

VALLGRAVSSTRÅKET



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ABSTRACT

The subject of empirical study is Vallgravsstråket, an urban space with squares, parks and open spaces that was created in the place of the Gothenburg's original fortification in the 19th century. The study can be discerned with two moments. The first part unfolds Vallgravsstråket's obscure historical legibility by looking into the subject's conditional processes of creating/producing heritage with focus on Vallgravsstråket's local identity and place-based memory. The second part of the thesis focuses on the area's operative practicality by studying the consequences of constructing a footbridge over Vallgravsstråket with the help of a morphological analysis.

A recurring question involves understanding what makes up Vallgravsstråket and why it is important to preserve it and, for whom. Along these lines, it has been interesting to identify an inconsistent gap between how the area is currently represented, what is commonly stated in legally binding documents and, how the local users evaluate the area. The aim of the study is to unveil different perspectives on Vallgravsstråket in order to obtain a better comprehension of the subject's cultural-historical, legal and morphological dimensions. The thesis of this dissertation as such, has an inductive nature and grounds from a holistic approach that is motivated by a pluralistic view of reasoning where knowledge cannot be reasoned from one single particular perspective.

The dissertation starts out with an intersubjective field study that introduces the area's 'urban walls', 'urban rooms' and 'urban experience'. The thesis then shifts its focus on Vallgravsstråket's urban development by outlining the significant changes in the history of Gothenburg and analysing the impact of planning interventions. Vallgravsstråket's urban elements, that is to say, parks, bridges and canal, are evaluated as thematic chapters. The dissertation then exemplifies a qualitative text analysis of legal documents that concern the named area with the purpose of understanding how or why certain approaches have surfaced in debates and researches. After having assessed an adequate empirical background on Vallgravsstråket, the last and final coordinated academic effort has been to experiment with a morphological analytical method both in theory and practice.

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The street is the river of the city, the place where we come together, the pathway to the center.

- William H. Whyte

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1. INTRODUCTION

When Gothenburg was founded in the early 1600s it was enclosed with a fortification wall that protected the town from neighbouring Scandinavian countries that for centuries fought over stabilising the nations' borders and trading privileges. Two centuries later the town had outgrown its need of a protective barrier system and sought after opening up the town with green areas and freestanding civic institutions, which resulted with the construction of Vallgravsstråket.

Geographically, Vallgravsstråket extends from Yttre Järnvågsbron in the west to Slussbron in the east and can be described as a green ring of parks, squares and canals around Gothenburg's historic core. The area comprises a diverse mixed-use function that creates possibilities for cultural and social exchange, shopping, and recreational promenade.

Vallgravsstråket is classified as an area of national interest and portrays a significant role in Gothenburg's townscape from a cultural and historical perspective, as much as in a social and environmental perspective. At a closer glance, however, Vallgravsstråket's representation as an area of national interest implicates mixed meanings in planning terms. I had never reflected on Vallgravsstråket's symbolic features until I came to study the area in a previous urban analysis assignment, which in turn, kindled an interest for exploring the subject further in a graduation thesis. Much of this thesis is dedicated in unveiling Vallgravsstråket's underlying characteristics and discussing the implicit conflicts and potentials in conceptualizing the area's place-based memory.

1.1 BACKGROUND

1.1.1 HERITAGE PRESERVATION AND INTEGRATED CONSERVATION

The methodological choices for heritage preservation and cultural-historical valorisation have been a long debated matter throughout the history of our time. Interests and attitudes in renovation have shifted and ossified according to our needs, which in turn has yielded with different approaches in intervening and adapting with our built environment. In a few words, the conservation department has constantly debated about issues that concern *what, why and how* to renovate.

It was, however, not until the second half of the 20th century that considerable achievements were initiated on an international level. The most groundbreaking document was the *Venice Charter 1964*¹ that sought after creating a common ground for the protection of architectural and heritage sites, as well as initiating an international joint approach. Since then, the Charter has been used as a referential framework in a number of recommendations, resolutions, declarations and statements adopted by international organisations such as UNESCO and ICOMOS.²

In 1974, as a reaction to the post-war urban planning tactics that implemented big-scale modernisation and urban renewal projects, the Council of Europe declared the “European Architectural Heritage Year” to confront the problems of rapid decay and disappearance of Europe’s architectural and natural heritage. In short, the “Eu-

ropean Architectural Heritage Year” took the form of a campaign and spread over three years resulting with pilot projects in participating countries.

A direct result of the European Council’s efforts can be interpreted as the adoption of *the European Charter of Architectural Heritage* and *the Amsterdam Declaration*.³ Both documents emphasised the need of broadening the scope of architectural heritage with integrated conservation strategies and discussed the particular roles of national, regional and local authorities in managing architectural heritage. Improving the preservation of our cultural heritage signified a gradual shift from the traditional way of preserving a single artefact to the conservation of the whole context, which now embraced the physical, geographical surroundings; the historical patterns and narratives; and, the social processes that shape heritage and its conservation.⁴ In physical terms, the development implied the expansion of historic monuments to include cultural landscape areas such as contemporary urban areas, parks, “*ordinary landscapes*”, vernacular architecture and industrial buildings.

The outcome of the European Council’s efforts in forging a common language to the professionalisation of conservation further developed the concept of integrated conservation that was first introduced by Piero Gazzola. In simple terms, integrated conservation can be understood as the broader definition of conservation that advocates a multidisciplinary and

1 Also known as the *International Charter for the Conservation and Restoration of Monuments and Sites*

2 Ahmad Y. (2006) pp. 292-293

3 Engelbrektsson, N., (2007), *Introduktion till kursen och till Del 1: “Kulturarv som konstruktion och konsumtion”*, lecture on 2007-10-08. See also: [<http://eurlex.europa.eu/Notice.do?mode=dbl&lang=en&ihtmlang=en&lng1=en,en&lng2=da,de,el,en,es,fr,it,nl,pt,&val=46457:cs&page=>] (2008-11-18)

4 Mason R., (2002), pp. 14

cross-sectorial approach.⁵ Although the concept has varied meanings from culture to culture, the term represents the recognition of the cultural and social values of a multicultural society, safeguarding intangible ('living') heritage⁶ and unveiling a pluralistically formed place-based memory.

In praxis, the concept of integrated conservation works with both qualitative and quantitative methods for value assessment and concretizes citizen empowerment with a democratic community planning strategies.⁷ Another approach has been promoting the need of assessing conservation perspectives in urban and regional planning.⁸ Both abovementioned strategies are topically evident in Sweden that has, alongside the international declarations and conventions, also ratified the concept of integrated conservation in a number of policy documents.

The development of this holistic approach has, in this manner, foregrounded the synergy of preserving our cultural heritage with sustainable urban development. One such ex-

ample is the Planning and Building Act (PBL), which manifests the legal measures in safeguarding buildings and cultural landscapes within urban and regional planning.⁹ Another such example is the nation's sixteen environmental quality objectives, where the goal of achieving "A Good Built Environment" strives for the protection and development of culturally and historically valuable buildings and environments, places and landscapes, all of which are motivated as significant factors in the nation's identity, well-being and aesthetic experience as they provide a wide range of housing, workplaces, services and culture.¹⁰

1.1.2 CHALLENGES

Although the advancement of the integrated conservation perspective has been evident in political agenda and local and regional development plans throughout the last four decades, the potentials and goals of the heritage preservation department is yet far from being fully met. As understood from above, professionals within integrated conservation are challenged to integrate and safeguard the cultural and natural values in an environment that is profoundly and rapidly changing. Another challenge is to strive after democratic means of signifying peoples' needs and experiences in the physical environment and planning process. Nevertheless, carrying out these demanding tasks however stirs up some problematic issues.

One major shortcoming that can be pointed out is the lack of methods and means of assessing cultural value in built environments.¹¹ Another underdeveloped area is its incapability

5 Engelbrektsson, N., (2007), *Introduktion till kursen och till Del 1: "Kulturarv som konstruktion och konsumtion"*, lecture on 2007-10-08

6 See for instance: UNESCO (2003), *Convention for the Safeguarding of the Intangible Cultural Heritage.*, 32nd session of the General Conference, Paris, 29 Sept. - 17. Oct. 2003

7 See for instance: Arnstein, S. (1969), "A Ladder of Citizen Participation" in: *JAIPI*, Vol. 35, No. 4, July 1969; Clark, K. (2006), "From Regulation to Participation: Cultural Heritage, Sustainable Development and Citizenship", in: *Forward Planning: The Function of Cultural Heritage in a Changing Europe*. Europarådet 2006. Inför 5te Ministerkonferensen; Hayden, D. (1995/1999) *The Power of Place: Urban Landscape as Public History*. Cambridge, Massachusetts: MIT Press; Sandercock, L. (ed.) (1998), *Making the Invisible Visible: A Multicultural Planning History*. Berkeley: University of California Press

8 See for instance: *the Convention for the Protection of the Architectural Heritage of Europe* (Granada, 3.X.1985) §10, "Urban and Regional Planning"

9 Boverket, PBL (1987)

10 [www.miljomal.nu/english/obj15.php], (2008-11-20)

11 Engelbrektsson, N. (1983) pp. 43-44,

of providing any guidelines or recommendations for the actual design process,¹² all of which is left as a task for the architect alone. In addition to these two problematic issues is also how conservation professionals tend to arrive at a later stage in the planning and decision-making process, all of which decreases the possibilities of strategically taking heed of cultural and historical values. In sum, the lack of a systematic and analytical approach in preserving our cultural heritage has resulted negatively with economic inefficiencies and a growing misunderstanding between different professions and interests. In a few words, this implies that the area of integrated conservation therefore still demonstrates a lot of potential in fully implementing integrated conservation tactics in urban planning and in design processes.

The multidisciplinary and cross-sectorial endeavour, as such, displays a detachment from the intended concept of integrated conservation, and the bottom line is that in praxis, the choices on what to conserve and why are evaluated independently from those that consider how to conserve.¹³ In short, this points out that the conservation field faces a problematic challenge of unbalanced and fragmented body of knowledge where the need of overarching interdisciplinary studies and progressing with new analytical methods and tools are topical for the future development of conservation practice.

1.1.3 VALLGRAVSSTRÅKET

The choice of empirical study in this thesis is Vallgravsstråket, which in brief can be described as the 19th century transformation of Gothenburg's original fortification.

As already mentioned, I was first acquainted with the designated area during a previous project where my colleague and I applied *Agora*¹⁴ on a topical area that was assigned in collaboration with the County Administrative Board (LST) and the municipality of Gothenburg (SBK). Although we had initially planned on using *Agora* in its full context, we soon realized that we had to modify the method accordingly, both within the particular setting of Vallgravsstråket and within the given time frame. When the project was finalised, the results and conclusions that surfaced interestingly roused my curiosity in comprehensively understanding the wider concept of integrated conservation within the physical context of Vallgravsstråket, all of which consequently brought forth this following study.

Having in mind that the field of heritage preservation is in need of methodological evaluation standards for preserving our cultural heritage, the main motivation with this following thesis is to both explore and to contribute to the development of conservation methodology and profession. The research is, in other words, to be considered as an instrument for searching for

12 Jivén, G. (2003); see also Chapter 6

13 Mason, R. (2000) pp.3

14 An urban analysis method initiated by the municipality of Malmö, Lunds Tekniska Högskola (LTH) and several architecture and designs institutions in London, Utrecht and Barcelona. More information on this EU financed project and the *Agora* method can be found in: Malmö's stadsbyggnadskontor (2006) *Agora - Cities For People*. See section 1.8 Previous Research, and: [<http://www.malmo.se/bostadbygge/designaret2005/samarbetsprojekt/agoracitiesforpeople.4.33aee30d103b8f159168000102175.html>] (2008-04-04)

new strategies and methods in establishing solid conservation and urban development programmes and further implementing a cultural and historical perspective within urban planning.

1.2 AIM AND OBJECTIVE

The course of the thesis starts off with discovering and evaluating the urban elements of Vallgravsstråket from a cultural and historical perspective in the bachelor part of the thesis to [re] discovering and [re]evaluating the area with a morphological analytical approach in the latter master part of the thesis. The study can, in a few words, be perceived as a developed interest in the operative practicalities of the named urban environment itself, as well as experimenting with a morphological analytical method, evaluating, in a broader sense, whether the assessment of an analytical morphological approach can be considered as a valuable instrumental tool in integrated conservation.

