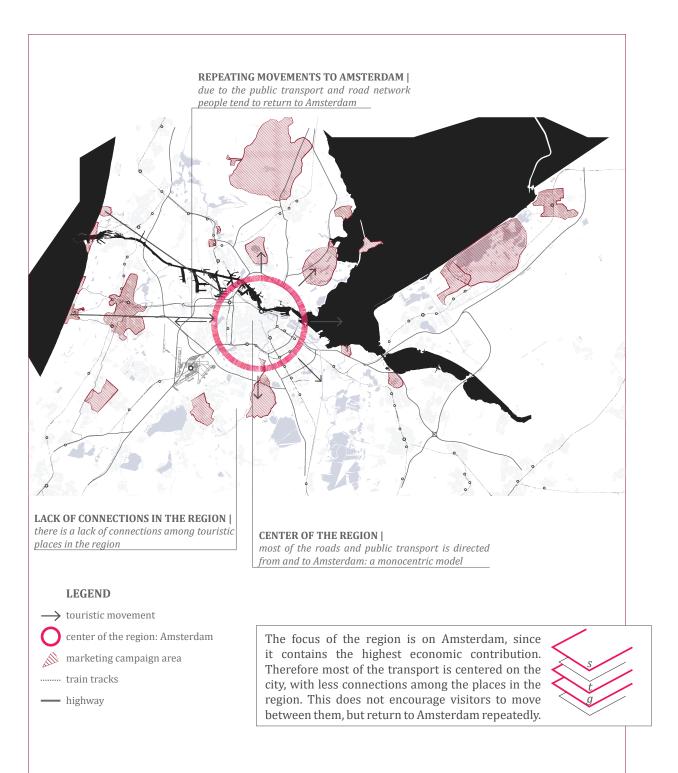


figure s.33. Social, technical and governance network of the metropolitan area.

CONCLUSION

This booklet is additional to the report Welcoming Amsterdam: A spatial strategy for a growing touristic region, aiming to explain the role of the layered analysis based on the theory from Gabriel Dupuy (1981) and Kritika Sha (2017) in relation to the current situation of the region, city and city center of Amsterdam. The maps address the 5 operators of the area: history, governance, technical, economic and social by mapping spatial elements of these layers. The results of the analysis of the layers were combined with each other, to find problematic or potential links among them. The conclusions become the elements of the SWOT analysis of the confrontation matrix in the report, intervention areas and potential spatial phenomena. The information for the maps came from various (municipal) websites, Amsterdam Marketing, researches from PhD students and master students, papers and books on tourism. A list of the concerned sources is presented on the next page.

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