The aim of the text is thus, to analyze and unveil different perspectives – cultural-historical, legal and morphological on primarily what the urban setting of Vallgravsstråket represents in everyday life and, secondly, on understanding what the consequences of an increased accessibility would imply to the environment. Along these lines, my objective is to experiment with an urban morphological analytical method in order to determine whether it can be used as a tool in the conservation field. The overall ambition, as such, can be interpreted as an attempt in assessing conservation principles in the field of urban planning and further developing the integrated conservation profession.

1.3 RESEARCH PROBLEMS

1.3.1 VALLGRAVSSTRÅKET – LOCAL PERSPECTIVE

During the previous assignment, a series of short interviews was carried out on pedestrians along Vallgravsstråket. The results revealed not only a lack of knowledge on Gothenburg's historical development in general, but also on Vallgravsstråket in particular: a majority had never heard of Vallgravsstråket whereas a few had but had no idea of what it is or where it is situated. This absence of knowledge indicates that present-day users lack awareness of Gothenburg's historical roots and can be seen as an obstacle in sustaining Vallgravsstråket's place-based memory.

It seems quite plausible that the cause of this diminishing local attachment can be the direct consequence of Vallgravsstråket's obscure historical legibility as a majority of the squares along Vallgravsstråket have lost its original function and are instead occupied by parked cars that spill out to the surrounding roads and Vallgravsstråket's waterfront. In other words, the overall dominating impact of vehicles can be interpreted as a visual obstacle in experiencing a continuity of Gothenburg's fortification walls, Vallgraven (former moat) and the park area of Vallgravsstråket.

Another aspect that further impedes Vallgravsstråket's historical legibility is the lack of accessible information along the area (i.e. small information posts or road signs that inform people on Vallgravsstråket's identity or, the simple naming of squares and bridges, etc.). In hypothetical terms then, it can be argued that Vallgravsstråket is in need of a voice and local identity, as, "buildings, landscapes and artefacts

are relatively mute – they don't speak for themselves."¹⁵

On the other hand, one may point out that Vallgravsstråket and Gothenburg's historic core are proudly represented with significant symbolic value in numerous history texts, legal documents and tourist brochures but after some scrutiny, there is a big gap between: what is commonly stated in legally binding documents; how the area appears today; and, how the area is consequently evaluated by its local users. Can the remnants of a historical urban structure be valued so highly by historic preservationists and urban planners simultaneously as it is so underestimated by the local users and 'tourists'?¹⁶ Why is it important to preserve Vallgravsstråket, and for who?

Relevantly, I would like to repeat that the field of integrated conservation in general terms, strives for providing cultural heritage a more vital role in the development of the society. The process of heritage creation/production and the underlying conditions of fabricating an attractive milieu are the consequence of people establishing an individual interrelationship with their cultural and natural environment. Considering that our built environment is significant in maintaining stability and continuity in a rapidly changing culture, it is important that we have an understanding of how people are affected by the whole process as well as having an understanding of how the environment is perceived and understood in the current climate.

What does Vallgravsstråket represent

¹⁵ Bluestone D. (2000), pp.66

¹⁶ Having in consideration that Vallgravsstråket is not promoted as an international tourist destination, despite its representative national significance and symbolic value.

to the public and what is it exactly that should be passed on to future generations?

The first descriptive part of the thesis, as such, illustrates Vallgravsstråket's physical dimension from both a contemporary and historical perspective. My main ambition in describing the contemporary urban analysis has been to understand the local experience of the area, and conversely, examining how history can be extended in the urban fabric and transcended to the public so that Vallgravsstråket can gain local awareness.

Studying the development of Vallgravsstråket also unfolded the need for researching Vallgravsstråket's underlying urban elements, such as the green areas, bridges and canal, all of which are discussed individually in separate chapters.

Questions that have been crucial in gathering the empirical data have been: describing Vallgravsstråket's present urban fabric; outlining the significant changes in the history of Gothenburg that have contributed the logic behind the principles and practices of planning Vallgravsstråket; analyzing the impact of planning interventions on Vallgravsstråket;¹⁷ and lastly, a brief comparative international study to facilitate the understanding Gothenburg's urban history.

17 I.e. when the fortification was partially demolished and the moat was straightened to provide space for new housing in late 19th century, and when the green areas of Nya Allén, Kungsparken and respectively Trädgårdsföreningen were implemented in the urban setting

1.3.2 VALLGRAVSSTRÅKET –BINDING DOCUMENTS

During several occasions¹⁸ I was informed that the municipality of Gothenburg has been commissioned by the Building Committee to research the prerequisites and conditions for adding a new footbridge across Vallgraven. This proposal has been supported by various property owners that consider that it is in their favour with facilitating and proliferating the accessibility to their businesses.

One complicating factor, however is that the historic core of Gothenburg and the surrounding area of Vallgravsstråket are classified as an area of national interest. Further, one of the green areas within Vallgravsstråket, namely, Trädgårdsföreningen, is classified as a listed park. This implies that the designated area is considered to permeate great representative and symbolic value in local and regional redevelopment plans and plays a significant role in the national identity, regardless of the lack of local recognition. Areas of national interest such as Vallgravsstråket are protected by certain regulations, which ensures that the preventive measures are taken and that the values and qualities that make the area into an area of national interest are not vitiated.

The latter part of empirical research has been mostly focusing on critically studying the different kinds of legal instruments and conservation programmes that Vallgravsstråket confers to with the purpose of understanding how their role affects how the area is

18 During the introduction to the abovementioned urban analysis assignment and via email correspondence with Rune Elofsson (15 Feb. 2008) Also, "Gångbroar över Vallgraven planeras" an article published in Göteborgs-Posten on 2007-11-12; found at [<http://www.gp.se/gp/jsp/Crosslink.jsp?d=113&a=368716&ref=rss>] (2008-04-04)

maintained. My ambition in this section is to discern the potentials and challenges that are embedded and enforced in the binding documents, as well as studying their relation to each other. Significantly, another point of departure has been to understand what makes Vallgravsstråket an area of national interest, and conversely, studying what the conditions are for a cultural landscape to get nominated as an area of national interest. The relationship between the state and municipality in planning affairs has also relevantly been pondered upon. Finally, an attempt was also made in understanding the problematic issues or obscurities when applying the regulations in praxis and whether there is a conflict between the assessed values and qualities of Vallgravsstråket and future visions of Gothenburg.

1.3.3 VALLGRAVSSTRÅKET – URBAN MORPHOLOGICAL ANALYSIS

Following the abovementioned line of thought, and with reference to the demand of competent analytical methods in evaluating cultural landscapes and heritage preservation, the second part of the thesis looks into the consequences of constructing a footbridge over Vallgravsstråket with a morphological analysis.

The main focus, as such, is studying urban morphology as an analytical method, both in theory and praxis. The analytical part of the thesis looks into the foundation of urban morphology and attempts to understand its qualities, namely by reviewing the different kinds of questions and perspectives that the method generates. Consequently, the practical part of the thesis aims on dealing with whether the method can provide any insight into any consequences and recommendations to the construction of an

additional footbridge. What would an enhanced accessibility implicate to an area that has been indicated as one of Sweden's national interests, and what can this imply to Vallgravsstråket's identity and the businesses, squares and roads within the vicinity? **Are bridges symbolic representations of a passed time or do they solely fulfil the purpose of being used? Is there a need of constructing a footbridge over Vallgraven? If so, where?**

Finally, the overall and underlying question that the thesis boils down to is establishing a wider understanding of assessing a morphological approach in conservation programmes. What are the method's advantages and disadvantages? Does the method have to be relevantly modified in a certain way if it were to practically cater to conservation planning ideals? Are there any possibilities of further promoting the analytical method in future conservation projects?

1.4 DELIMITATIONS AND DEFINITIONS

Geographically, the area within Vallgravsstråket stretches from Yttre Järnvågsbron by Göta Älv in the west, till Slussbron by Drottningtorget in the east. In sum, the area covers in total ten squares,¹⁹ nine bridges²⁰ and four green areas.²¹ Although Vallgravsstråket solely includes the immediate area closest to the canal, with consideration to how much the urban character and environment changes when it is traversed from the western end to the eastern end, I have decided to divide the area into three principal parts to create a western, central and eastern section. To be more precise, the western part contains the area from Yttre Järnvågsbron till Rosenlundsbron; the central part contains the area from Rosenlundsbron till Kungsporsbron; and the eastern part contains the area from Kungsporsbron till Slussbron, (see illustration 1). While the first empirical part of the thesis focused on this demarcated area, the latter part of the thesis necessitated a more holistic overview of the area within Vallgravsstråket with broadening of the demarcated area to extend from _____ to _____.

Consequently, although the initial ambition to the following chapter on Vallgravsstråket's urban analysis has been to have a systematic approach in all descriptive sections, Vallgravsstråket's contrasting urban layout that covers both built and green areas and a canal clearly ruled out the possibility to do so. The overall intention of the sec-

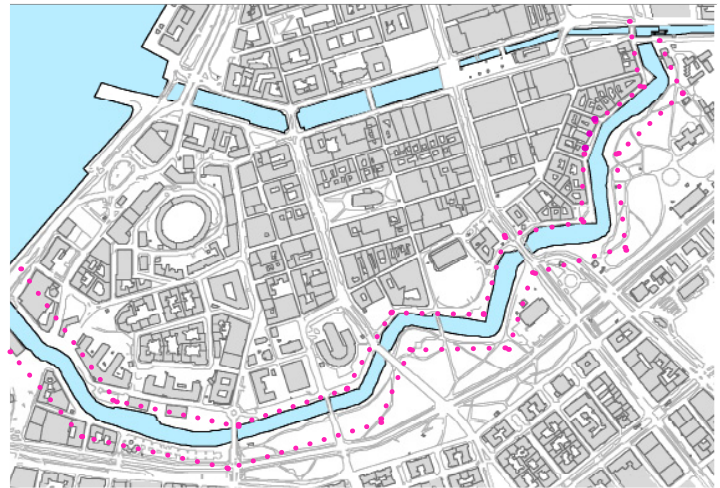


Illustration 1. Vallgravsstråket is illustrated within the pink dotted area

ond chapter is, as such, to present an introductory visual analysis of the area and to elucidate the distinctiveness of Vallgravsstråket's urban components rather than carrying out a consistent and uniform analytical point of departure for each section.

Furthermore, parts of the empirical research have been delimited within the relevant scope of Vallgravsstråket. This implies that the historical overview in the third chapter has been sectioned out in the following three different time intervals: the foundation of Gothenburg; the demolition of the fortification to the construction of Vallgravsstråket; and lastly, the development from a commercial town to an industrialised city. Relevantly, the focus has been concentrated on the demolition of the former moat and the practicalities of the planning ideals imposed in the 1860s to create Vallgravsstråket. The international comparative texts are only studied in the context of Vallgravsstråket's historical development and do not, for instance, reoccur in the other chapters that concern bridges, water, or law binding documents. Additionally, the last-mentioned chapter on Vallgravsstråket's legal instruments and conservation programmes

19 Esperantoplatsen, Heurlins Plats, Fisketorget, Rosenlundsplatsen, Pusterviksplatsen, Hvitfeldtsplatsen, Grönsakstorget, Kungstorget, Kungsporsplatsen, Bastionsplatsen

20 Yttre & Inre Järnvågsbron, Masthamnsbron, Pusterviksbron, Rosenlundsbron, Viktoriabron, Vasabron, Basarbron, Kungsporsbron, Slussbron

21 Nya Allén, Kungsparken, Bältespänneparken and Trädgårdsföreningen

has also accordingly been studied in relevance to the development and norms in Sweden only.

1.4.1 VALLGRAVSSTRÅKET – CONCEPTUAL DEFINITION

The term Vallgravsstråket in Swedish is in fact two words that have been merged together, namely, vallgrav and stråk. Whereas the English translation for vallgrav is moat, the latter, stråk, has a more complicated definition that is difficult to translate in simple terms. Although the term stråk is commonly translated as a route or a path in English, the term has the distinction of connoting a more complex meaning than any English counterparts.

If we start with comparatively scrutinizing the differences and similarities between a route and a stråk, for instance, we could claim that a route is traditionally understood as a way or a course taken by an individual that is to get from a starting point to a final destination. Points along a route are preset and much more related to time than space in that it can be grasped through a study of an itinerary or timetable. Stråk, on the other hand, denotes a more fluid and spatial context where people can collectively hop in and out at any given time because there are no fixed points, no starting point, and no final destination, as Rikard Persson points out:

“When stråk are referred to in a Swedish urban planning situation they are clearly seen as linear structures which hold institutionalised human movement whose points of entry and exit cannot always be specified (and which can change). It is used to denote a variety of linear structures that interacts with movement. We have grönstråk (green-), huvudstråk (main-), nöjesstråk (entertainment-), han-

delsstråk (retail-), cykelstråk (bicycle-), gatustråk (street-), and gångstråk (pedestrian-).”²²

Unlike paths and routes, in other words, the term stråk can be distinguished with specified movement and activities and when combining the term with a prefix, the notion of stråk can be distinguished with specified movement and activities.

Paths, as referred by Kevin Lynch, are the “*channels of movement along which the observer customarily, occasionally, or potentially moves.*”²³ Nevertheless, the paths that Lynch has conceptualised also have “*a directional quality where one direction along the line can easily be distinguished from the reverse.*”²⁴ This implies that Lynch’s paths lacks the flexibility that a stråk has where people can, as discussed above, freely wander around without any predetermined starting points or end points. In other words, in contrast to a route and a path, people can stroll on a stråk without ever even seeing the starting points and the end-points. Defining stråk is, to rephrase Persson’s words, to overlook the dichotomy of form and function and perceiving the word as a verb-like noun.

Further, it should also be added that the word stråk not only implies movement and activities but also connotes a collective and social dimension that in turn can be compared with a *samfärdsled*: a route that is travelled together. In similar terms, stråk is also associated with human activity and liveliness as opposed to a route that,

²² Malmö stadsbyggnadskontor (2006) *Agora - Cities For People*. pp.14

See also Persson, R. (2004) *Some Notes on Routes. Some Thoughts On Stråk*

²³ Lynch K., (1960) pp. 47

²⁴ Lynch K., (1960) pp. 54

as discussed above, can be repeated by the same person alone day after day.

Also, in historical terms many cities have emerged and grown alongside and on different intersection points of a stråk. In this manner, stråk can also be considered to connote a positive developmental implication as well.

In more abstract terms, stråk can also be said to be the production of a “*human-space interaction*”²⁵ which in turn embraces the French Marxist thinker, Henri Lefebvre's unitary theory of space that combines the physical, the mental and the social level of production.²⁶ In this perspective, a stråk can be defined as a spatial system that structures constraints and opportunities for movement and social interaction in spatial practices.

As a result, this short discussion concludes that the problematics of defining the stråk perspective cannot be delimited as a simple technical translation difficulty between two languages. Along these lines, it is worth repeating that the concept of stråk can be paraphrased as a verb-like noun that represents both form/function and space/object. Consequently, by emphasising the significance of the term Vallgravsstråket and its lack of any English counterpart, the Swedish term, stråk will be used throughout the study.

Although acknowledging the complexity in the conceptualized definition of the Swedish word stråk is vital, the conceptual study is delimited from

the scope of this thesis — nonetheless, it should be noted that the overall hermeneutic approach in unveiling Vallgravsstråket throughout the thesis has stemmed from understanding this multifaceted dimension and shedding light on the named area as verb, noun, form, function, space and object.

25 Malmös stadsbyggnadskontor (2006) *Agora - Cities For People*. pp.14

26 According to Lefebvre, space is a social product that serves as a tool of thought and action. The production of space is defined into three categories: practiced space, conceived space and lived space.

See Lefebvre, H. *The Production of Space*

1.5 METHOD AND MATERIAL

This graduate thesis was kindled by a previous assignment where I started reflecting on the potentials of Vallgravsstråket's obscure place-based memory and the dynamics of changing cultural relations. My thesis can, in this manner, be seen as a generic qualitative study that seeks after exploring the representative context of Vallgravsstråket as an area of little local association and as an area of national interest.

The thesis has both a heuristic descriptive approach, with the attempt to confirm and extend the reader's knowledge, and a hermeneutic explorative approach with the attempt of scrutinizing Vallgravsstråket's multifaceted properties in order to attain a holistic comprehension of the area. The focus will, as such, be shifting from different spectacles and interpretations that will facilitate a wider understanding of the area.

During the course of my study it was decided to divide the thesis into two parts – the first part being my bachelor thesis that represents the empirical research on Vallgravsstråket's urban analysis, local association, and historical development and legibility; and the second part being my master thesis that represents the analytical research on assessing an urban morphological approach on the consequences of a new footbridge over Vallgravsstråket.

The first heuristic half of the thesis has a cultural and historical perspective that permeates throughout the different sections of the empirical research. The latter part of the thesis challenges a wider integrated conservation perspective with a complementary analytical method to the previously gath-

ered empirical data. In sum, the thesis carries out four different courses in the empirical work all of which can shortly be outlined as the following:

- First off, an introductory urban analysis of Vallgravsstråket that will appropriately provide an overall orientation to Vallgravsstråket from a contemporary perspective. The descriptive analysis illustrates an intersubjective approach with the intention of understanding the local experience and identity of the area. A key source in this initial urban analysis has been principally based on field studies on the actual physical fabric of Vallgravsstråket. Significant aspects have been looking into the area's 'urban walls', 'urban rooms' and 'urban experience'²⁷ where Vallgravsstråket's architecture, character, usage, functionality and overall composition were studied.
- The second part of the thesis can be summarised as a perspicuous study of the urban development that zooms in on the most significant historical events. Unfolding Vallgravsstråket's urban development entailed using both primary and secondary sources. For instance, different planning measures have been documented and studied with the primary sources of hand-drawn historical maps from Gothenburg's 1923 anniversary exhibition²⁸ together with various pictures from Gothenburg's City Museum's picture archive, *Carlotta*.²⁹ Consequently, these were further studied and evaluated with

27 Malmös stadsbyggnadskontor (2006) *Agora - Cities For People*

28 *Historisk kartverk över Göteborg*, (1923), inför Jubileumsutställningen Göteborgs stad upprättad av andre Stadsingenjören Södergren, A.

29 [<http://carlotta.gotlib.goteborg.se/pls/carlotta/welcome>]

published secondary sources. The thematic chapters of Vallgravsstråket's underlying urban elements, namely, the parks, bridges and canal were also critically examined to constitute to the thesis' hermeneutic whole with previous researches, relevant literature and on-line sources.

- Consequently, a qualitative text analysis of key documents that concern Vallgravsstråket have been exemplified and analysed in accordance to the underlying conditions that are defined and developed in Swedish practice. The intention with this empirical research has been to get a good grasp on Vallgravsstråket's officially authorized dimension and conservation programmes to understand how or why certain approaches have surfaced in debates and researches that concern the named area.
- Finally, having researched the above points as a foundation of the empirical background, I intend to experiment with a morphological analytical method as the final process of this dissertation. In short, a holistic approach has been implemented in order to determine whether an urban morphological analysis can yield a deeper understanding of Vallgravsstråket's present and past operative practicalities, consequently integrating and developing the cultural-historical perspective from the first part of the thesis. Evidently, this implied scrutinising the developing field of urban morphological both in theory and practice. This latter part of the thesis, as such, starts off with theoretically examining the capacity of the method, in terms of its possibilities and shortcomings. The practical point of departure has focused

on the evaluation of what an additional footbridge would implicate to the cultural and historical values of Vallgravsstråket and to the urban fabric as a whole. The method has mainly studied Vallgravsstråket's historical legibility by examining its spatial and functional conditions and dominating elements such as streets, squares, plots. Significant sources in this section were the texts that have been produced and disseminated within the ISUF—the International Seminar on Urban Form;³⁰ that in short, have been significantly important in understanding the conceptual possibilities of urban morphology in this thesis.

30 Also referred as SIFU – Séminaire International de la Forme Urbaine; Seminario Internazionale de la Forma Urbana. The ISUF was founded in 1996 by a group of international urban morphologists with the ambition of expanding the field's interdisciplinary research and establishing international contacts. Another significant objective was to formalise the scope of the field's theoretical basis.

1.6 DISPOSITION

This study has taken the course of a hermeneutic graduate thesis. The empirical research is a combination of descriptive and explorative research, all of which will be finally evaluated and discussed with own contemplations and reflections from my education and experiences from the field.

The first chapter is an introductory chapter to the thesis, where the dissertation's subject, Vallgravsstråket, is presented along with the research problems, aim and objective, delimitations, sources and theoretical framework.

Chapters two and three are dedicated in comprehensively understanding Vallgravsstråket's urban fabric. While the second chapter studies Vallgravsstråket from a contemporary perspective and looks at the area's existing urban rooms, experience, legibility and, its social, environmental and cultural and historical values, the third chapter presents a historical overview of Gothenburg's urban transformation, the gradual demolition of the fortification walls and the creation of Vallgravsstråket. International parallels are also drawn in relevance to the rise and fall of fortified towns and the integration of green metropolitan space in the urban design in order to get a wider perspective on how Gothenburg stands on an international level.

Chapters four and five look into Vallgravsstråket's urban elements in terms of the area's bridges and water. Both elements have been provided with a brief historical background in regards to their use and management. The fifth chapter on water even discusses the legal documents that regulate and maintain the use of the water.

Chapter six presents a short analysis of Vallgravsstråket's conservation programmes and law binding documents. The study as such, commences from a local perspective with municipal planning documents and ends with a national perspective where the area is studied as an area of national interest.

Chapter seven is the transitional chapter between the bachelor and master sections of the thesis. After introducing urban morphology as an analytical tool and mapping the different schools and approaches, the intentional morphological analysis of Vallgravsstråket is proposed.

Chapter eight is a morphological exploration of Vallgravsstråket.

- Chapter 9
A discussion of the acquired information that draws conclusions, contemplations with personal reflections, and contributes some thoughts about future research needs.
- Summary
- References

1.7 THEORETICAL FRAMEWORK

1.7.1 HOLISTIC APPROACH

The thesis has an inductive nature where the paper's subject, Vallgravsstråket, has been studied through several different empirical studies to engender a comprehensive understanding of the named area. This implies that the course of this study has been structured and restructured through different empirical spectacles in the quest of a holistic approach.

As a result, the acquired knowledge from the intersubjective field study, descriptive cultural and historical study, qualitative literature and document analysis and finally, explorative morphological transformation analysis are all perceived as a part of a complementary process of writing a graduate thesis within the field of integrated conservation of built environments. A substantial theory will, as such, be developed and discussed towards the end of the research, in accordance to the collected information and knowledge from the empirical research.

Considering the overall hermeneutic standpoint that permeates this thesis, the theoretical point of departure sprouts from the philosophical view of perspectivism, which in turn caters for a multiple realm of absolute truths. This implies that a wide range of conceptual schemes and perspectives are taken into account, as no one is considered to be more valid than the other. In other words, knowledge cannot be reasoned from one single particular perspective but rather understood from several different perspectives. This pluralistic view of reasoning, which was originally developed by Friedrich Nietzsche, is further motivated by the hermeneutical theorists Friedrich Schleiermacher, Wilhelm Dilthey and

Hans Georg Gadamer who, in short contributed 'the hermeneutic circle'³¹ and 'fusion of horizons'.³²

The term the 'hermeneutic circle' refers to the relation of the whole and part in interpretation where the interpretation of all parts is necessary to understand the whole and the interpretation of the whole is conversely necessary to understand all the parts. The term, "hermeneutic spiral" is, on the other hand, used when understanding the given subject as an ongoing process where the interpretation does not reach a closure but rather goes around and around forever. This graduate thesis strives after both approaches of the hermeneutic circle and hermeneutic spiral in understanding the context of Vallgravsstråket.

31 "...the recurring movement between the implicit and the explicit, the particular and the whole", (source: [http://en.wikipedia.org/wiki/Wilhelm_Dilthey] (2008-12-15))

32 Gadamer defines 'fusion' as: "Every finite presentation has its limitations. We define the concept of "situation" by saying that it represents a standpoint that limits the possibility of vision. Hence an essential part of the concept of situation is the concept of "Horizon." The horizon is the range of vision that includes everything that can be seen from a particular vantage point.... A person who has no horizon is a man who does not see far enough and hence overvalues what is nearest to him. Contrariwise, to have a horizon means not to be limited to what is nearest, but to be able to see beyond it.... The working out of the hermeneutical situation means the achievement of the right horizon of enquiry for the questions evoked by the encounter with tradition." (Source: [http://en.wikipedia.org/wiki/Fusion_of_horizons] (2008-12-15))

1.7.2 VALLGRAVSSTRÅKET - SOME THOUGHTS

Following the discussion from the study's research problems, the recognition of Vallgravsstråket as a national interest is a questionable matter. Conflicting issues arise when considering the lack of local attachment, obscure historical legibility, overvalued symbolic representation and, underdeveloped planning and protective measures. While Vallgravsstråket is regarded with an overestimated representational value by some of those who are sitting higher up in the decision making ladder, Vallgravsstråket is unknown and unseen to the majority of those from the bottom half.

The problematic task of Vallgravsstråket's national identity not only challenges the gap between state and municipal planning affairs but also points out the dominating power of certain forces over others. As the previous assignment has shown, it becomes difficult to overlook the fact that economic and political interests outweigh the cultural and historical ones. Although the arguments leading from this discussion may exceed the scope of this thesis, one can appropriately use this example to illuminate the need of expanding our field's operative modalities in planning matters. Equally significant in this context is also the need of providing cultural heritage with a more vital and clarified role in the development of the society.

In theoretical terms, Vallgravsstråket's representative identity can be paralleled to the way certain values select and prioritize what we call heritage. In this case, by delineating the motivating reasons behind (re)producing and preserving our heritage, we can say that Vallgravsstråket's presently acknowledged social existence involves

an understanding of both its form and function. In elaborate terms, while the form can be perceived as the result of a former identity that is linked to the original foundation of Gothenburg as a military citadel, the function, on the other hand, derives from a more recent planning intervention that is linked to the growing social and environmental needs of an industrialised city. This, in a few words, gives us an understanding that the added social and use values contribute a significant intangible dimension within Vallgravsstråket's physical qualities.

Emphasising the relationship between the physical (form) and social (function) aspects of Vallgravsstråket's spaces and places is vital in understanding its historical development and its specific role in the production of space. In this context, three theoretical assumptions can be made:

Firstly, by reflecting on Lefebvre's line of thoughts on how and why a society contrives to produce its space, one can concur with the theory that a produced space in the past cannot be the same space today, even if it is located in the same place.

Secondly, with consideration to the late 19th century planning interventions advocated by individuals such as P. Geddes and J. Ruskin, a connection can be made between spatial form and social processes. In theory, as such, one can argue that a change in the spatial form generates a change in the social structure, inasmuch as a change in the social structure can also be reflected on the spatial form.

Finally, acknowledging the two above assumptions, the dynamic state of Vallgravsstråket can be studied with a morphological theoretical perspective. Crucial to Vallgravsstråket is the

'idea that a particular logic has dictated the organisation of the urban fabric in different periods; that some categories remain constant: that certain aspects are permanent; that there are rules of transformation over time that dictate changes to the fabric.¹³³ This implies that the complexity of Vallgravsstråket's urban environment has to be understood as a system of relations submitted to certain rules of transformation. Therefore, when we holistically contemplate the lack of local attachment and the growing gap between Vallgravsstråket's history and place-based memory, we can theorize that Vallgravsstråket's identity is determined more by the conditional relationship between the processes of physical formation and external political, economic, social, cultural and topographic factors than by its internal spatial system. **This theoretical perspective is vital in understanding the prioritization of car traffic and parking that is a recurring subject in several chapters.**

33 Levy, (1999), pp 79

1.8 PREVIOUS RESEARCH

My ambition of researching Vallgravsstråket from different perspectives – from its present-day urban form and local integration, creation, its urban elements, legal status, and morphology– has resulted with a wide range of literature, historical maps and pictures.

First off, *Agora – Cities For People* is a EU-financed project that has been very influential in this study. Much insight was provided on the approach that has been used on Vallgravsstråket as the project researches how the existing squares and streets along the area operate and, how different individuals use them.

Second, relating to the history of Gothenburg, Eliza Söderberg's *Från befästning till park. Uppkomst av Göteborgs gröna bälte och dess historiska förankring* has been a very useful secondary source that provided a comprehensive historical overview with a central focus on the creation of Vallgravsstråket.

Two important sources of knowledge on historical urban planning and design have been Nils Ahlberg's dissertation *Stadsplanereglering i Sverige 1550 – 1875 (Town Plan Redevelopment in Sweden 1550 – 1875)* and Lennart Améen's *Stadens gator och kvarter*. Horst De la Croix's *Military Considerations in City Planning: Fortifications* has been crucial in understanding the development of fortified cities.

Although I came across a great number of texts that concern Gothenburg's urban development and Vallgravsstråket as a historical structure in particular, finding useful secondary resources on Vallgravsstråket's specific urban elements has been - with

the exception of the listed park, Trädgårdsföreningen, somewhat limited. As a result, I focused on reading more comprehensive texts that concerned similar urban elements to Vallgravsstråket. For instance, an extensive background on Swedish public gardens was apprehended from Catharina Nolin's doc. dissertation, *Till stadsbornas nytta och förlustande. Den offentliga parken i Sverige under 1800-talet (For the Benefit and Pleasure of Urban Citizens. The Public Park in Sweden During The Nineteenth Century)*, and interesting examples were illumined in *The European City and Green Space: London, Stockholm, Helsinki and St. Petersburg, 1850 – 2000*. Sources of literature on bridges and the canal have included Bengt A. Öhnander's *Göteborgs kanaler och broar berättar* as well as Söderberg's forementioned book. Another important source in studying Vallgravsstråket's canal system evidently were Gothenburg's Water Plan, *Vatten – Så Klart* and, the complementary *Kanalplan*, as well as Frida Ekfeldt's dissertation, *Göteborgs blå struktur – Med studie av Osbäcken, (Water Structure in Gothenburg – Case Osbäcken)*.

Two doc. dissertations that have been relevant in considering an alternative methodological approach within conservation have been Anna-Johanna Klasander's *Suburban Navigation – Structural Coherence and Visual Appearance in Urban Design*, and Gunilla Jivén's *Stadens morfologi som kulturarv (Urban Morphology as Cultural Heritage)*. Consequently, the articles posted by ISUF in the Urban Morphology-Journal of the International Seminar on Urban Form have also been substantially crucial in understanding the development of urban morphology and typology.

2. VALLGRAVSSTRÅKET'S URBAN ENVIRONMENT

Vallgravsstråket is today an area of national interest and portrays a significant role in Gothenburg's townscape from a cultural and historical perspective, as much as in an environmental and social perspective. When Gothenburg was founded, it was enclosed with a fortification wall that protected the town from its enemies that wanted to take over the trading routes with Western Europe. As time progressed however, the needs and demands of Gothenburg developed in another direction, which eventually resulted in the demolition of the barrier system and the construction of Vallgravsstråket. In physical terms this implied that Gothenburg sought after opening up the town with green areas and civic institutions after existing within the confines of an outdated fortification wall. As a result, the area today comprises a diversity of mixed-use functions that includes possibilities for cultural and social exchange, shopping, and recreational activities.

Vallgravsstråket is used as a popular oasis in the heart of Gothenburg and plays a significant role to the local public. In historical terms, this can be interpreted as the result of implementing public parks in the urban grid, all of which gradually engendered and developed the possibility for a middle class sociability. Although this is a plausible way of perceiving the underlying factors to the current urban milieu, it becomes relevant to primarily get acquainted with a solid descriptive base of the area's urban fabric before putting on our binoculars to look at the distant past towards the following chapter that concerns the area's historical development. The motivation has grounded from the theoretical understanding that a constructed space in a city in the nineteenth century is not the same constructed space in the twenty-first century – even if the constructed space is physically located in the same exact place. Along these lines, this introductory chapter intends to catch a glimpse of Vallgravsstråket's urban environment that in turn will contribute with an understanding of the present context of the dissertation's research issues.

Reflecting back to the previously discussed lack of local association to Vallgravsstråket's historical background the wider public sphere has been taken in consideration to how Vallgravsstråket is perceived, used and evaluated. For instance, apart from studying the architectural features and urban room of the different sections, I have also tried to understand why people in general have difficulty in regarding Vallgravsstråket as one single unifying spatial structure that extends from Esperantoplatsen till Drottningtorget as well as why certain parts are more popular than others. The focus on this empirical research has been, as such, observing Vallgravsstråket's physical urban environment and evaluating the local values. In short, the overall question has been to answer what the area looks like today and how it functions as a social space, and a reasonable attendant question has been to determine whether Vallgravsstråket's cultural landscape history can be disseminated to the local people.

2.1 YTTRE JÄRNVÅGSBRON TO ROSENLUNDSBRON



Illustration 2. Western part of Vallgravsstråket - Yttre Järnvågsbron to Rosenlundsbron

Characteristically, the western part of Rosenlund has managed to keep its tradition as an industrial area for almost two centuries. The harbour's towering orange cranes with Göta Älv's shipping industry in the background and the smoky chimneys that soar out of Göteborg Energi's container like property are a few strong reminders and landmarks that represent the area's industrial urban experience.



Illustration 3. The western end of Rosenlund



Illustration 4. The 'Administrationsbyggnad' was constructed 1902-1903 by Hans Hedlund



Illustration 5. "Tullpackhuset" Custom Warehouse 1920s

Another notable feature in this area is Fêskekyrkan, (the 'Fish Church') in Fisketorget where people have traditionally been buying fish for the past 150 years. Fêskekyrkan's architecture is very unique in that it is, as its name suggests, formed like a church with sharp gables and pointed arched windows. Fêskekyrkan plays a symbolic role in local identity of Gothenburg and has also become a popular tourist attraction. The overall atmosphere represents a traditional fishing market with two mosaics with fish and a crab motif on the ground and bronze fishermen sculptures. During the summer months Fêskekyrkan's restaurant serves their customers outdoors, which brings a lot of life into the square.



Illustration 6. Fêskekyrkan

Finding means of integrating the canal and sustaining a close contact to water is an important aspect to the historical character of Gothenburg. Along the Rosenlund canal there are possibilities to moor small boats,³³ which is a reminiscence of Vallgravsstråket's recent past where the canal was more frequently used. These small boats and the touring Paddan boat provide a lively atmosphere into an otherwise quiet canal. Pedestrians can also experience the water by the stairways along the waterfront where people can reach their boats and by Fiskkajen, the broad set of steps by Fisketorget that almost reaches down to the level of the canal.

33 GREFAB – Göteborgsregionens Fritidshamn AB have a total of 89 rental spaces along the canal.



Illustration 7 & 8 Moored boats along Rosenlundskanalen



While Fêskekyrkan is one of the few freestanding buildings in the area, the rest of the buildings in this part of Vallgravsstråket are built with dense and closed façades from Brogatan in the north and big and extensive building complexes from Rosenlundsgatan in the south. Brogatan's urban walls can be described as a cluster of homogenous pale brick buildings apart from the occasional lightly coloured plastered ones. This side of the street has a private character; not much can be seen through the windows and most doors are placed on the parallel street to the south towards Nya Allén. On the other side of Rosenlundskanalen is Rosenlundsgatan that have a lot of shop windows on the bottom floor that contrasts to Brogatan's closed, private façades. Rosenlundsgatan is occupied by colossal, wall-like buildings which, although far-fetched, can be used as a modernised metaphor to the former rampart walls. Relatively this can be reflected by the Carolus Rex bastion that stands as a reminisc-

ing coulisse in between the urban walls in Esperantoplatsen.



Illustration 9. Esperantoplatsen

Broadly speaking, people use Rosenlundsgatan more frequently, especially during the winter and autumn months since the buildings are constructed with a covered pilotis where people can walk without getting wet from the typical rainy and snowy climate of Gothenburg. Other obvious reasons that Rosenlundsgatan is more preferred is the amount of public facilities and overall transparency, when compared to the closed private façades of Brogatan. Nevertheless, despite the mixed use of activities that range from offices, theatre, gym, restaurants, cafés, fish market, parking, hair salon, shoe store and night club, the area is not as popular as the rest of Vallgravsstråket, especially after dark when all the stores, offices and restaurants are closed. People come to Rosenlund only when they have to park their cars within the vicinity, otherwise it is considered as a transit place; people are always on the go. Perhaps this has a lot to do with the fact that all of the squares – with the exception of Esperantoplatsen are used as parking places,³⁴ and that the area has also been stigmatised with prostitution for several decades, (although this has almost disappeared these days).



Illustration 10. Pilotis along Rosenlundsgatan

The Rosenlund area has up until very recently been under a long reconstruction process that altogether had somewhat given the area a temporary feeling about the facilities. After redirecting the traffic flow through the newly built Götatunnel, the reconstruction of Esperantoplatsen has, as a result, “tidied up” the mess and disorder in such a way that the area feels artificially organised with a large open public space that extends towards Göta Älv to the west and Järntorget to the south. This asphalted extensive space is unsheltered from both wind and the sun, that somewhat suggests a provisional and non-friendly atmosphere, making one feel quite defenceless. The overall large-scale architecture and the openness of Esperantoplatsen and Heurlins Plats cast a contrasting physical orientation to the small human scale. Apart for the occasional tree plantation in some squares, the area lacks green spaces on the whole, and the dominating asphalt paving renders a certain greyness to the area, which is further emphasized by the lack of people and the domination of parked cars.

³⁴ That is to say: Heurlins Plats, Pusterviksplatsen, Rosenlundsplatsen and parts of the western part of Fiskefortet.



Illustration 11. Esperantoplatsen



Illustration 14 & 15 Rosenlundsgatan



Illustration 12 & 13 Heurlins Plats



Illustration 16. Rosenlundsgatan 1930's



Illustration 17. Brogatan



2.2 ROSENLUNDSBRON TO KUNGSPORTSBRON



Illustration 18. The central part of Vallgravsstråket - Rosenlundsbron to Kungsportsbron

Eastwards, from Rosenlundsbron towards Kungsportsbron, the urban configuration changes drastically and becomes more spacious and green. In contrast to the densely built facades of the Rosenlund area, this part of Vallgravsstråket can be characterised by freestanding institutional buildings, public squares and Kungsparken that were constructed after the demolition of the fortification walls. Rosenlundsgatan continues along Vallgravsstråket and becomes Sahlgrensngatan, whose name derives from one of the civic buildings that were constructed, namely Sahlgrenska sjukhuset, (the Sahlgrenska hospital). Today the edifice is referred as Pedagogen, and represents three adjacent large-scale buildings on Sahlgrensngatan. These freestanding buildings houses facilities for Gothenburg's University, which, needless to say generates a lot of students and staff members to the area during office hours.



Illustration 19. & 20. University complexes on Sahlgrensngatan



Another significant feature along this part of Vallgravsstråket is Kungstorget that is a lively and vibrant market place. Saluhallen, Kungstorget's market hall, is, like Fêskekyrkan, a representative symbol for Gothenburg with its brick and cast-iron architecture that offers both locals and tourists a wide array of colours, aromas and flavours. Apart from Saluhallen, Kungstorget is also surrounded by restaurants, food vans and vegetable and flower vendors that attract a lot of people throughout the day. Even though the vendors and Saluhallen close in the evening Kungstorget tends to remain busy by nightfall with people from the movie theatre and restaurants that run clubs and bars.



Illustration 21. Saluhallen, Kungstorget



Illustration 22. Flower stand on Kungstorget



Illustration 23. Kungstorget's bazaar, date unknown

In contrast to Kungstorget's dynamic contribution to Vallgravsstråket's identity, the remaining squares along Sahlgrensngatan have lost their original function and serve as parking places. This even includes some parts of Kungstorget,³⁵ which are also used as parking places. Cars spill out onto the road along the waterfront, which visually hinders Gothenburg's genuine experience of the fortification walls and the immediate contact with Vallgraven's water.



Illustration 24. Hvitfeldtsplatsen



Illustration 25. Grönsakstorget

³⁵ Where a row of bazaars once stood and towards the waterfront in Vallgraven, see illustration 23

Across the water, right after Rosenlundsbron lays Kungsparken with its grassy sloping terrain, winding promenade paths and 200-year-old trees. Even though Kungsparken is located right in the heart of Gothenburg and is surrounded by heavy traffic, it can still bestow the feeling of a natural landscape in the countryside. Kungsparken is a popular downtown oasis for locals and offers a multitude of social activities, which can range from a promenade, picnic, mini-golf, fishing and sports, just to name a few. Apart from the park's social features, Kungsparken's plantations, sculptural artwork and fountain contribute with incomparable aesthetic properties and is frequented by people of all ages and range for instance from people walking their dogs to families, couples and friends.



Illustration 26. Kungsparken

Kungsparken is designed with a sloping waterfront, which encourages a closer integration with the former moat. Even the angled bastions can be viewed when standing across from Kungstorget. The outline of these former bastions are one of the few remaining traces of Vallgravens original design, and along those lines, it is evident that the layout of Kungsparken is crucial in experiencing what is left of the former fortification wall.



Illustration 27. Winding promenade paths



Illustration 28. 200-year-old trees



Illustration 29. Protruding bastion by Kungstorget

2.3 KUNGSPORTSBRON TO SLUSSBRON

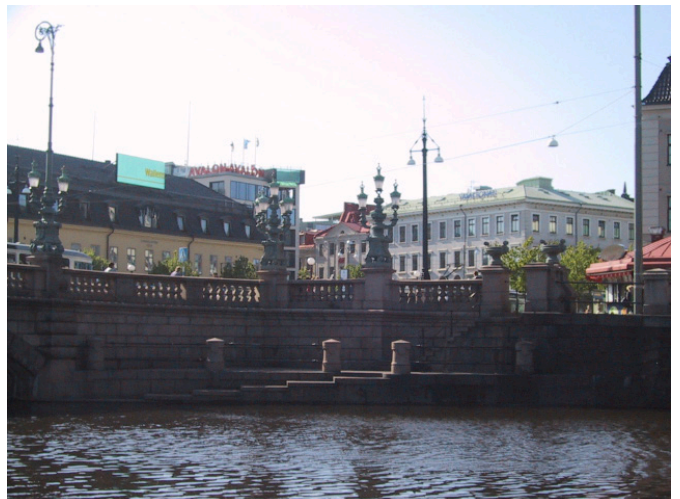


Illustration 30. The eastern end of Vallgravsstråket - From Kungportsbron to Slussbron

Continuing down along Vallgravsstråket towards the east is the hectic Kungsportsplatsen where all the hustle and bustle from Kungstorget seems to lead to. Kungsportsplatsen is a widely used intersection for public transportation and is today used as a popular meeting place that is surrounded by several trendy cafés and fashionable stores. When approaching Kungsportsplatsen from Kungstorget or Kungsparken, the experience of Vallgravsstråket becomes obstructed because of the incoherent crossings over to Trädgårdsföreningen and Stora Nygatan, which most often result in people turning their direction towards the city to the north, or towards Kungsportsavenyn to the south. This feeling of disconnectedness is further emphasized by the heavy traffic and all the commotion in the area that in turn can be interpreted as an intersecting barrier in Vallgravsstråket.



Illustration 31 & 32 Kungsportsplatsen



The last bit of Vallgravsstråket includes Stora Nygatan to the north and Trädgårdsföreningen to the south. The urban room in Stora Nygatan contrasts greatly from Trädgårdsföreningen, but it is exactly their difference that harmoniously complements each other, both in their spatial configuration and reflection on Vallgraven's water.



Illustration 33. Stora Nygatan to the left and Trädgårdsföreningen to the right

Stora Nygatan can be characterised by a dense mid-nineteenth century high-class architecture that metaphorically speaking, creates a uniform background coulisse to Vallgravsstråket. The yellow brick facades all share the same height and floor level and have a closed and concealed exterior, which gives the area a collective private character. Noteworthy buildings along this part of Vallgravsstråket include the Art Nouveau "Kontoristföreningens hus" by Bastionsplatsen and the classical Synagogue that has been nominated as a listed building since 1999. Apart from the last-mentioned Synagogue, most of the buildings were initially constructed as luxurious residential properties that overlooked Trädgårdsföreningen on the other side of the canal. Today most of these buildings are being used as offices with stores on the ground level.

Another significant feature is Bastionsplatsen - a triangular urban room that has been preserved along Vallgravsstråket that forms a triangular urban room. Like Kungstorget's other two angular bastions, the layout of Bastionsplatsen is provided with steps that descend all the way down to the canal that allows people to experience Vallgraven's water at a closer range. Although there are a lot of parked vehicles around Bastionsplatsen that hinders the visual experience of Vallgravsstråket, the square is occupied by a top-end restaurant whose outdoor serving generates a cosy (and unfortunately quite often windy) atmosphere in the spring and summer.



Illustration 34. Bastionsplatsen

Finally, the last angular bastion closest to Drottningstorget seems to be more reserved with an anonymous character that seems to be almost forgotten. With consideration to its former military function,³⁶ it has been surprisingly that it has been difficult to even find out what this space is called.



Illustration 35. Last angular bastion on the eastern end of Vallgravsstråket

³⁶ The former position of the ravelin Carolus Rex

Across Stora Nygatan is Trädgårdsföreningen, which, in contrast to Stora Nygatan's dense brick blocks has an open and airy space. The public park has been a popular social meeting place since it was created and forms a pleasant green belt around the city with Nya Allén and Kungsparken. Trädgårdsföreningen offers a diverse plantation of trees, shrubs, flowers and fauna that in turn creates a vibrant and polychromatic atmosphere. The overall design of Trädgårdsföreningen has been implemented with thick foliage around the borders of the park in order to protect the flora of the park, all of which also expressively casts a green reflection over Vallgraven's water. Consequently, the paths along the rims of the park follow the form of the pre-existing moat and significantly contributes to Vallgravsstråket's legibility. The park's sloping waterfront is yet another equally crucial feature to Vallgravsstråket's identity that enables a close contact with the water. Trädgårdsföreningen has apart from the horticulture and woodland garden, a rose garden and a Palmhouse made from cast iron and glass.



Illustration 38. Winding path promenade that follows the shape of Vallgraven



Illustration 39. Playground



Illustration 36 & 37 Trädgårdsföreningens entrance and fencing



Illustration 40. Palmhouse



Illustration 41. Café

2.4 REFLECTIONS

Vallgravsstråket, which extends from Rosenlund in the west and Drottningtorget in the east, is a unique part of Gothenburg in that it has been raised on the ruins of the former fortification walls. In plain terms, the fortification's protective walls originally surrounded the town of Gothenburg until the structure was demolished to create the flowing space of Vallgravsstråket.

The urban analysis of Vallgravsstråket has, as a result shown us how complex and multifaceted Vallgravsstråket's environment is when traversed from one end to the other. The stråk has a rich mixture of activities, movement, content and form that are arrayed in cultural and commercial facilities, restaurants and stores. In sum, Vallgravsstråket can be paraphrased as a heterogeneous space that attracts different kinds of people to different destination points. Another noticeable feature is that the western part of Vallgravsstråket is the least integrated area and the traffic increases eastwards with concentration in the central area. Consequently, although it was decided that Vallgravsstråket would be divided into three principal parts with a western, central and eastern section, the urban analysis subsequently revealed that the character of the different sections vary in large amounts even within the sections, with the canal having the functional quality of a barrier. All in all, in order to achieve a more comprehensive comparison analysis, the following summary is outlined to provide a more holistic perspective.

2.4.1 YTTRE JÄRNVÅGSBRON TO ROSENLUNDSBRON

The north-western part of Vallgravsstråket is dominated by public and commercial facilities. The façades along Rosenlundsgatan has a lot of shop windows and a fast rhythm of entrances that give the stråk a very open and public character. Pedestrians show a tendency to walk under the pilotis where they are sheltered from the weather. The buildings are relatively large-scale with similar height.

The south-western part of Vallgravsstråket is, in contrast to the north-western part, partly occupied by private offices and dwellings on the western end. The eastern end has a gas station and an elongated square that is used as a parking space. The facades on the western end have very low transparency and most entrances are placed on the other side of the street, which simultaneously decreases the number of pedestrians to this street. The small-scale buildings have uniform height and material.

2.4.2 ROSENLUNDSBRON TO KUNGSPORTSBRON

The northern part of the central section is dominated by public and commercial facilities such as university facilities, restaurants, squares, and stores. This part of the stråk has the highest transparency when compared with the rest of the facades in Vallgravsstråket. Kungstorget and Saluhallen function as a strong magnet throughout office hours. The traffic flows in a more complex way in this section by both cars and pedestrians in all directions: eastwards and west-

wards along the canal, northwards and southwards by Vasabron, Viktoria-bron and Basarbron. The buildings are relatively large-scale and of different height.

The southern part of the central section is a green park space that is known as Kungsparken. Kungsparken has no fencing all of which gives the park an open and public character; despite the trees and the bushes that are planted in Kungsparken, there is high transparency across to the other side of the street, to the immediate south of the park.

2.4.3 KUNGSPORTSBRON TO SLUSSBRON

The northern part of the eastern section of Vallgravsstråket is dominated by public and private facilities. In sum, this section has a shifting gradation between public and commercial facilities closer to Kungsportsbron and, private facilities towards Slussbron with high and low transparency, respectively. Kungsportsbron has the heaviest and most hectic traffic flow of the whole of Vallgravsstråket that in turn, functions as a barrier when one crosses from the western section of Vallgravsstråket towards the east, and vice versa. The buildings on this side are, with a few exceptions, principally small-scaled with a uniform height and texture.

The southern part of the eastern section of Vallgravsstråket is a green park space known as Trädgårdsföreningen. Trädgårdsföreningen has fences, gates and trees that function as a barrier giving the park a more private and reserved character.

2.4.4 VALLGRAVSSTRÅKET'S URBAN QUALITIES

The assumption that there are certain sections of Vallgravsstråket that are more frequented and popular than others proved to be related to several factors. A good starting point of departure can be studying the stråk's public character by analysing the relationship between the buildings' façades and the activity along the given space. Although it may seem obvious to point out the public and commercial facilities as a fundamental determinant, the analysis subsequently revealed how good urban environmental qualities were met particularly in the sections that have a lot of different types of commercial and public establishments as well as in the sections that have a fast rhythm of entrances that additionally have the possibility to generate a considerable amount of movement.

In similar terms, Vallgravsstråket's social qualities are also strongly tied to how the stråk is used and experienced on an eye-level. Façades with high public accessibility and transparency that feature indoor and outdoor activity relatively had the potential to make people slow down and walk at a leisurely pace when passing by. Crowds also interestingly appeared to have a magnet-like quality that drew in even more people to the area, as they willingly (or unwillingly) got allured to look at other people along the stråk.³⁷ Examples of such active sections include the north-western section and the north-central section of the stråk that have, not only mixed commercial and public facilities with a fast rhythm

³⁷ A comparative example in parenthesis can be for instance how people prefer to eat in a restaurant that is full of people rather than in an empty one. Crowds bring in an even bigger crowd, so as to speak.

of doors but also, high public accessibility and transparency throughout different hours of the day, all of which circulates more movement and life to the stråk. In a few words, these two sections offer the social practicalities that are required to maintain Vallgravsstråket as a vibrant and lively stråk and can clearly be pointed out as the most socially active sections of the stråk, when compared with the other sections that have a built environment.

In contrast to the façades with high transparency were the sections whose façades are more reserved and homogenous that conversely did not attract as many people. Such sections include the south-western and the north-eastern sections that are predominantly occupied by yellow-brick façades of similar scale and height. Relatively speaking, a more comprehensive understanding of the stråk's social dimension can be achieved when these two sections stand in comparison with the abovementioned north-western and north-central sections. This observation conclusively shows us how the façades' formation, material and texture can also affect the experience and movement of people along the stråk. (Compare illustration 14 and 15 with 17).

The field study consequently revealed how architectural details can also have a significant role in providing Vallgravsstråket with a social dimension. In other words, façades with for instance footsteps, overhangs, and pillars can function as socially communicable architectural expressions that make people linger in that they allow (and encourage) people to stop and take a little rest by sitting or leaning or, even taking shelter while walking along the stråk.

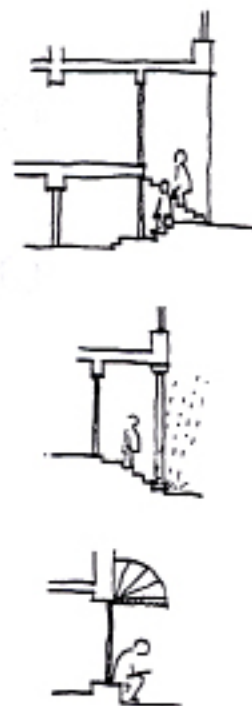


Illustration 42 Different ways of using a facade (Source: Wetterberg, O. (1996) Vallgravsstråket - Värt att skydda in: Samhällplaneringen som kulturvårdare? Planeringslagstiftningens roll i omsorgen om det yttre kulturarvet.)

This observation can, for instance, be compared with the western part of Vallgravsstråket whose southern side has closed façades with most of the entrances placed on the other side of the street, (towards Nya Allén), and the northern side that has an extensive pilotis construction that forms an arcade. As previously mentioned in section 2.1, people are more frequented on the north-western section where they can take shelter under the arcade and look into the store windows of the facilities. The arcade along Rosenlundsgatan can, in this manner, be interpreted as a publicly accessible intermediate zone in between the interior and exterior zones, (see illustration 10). Vallgravsstråket has several spaces along the northern part of the stråk that provide such a possibility in between all three sections.



Illustration 43 Benches south of Hvittfeldtsplatsen

Relatively speaking, apart from the physical and functional determinants mentioned above, the relationship between the stråk and its users is another point of departure that unfortunately has not been studied in the urban analysis. The extensive study of peoples' movement along Vallgravsstråket, as such remains for further research. In brief, however, it can be said that peoples' choice of movement and direction along the stråk depends on the following three generalised categories of users: first off, the *daily users* that live and work in the area; the *temporary users* that are out on an errand or a mission; and lastly the *one-time users* that are namely visiting tourists. This implies that people choose to use and move differently along Vallgravsstråket depending on which category they belong in. Vallgravsstråket's social dimension is in other words, also established on the grounds of peoples' individual relationship with the area – that is, whether it is visited with a purpose with shortcuts and/or predetermined goals, or at their leisure that for instance makes a longer scenic stroll possible. There is, for instance a big difference between the paths that a couple of retirees, employees on a lunch break, parents with a baby carriage, or lovers take.

2.4.5 CONTINUITY VS. BARRIERS

Nonetheless, by studying Vallgravsstråket's architectural and functional features, we have come to an understanding of the stråk's multifaceted character throughout the different sections. When looking at the whole stråk from one end to the other, Vallgravsstråket is composed of built areas with buildings and squares, parks and a canal which, in turn makes it difficult for people to identify Vallgravsstråket as a single unifying spatial structure. The paradox of maintaining a diversely rich layout throughout the sections, as such, is that it keeps the stråk vibrant and lively on the one hand, simultaneously as it diminishes the chances of grasping the whole spatial continuity of the stråk.

Figuratively speaking, when considering the continuity of Vallgravsstråket in holistic terms, the stråk can be interpreted as a series of different urban rooms that are visually demarcated. Having in mind that these urban rooms are also the component parts of the stråk's entirety, we can point out several barriers that visibly delimit the perception and experience of Vallgravsstråket as a single unifying spatial structure. As discussed in the previous summarising section, the most apparent and dominating barrier that can be primarily pointed out is the canal that runs through the whole stråk in a horizontal direction. Subsequently, a secondary barrier is formed by the abrupt directional shift by Kungssportsplatsen, where Kungssportsbron's extensive width interrupts the spatial continuity of the stråk with a perpendicular Kungssportsavenyn to the south and a Östra Hamngatan to the north. The stråk's discontinuity is further emphasised with the heavy and chaotic traffic of cars, public transportation and pedestrians. In sum, these two

barriers can, in a few words be interpreted as a vacuum-like spatial corridor that are placed in a north-south and a east-west direction along the stråk that functions as an obstacle in perceiving and experiencing Vallgravsstråket as a single entity. Another confusingly fragmentary feature is also the fencing of Trädgårdsföreningen on both ends of the south-western section, all of which relatively frames in the section to itself, and in this manner, appears to stand independent from the rest of the stråk. (See illustration 36 and 37)



Illustration 44 The wide Kungssportsavenyn, immediately north of Kungssportsplatsen

Furthermore, the urban rooms that shift and overlap between the sections do not follow any sort of continuity that enables a visual coherence of the stråk. Lynch, who argued that continuity is an obvious functional necessity, pointed out several continuity requirements that are significant in sustaining a satisfactory degree of track continuity; for instance, from maintaining a uniform bed of pavement to having uniform spatial continuity or, having a continuity in the use of buildings or the continuity of the names of the street.³⁸ Elaborately speaking, Vallgravsstråket does not follow any of these qualities: the paving changes from section to section; the spatial continuity of the

paving and the road (for cars, bicycles and pedestrians) are inconsistent; the façades and use of buildings are also altered throughout the sections; and the street also changes names several times. The northern part of the stråk that does not consist of park areas for instance, bears the names of: Rosenlundsgatan, Sahlgrensgatan, Basargatan and Stora Nygatan. In short, Vallgravsstråket lacks these continuity characteristics that are, in essence, also vital in spatial orientation as people regularly depend upon them to visually mark out identifiable linkages when looking at the whole city image. It is therefore of no surprise that people are inevitably presented with a fragmented and disconnected perception of Vallgravsstråket when traversing from one end of the stråk to the other.

As a result, the urban analysis has illustrated Vallgravsstråket as a significant everyday-environment that offers a rich cultural life with an abundance of commerce, social meeting points and recreational activities in the south-western, south-central and park areas. From what we have understood so far, people have difficulty in sensing a continuation of the stråk from one end to the other because of several visible obstacles and barriers as well as its lack of continuity characteristics. Vallgravsstråket's identity, it seems, is weak and unintelligible upon these grounds with diffused urban rooms that shift between the sections, but what about Vallgravsstråket's historical dimension? What can still be traced from its previous form and function?

38 Lynch, K. (1960) pp.49 - 53

2.4.6 HISTORICAL LEGIBILITY

For reference, it can be said that there are several aspects that directly connect Vallgravsstråket to its original urban dimension. In broad terms, a historical association can be made with the close relationship with Vallgraven's water and the sociability of the area's public parks. Most important of all however, is that Vallgravsstråket was raised on the ruins of the former fortification walls, which certainly does make it a unique part of Gothenburg. While the area between Vasabron till Slussbron is most well preserved with the moat's and angular bastions' original shape, the stonemasonry also expressively reflects Gothenburg's development and ranges from the oldest parts in the east towards the newest parts in the west: Slussbron to Viktoriabron from the 1600s; the Rosenlund canal from the 1800s; the area around Pusterviksbron from the 2000s. All in all, it can be said that the appearance of Vallgravsstråket is the result of the late 19th century town planning ideals that have, to a large extent, prevailed to this very day, and the prevailing aesthetic and experiential qualities that the stråk bestows with its stonemasonry, water and green areas are of sure, no doubt.

Although it is difficult to fathom how much of this is reflected upon and valued on a local level, we are certain that Vallgravsstråket (or at least parts of it) is used as a popular public space even though the function and use of the structure has been modified. The fact that the majority of the squares are being used as parking lots typically depicts the emergence of the modern movement with a fast-moving consumerist society and big supermarkets and a proliferating amount of cars. Needless to say, the consequences of our civilisations' progress can also

be said to have lashed out on Vallgravsstråket's former marketplaces that embraced the evolvement of new social needs and the development of a better functioning urban system, all of which was met with modern downtown parking spots.

Broadly speaking, urban space is in a dynamic process of reconfiguration that is stimulated by material and immaterial ingredients. To elaborate, this can be perceived by analysing the complex relationship between the physical development of public space and the non-physical development of approaching and using the public space. Rephrased in the context of Vallgravsstråket, we can concur that the creation and metamorphosis of Vallgravsstråket is an integrated process of visible and invisible spatial relations. Nevertheless, in order to discuss the complete arena of Vallgravsstråket it should also be reminded that the meaning of an urban room alters and shifts not only through the ways we communicate and represent it in the media, local discourses and urban planning strategies but is also determined and positioned by political and power relationships.³⁹ In this sense, the discontinued use of the majority of the market squares on Vallgravsstråket can be interpreted as firmly dominating political and economic interests over the area's cultural and historical interests. In other words, the end result of having such anonymous and characterless urban rooms throughout the stråk can be understood as a premeditated choice that is made on the cost of having distinctly interesting urban rooms that could have connected and strengthened Vallgravsstråket's identity in a more a historical and cultural sense. In sum this can be perceived as a discontinua-

39 Clark & Jauhainen (2006) pg. 7

tion of Vallgravsstråket's urban history and the constant recreation of a new urban dimension.

By shedding light on Vallgravsstråket's present context, my ambition has been to first provide a visual understanding of what the area comprises. The main point of departure has been to attain a social understanding of why certain parts of Vallgravsstråket are more popular than others and why people have difficulty in recognizing Vallgravsstråket in whole. These observations can be interpreted as a preliminary presumption to the dissertation's problem, which however can be rebutted as we continue with our empirical analysis. As follows, the next step in obtaining a more comprehensive perspective is by reading up on the cultural and historical development of Gothenburg, and thereby Vallgravsstråket. The course of the dissertation as such, turns towards a historical account of Gothenburg with the ambition of providing insight on how the different layers of physical, economic and social forces have occurred and interacted with one another over time and space in order to become what it is.

3. THE EVOLUTION OF GOTHENBURG

The following text concerns a historical account of Gothenburg that has been delimited to the following three different developmental phases:

- The foundation of Gothenburg as a small fortified citadel town
- The demolition of the fortification and the creation of Vallgravsstråket
- The City plan

These three phases have been selected in consideration of providing a summarised overview on the urban setting of Vallgravsstråket. Most focus in this dissertation will be on the second developmental phase, as it represents the planning history of Vallgravsstråket's urban development. My ambition with understanding the foundation of Vallgravsstråket from several different angles has also resulted with an urban historical study with relevant international parallels that briefly focuses on the development of the urban milieu with regards to the stråk's creation, functionality (both commercial and strategic), as well as appearance.

3.1 THE FOUNDATION OF GOTHENBURG AND VALLGRAVSSTRÅKET

In 1608 Dutchman Petter Nicolaus de Kemp designed Sweden's very first right-angled grid plan after the prominent town-planning theorist Simon Stevin's model for port cities in the 1590s.⁴⁰ The town plan that was to soon put Gothenburg on the map was designed with a sophisticated semi-circular plan that had the advantageous potential of protecting the town from all directions – that is, from the coastline in the northwest and the three mountaintops to the south and that east. Another notable feature in this strategically ideal military town was the integrated canal system. However it was not until 1621 when a site for Gothenburg was chosen on a swampy, wetland area in the west coast. Although at first it may seem as a rather peculiar site for establishing a city, choosing a marshy area was no random mistake as the town was planned from the beginning with the predetermined defensive ambition of maintaining the moat constantly filled with water.

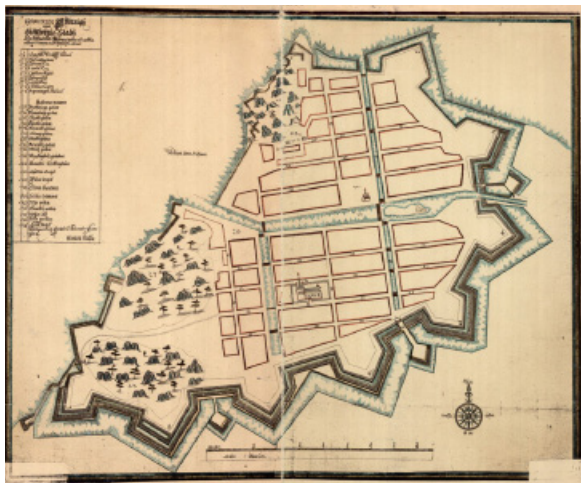


Illustration 42 Historical map from 1621

In a few words, this type of Renaissance town planning was generally characterised by an integrated canal system that, not only surrounded the town in the form of a moat as a defensive strategy, but that was also weaved within the whole urban fabric. Considering Holland's low ground level that constantly required drainage, the Dutch integrated canal system suited the topography extremely well. During the 17th century, Holland was regarded as the leading nation of town planning theories and knowledge and many planners, architects and builders were brought to Sweden to practice their capabilities. Other good examples of this type of Dutch Renaissance urbanism is Holland's capital, Amsterdam that was subsequently derived from the town plan of Venice,⁴¹ and Naarden, a municipality just south of Amsterdam that has pristinely preserved its star-shaped fort and moat.



Illustration 43 Naarden

Dutch Renaissance urbanism ideals comprised gridiron plans where a main harbour canal was designed in a straight line in the middle of town. The main harbour canal was then intersected with transportation canals that were aligned with a double row of tree plantations. Consequently, right-angled blocks and smaller streets passed through the whole town area

40 Ahlberg, N. (2005) pp. 316; see also Lilienberg (1928) pp. 149 and Wetterberg, O. (1996) pp. 146

41 Améen, L. (1985) pp. 21

in north-south and west-east directions that together created a net of streets. The plan was also drawn with squares for public use and a church that were in turn, created by systematically reserving one or two of the rectangular blocks. Lastly, as a clear expression of a settlement's military purpose, these checkerboard plans were strategically surrounded by a powerful fortification that was formed with polygonal ramparts, *bastions*⁴² and moats.⁴³

Generally speaking, the order of building the city and the fortification varied but it was quite often that the city was constructed after the site was fortified,⁴⁴ which, was also the case for Gothenburg: the foundation commenced with the construction of Stora Hamnkanalen (Gothenburg's main canal situated horizontally over the town) which was subsequently followed by the construction of the earthen rampart walls and the ditch. Lastly, plots were measured and planned according to the predetermined town plan for the establishment of the citadel city.

As in Amsterdam, rows of trees were planted alongside the canals and squares already when Gothenburg

was first starting to take form,⁴⁵ making it Sweden's first acknowledged example of tree plantations on public spaces.⁴⁶ In short, trees were a significant urban element not only because they naturally provided a beautiful view, but also for practical reasons as they functioned as firewalls. Towards the end of the century, planting trees had become a common planning procedure of the time and could be found along streets that were demarcated as fire zones and main roads, as well as on open areas such as squares.⁴⁷

3.1.1 GOTHENBURG'S FORTIFICATION

In the beginning Gothenburg's fortification had five bastions in the east that was surrounded by a girdle wall of tamped earth and a deep wide ditch.⁴⁸ The west side towards Göta Älv was in turn, protected by water palisades. In 1643 the fortification was modified with new gates, outworks, *ravelins*⁴⁹ and dams with drawbridges. Other adjustments included the enlargement of the *enceinte's*⁵⁰ width and the deepening of the moat. In practice however, the construction of the defence system proved to be a difficult task that required constant modifications that demanded a lot of manpower and material and challenging complications such as the harsh weather conditions and difficult gault soil not only delayed the completion of the fortification, but

42 Definition: a gun platform projecting from fortress walls that consists of two flanks behind a triangular head.

Although a lot depended on the topography of the chosen site, it was quite often that the town was fortified with seven bastions, since seven was theoretically considered to be a holy number. In praxis however, constructing a fortification according to the concurrent theory of fortification proved to be an arduous process and was rarely completed to the fullest. Nonetheless, a rare example that was actually founded according to military planning theories is Batavia (Jakarta) that was built approximately at the same time as Gothenburg. (Source: Söderberg, E. (1995) pp. 12)

43 Ahlberg, N. (2005) pp. 375, Söderberg, E. (1995) pp. 12, de la Croix (1972) pp. 36, Wetterberg, O. (1996) pp. 145

44 de la Croix, H. (1972) pp. 8 - 11

45 Wetterberg, O. (1996) pp. 149

46 Ahlberg, N. (2005) pp. 320

47 Ahlberg, N. (2000) pp. 59

48 Constructing ramparts in tamped earth was mostly practiced in Northern Europe and was considered better than stone and brick fortifications because mounds of earth advantageously could resist bombardment by absorbing cannonballs rather than being shattered by them. (Source: de la Croix (1972) pp. 41)

49 Definition: Detached outwork built outside the moat to provide additional protection to the curtains and the flanks.

50 Definition: The enclosing wall of a fortified place

that in turn, was modified to the final star-shaped polygonal enceinte.

Surrounding the town with double or triple wall circuits was however no new phenomenon relative to the triangular-shaped bastions that were the result of constant modernization to the concurrent artillery and a great improvement from the round bastions that were known to have several disadvantages. For example, one of the biggest problems with the round structure was the dead angle at the immediate front that unfortunately could not be protected by the flanking fire from the adjacent bastions. Another shortcoming was how the circular platform could only fit one or two cannons that consequently limited the defenders' potential firepower. In contrast to round bastions, triangular-shaped bastions connected the curtain with flanks and advantageously allowed the installation of four cannons for the protection of each curtain.⁵⁷

Gothenburg's fortification strived after mastering the ideal strategic form for many decades without ever reaching the final plan, and with time, the conditional choice of new urban development and town planning was determined after evaluating matters such as Gothenburg's initial purpose and the state of weaponry. Elaborately speaking, the foundation of Gothenburg's urban enclosure occurred during a time of political and economic unrest where the border districts between Denmark and Norway were acutely being redefined simultaneously as Sweden sought after establishing a protected port town that had accessibility to the rest of Europe and

the Baltic countries.⁵⁸ Nonetheless the devastating Nordic War eventually came to an end and by that time, Gothenburg's defence techniques had already become outdated.⁵⁹ As a result, the relation between sustaining the fortification and investing on the expansion of the town proved to sway towards the latter and the unfinished stony masonry was left to a gradual decline shortly after Charles XII's death in 1718.⁶⁰

3.1.2 MERCANTILISM - NEW URBAN ECONOMY

The end of the Nordic War brought forth the 'Age of Liberty', an experimental era of political and economic recovery that quickly ended in 1772 with Gustav III's coup d'etat. In a few words, this significantly implied a lot of changes for the Swedish state—in political terms the power of the Monarch shifted to the Parliament; and in economic terms, the integration process with the European market and trade accelerated like never before. One noteworthy example is the nation's prominent timber export that became the most prosperous in Europe with her Gothenburg-based East

58 When the trading privileges of the great port city of Lübeck was overthrown by the Dutch and English, the area around Gothenburg became a profitable location for the development of trade in Scandinavia and the rest of Europe. All the goods that were being imported from the Baltic countries to Sweden were transported through Øresund where the Danish sternly controlled taxes in Kronoborg (located by Hälsingör). Evidently, this turned to be a disadvantage for both Sweden and Holland who therefore looked for alternative ways of transporting via Vänern and Göta Älv. The creation of Gothenburg can, in a few words be seen as a collaborative interest for both the Dutch and the Swedish politicians and merchants. (Source: Söderberg, E. (1995) pp. 8)

59 Relatively can be compared to the introduction of the rifled gun-barrel that inevitably overthrew the traditional fortification methods of the canons and spears.

60 Söderberg, E. (1995) pp. 12-20. See also: Wetterberg, O. (1996) pp. 149

57 de la Croix (1972) pp. 44 - 49

Indian Company.⁶¹ The town of Gothenburg entailed an important military significance but at the same time functioned as a successful centre for commerce and shipping, all of which gave the municipality an exceptional position amongst other newly established towns in Sweden. It is of no surprise then, that Gothenburg was often remarked as “Sweden’s gate towards the West” as it simultaneously introduced new means of reaching West Europe without paying tax to the Danish, (see footnote 58).

3.1.3 THE FOUNDATION OF GOTHENBURG - INTERNATIONAL PERSPECTIVE

The urban settlement process of the pre-industrial structure developed at a rather slow pace considering the modest number of towns that were founded in Europe during 1500 – 1700. An exception to this long-drawn-out development was Scandinavia⁶² whose town-planning activity can be compared to the scale of operations in the colonial towns of Latin America and the Far East. Having that in mind, the establishment of Gothenburg can be perceived as a groundbreaking event that engendered the foundation of twenty more towns in the south-western part of Scandinavia during the 1640s – 1650s.⁶³ In general terms, one of the main ambitions of these late medieval cities was to create a network of local centres for civic authorities and developing the nation’s economic means of commerce and urban tax revenues. Consequently, another significant feature was to protect the nation’s borders and growing capital by establishing strong defen-

sive towns like Gothenburg—and this, in brief, can be considered as the beginning of Sweden’s pre-industrial urban development as a whole.

3.2 THE DEMOLITION OF THE ENCLOSED FORTIFICATION TO THE CONSTRUCTION OF AN OPEN PARK BELT

The turn of the 19th century was a time of great changes in the political and demographical status of Gothenburg. The population had multiplied since the 1620s and more land was needed for housing as much as for a larger and more accessible quay area. The fortification comprised about as much as one fourth of the whole town’s area and was definitely considered as a hinder to Gothenburg’s future development under these circumstances. Consequently, the formation of centralized nation-states implied that only the cities located by the national frontier had to be protected and by then, the borders to Denmark had long moved further south of Gothenburg.⁶⁴ As a result, the fortifications stopped serving its military purpose in 1806 and it was decided that the ramparts, bastions and gateways were to be torn. Physically, this entailed significant changes in the townscape where the *glacis*⁶⁵ that previously functioned as a strategic defence system could now be redesigned with new urban facilities for the growing town.

A year later, Gothenburg’s town architect, Carl Wilhelm Carlberg, constituted a proposal to the partial demolition of the fortification where he presented a circular tree-lined double allée that formed a ring around the former moat all of which was accompanied with another park with walkways and lawns

61 Roberts, M. (1986), pp. 215-216

62 For longer or shorter periods, Sweden ruled over large areas around the Baltic, Estonia, Latvia Poland, Germany and parts of Russia, where many new towns were founded and old ones were relocated.

63 Ahlberg, N. (2005) pp. 371-374

64 de la Croix (1972) pp. 54 - 56

65 Definition: The sloping bank downward and outward from the rim of the ditch

on the outskirts, (where Bältespänneparken and the Kungsportsavenyn are located today). As a result, the developing demands of the urban fabric necessitated a new approach where Carlberg now planned Gothenburg with new open green areas.⁶⁶ Later that year, the state and the body of borough administrators officially signed a contract and commissioned Carlberg to create a second proposal after the stated modifications. For reference, both the demolition of the former enceinte and the foundation of the public park were to be financed by the city through the profit from alcohol sales and dog licensing taxes since they were not bound to any specific purposes and could be used to finance the city's diverse needs.⁶⁷

Great plans were made to reform the area around Vallgraven with a new spatial configuration that completely differed from its former military function. Within the next few decades the inner side of Vallgraven, (closer to the heart of Gothenburg), was constructed with market places, institutional buildings and residential quarters, while the outer side of Vallgraven, (where the fortification's outworks once stood), was leased to a green promenade and park belt that was to be intersected by Kungsportsavenyn – the new grand entrance to Gothenburg that was formed as an impressive wide tree-lined access road that was connected with a stone bridge and

Kungsporten.⁶⁸ As such, Gothenburg was redesigned with Vallgravsstråket that altogether created a harmonious balance between open and closed spaces of green areas, dense residential blocks, freestanding institutional buildings and public squares for commerce, all of which expressively reflected over Vallgraven's water.

3.2.1 CARL WILHELM CARLBERG'S TOWN PLAN

Carlberg's proposal implied that the moat, in its majority, would remain intact with the exception of the western part by Rosenlund where the zig-zag patterned moat was rebuilt with a straighter form in order to provide space for housing, marketplaces and public gardens. Although most of the right-angled urban grid remained without any changes,⁶⁹ the urban walls and streets were about to be refashioned with stone façades. The neglected building ordinance that abolished wooden constructions within Vallgraven was, as such, finally regulated with stone constructions as a preventive measure to future fire catastrophes. Equally important was the façades' dimensions and colours. Carlberg's influence on this transition is easily reflected by the term, "*den carlbergska nyklassicismen i Göteborg*", ('Carlberg's classicism in Gothenburg'), that in turn reconstructed the burnt wooden town of Gothenburg to

66 For reference, during the 1700 and 1800s, Gothenburg had no public green areas within the city walls apart for some minor green shrubs here and there. People had to go outside the town's borders to Slottskogen or to Gamla Allén to stroll around a green area.

Source: Söderberg, E. (1995) pp. 26

67 Nolin, C. (1999) pp. 71 -72, 120 – 125; Nolin, C. (2006) pp. 114

68 Relatively speaking, Gothenburg had until then been a fortified town and the gates were controlled for tax purposes so people could only come in and go through narrow bridges and drawbridges. The initiation of Kungsportsavenyn was therefore represented as a modern urban element that had a symbolic role in advancing the development of a modern industrial society.

69 Apart from the exception of a couple of new building blocks in the north-eastern and western part of town: first off Norra Larmgatan that was extended in order to provide space for two new angled blocks towards the former Gustavus Princus bastion; and, the extension of a couple of blocks by Pustervik.

a solid stone city.⁷⁰ One such example is Stora Nygatan, which starts after Kungssportsplatsen and extends to the northwest part of Vallgravsstråket towards Slussbron, (see Chapter 2.3 for a more detailed urban analysis of the area between Kungssportsbron and Slussbron).

Carlberg also sought after developing market places with the construction of two squares around the glacis with the names Drottningtorget (Queen's Square) and Kungstorget (King's Square). Consequently, in order to facilitate the transport of goods to these squares, Carlberg also proposed that the canal was to be made navigable for boats and smaller vessels and appropriately modified the canal with quays.⁷¹ By the end of the 1800s, as such, Västra Hamnkanalen had become a vibrant waterway for Hising island farmers that came in with bundles of fresh groceries in their flatboats and rowboats.⁷²

3.2.2 NOLIN ON CARLBERG

Although Carlberg's proposals to Gothenburg's town plans are significant in that they initiated great changes to Gothenburg's form and function, Nolin contrarily argues that Carlberg was not as original in creating Sweden's first tree-lined promenade, as a majority of the literature claims.⁷³ According to Nolin, the con-

fusion derives from the fact that Gothenburg's Nya Allén was the nation's first green belt project that was actually effectuated, but primary sources reveal that his proposal actually came in after the town plan proposals of Malmö and Landskrona, where similar initiatives were being discussed.

As a result, Nolin suggests that Skåne's head governor Johan Christoffer Toll, (the man behind the Malmö's proposal), is more likely to have initiated the underlying concept of replacing former fortification walls with promenades in Sweden. This argument is further supported by Malmö's contract with the Crown, which specifically states that the reformation of Malmö's enceinte should be done in such a way that can be regarded as a prototype for Gothenburg. Interestingly, Nolin also points out that the demolition of the fortification walls in Gothenburg was actually initiated by the citizens' will that was subsequently followed up by the Crown's guidelines. Conclusively, she adds, that it was in fact the Crown and the National Fortifications Administration, and not Carlberg that actually engendered the concept of implementing green spaces in forms of allées and parks.⁷⁴

3.2.3 GREEN PLOTS INTO THE RENAISSANCE CHECKERBOARD AND THE BUILDING ACT OF 1874

Although it was not until the 1860s that Sweden experienced an accumulating number of people and industries, it did not take long till the nation faced the common problems of attending to the industrial city's hygienic concerns with essential 'breathing spaces'. The concept of integrating verdure in the urban grid inevitably disseminated throughout the continent and natu-

70 Sedenmalm, S. (1996) pp. 183

71 Wetterberg, O. (1996) pp. 150-153

72 Öhnander, B. A. (2006) pp. 13

73 The list of literature she refers to are as follows: Bäckström, A. (1923) *Studier i Göteborgs byggnadshistoria före 1812*. Holmberg, I. (1992) *Trädgårdsföreningen i Göteborg – en kulturhistorisk dokumentation*. Kjellin, M. (1955) «Nya Alléns tillkomst och betydelse» In: *Göteborgs Handels- och Sjöfartstidning 10 & 11*, February 1955. Lilienberg, A. (1923) *Stadsbildningar i Göta älvs mynningsområde*. Lindberg, H. (1942) *Från Segerlindska ängen till Trägår'n*. Ljungberg, V. (1924) *Göteborgs befästningar och garnison*.

74 Nolin, C. (1999) pp. 124 – 125, See also Söderberg, E. (1995) pp. 29

rally reached Sweden alongside the hopes for improved health and medical care in the form of parks, boulevards, avenues, promenades and freestanding institutional complexes.⁷⁵ By and large, mushrooming cities sought after a healthier urban environment.

A common problem was the growth of industries that attracted people from the low and middle class that consequently had no choice but to live in cramped housing conditions that provided no space for socializing.⁷⁶ Another accelerating factor was the country's high alcohol consumption that promoted public parks as a more suitable social setting than the town's streets, squares and pubs.⁷⁷ Simultaneously, the devastating fires throughout the 17th and 18th century sought after modifying the urban grid with preventive measures that included a fire-safe zone and a green belt. Hence, it was just a matter of time until the uniform Renaissance symmetry was complemented with diagonal boulevards that broke away from the monotonous urban grid of the right-angled blocks, scattered green plots and, central thoroughfare in the middle of the town.⁷⁸

In reference to the above points, another key factor was the Building Ordinance of 1874 that also strived towards the same direction. In brief, the ordinance can be described as Sweden's first attempt to regulate the nation's urban planning standards by enforcing obligatory town plans and specific guidelines. One such paradigmatic recommendation was to

implement a coherent green system of parks of various sizes and esplanades⁷⁹ into the existing urban grid so that everyone had a park close to their home. Having said that, it is not so strange that a majority of the town plans from the 1870s depict an esplanade ring around the existing town and the immediate extension area.⁸⁰

In praxis however, the ambition of incorporating green areas throughout the urban fabric proved more difficult than in theory. To begin with, the proliferating influx necessitated more residential quarters, which was often prioritized from green areas. Further, these extension plans were never critically scrutinized in context-based situations where conflicts arose from applying a stiff geometric grid to an irregular town centre. In short, this problem was emanated from Camillo Sitte's concurrently influential ideas of irregular urban structures that altogether criticized the elongated linear forms and wide ring boulevards.⁸¹ Choosing a site for these green areas varied from town to town, but in general terms, towns like Gothenburg that were originally planned with a fortification belt had the possibility of placing their green spaces on the glacis and on the newly extended area that was provided after the demolition of the enceinte. On the contrary, old towns that already had an established city centre encountered it as a challenging task which usually resulted with placing them on the outer districts and borders of the town and, sometimes, even further away.⁸² Nevertheless, in general terms incorporating a green belt around the town mostly remained in town plan proposals and were, as mentioned above,

75 Ahlberg, N. (2000) pp. 60-61

76 Generally speaking, living standards were very low during the Industrialization. In Sweden it was quite common that several families had to live in one room and kitchen.

77 Nolin, C. (1999) pp. 321 - 322

78 Améen, L. (1985) pp. 58 - 60

79 Described as wide tree-lined boulevards designed with two parallel roads.

80 Ibid. See also, Nolin, C. (2006) pp. 113

81 Svedberg, O. (1988) pp. 101 - 104

82 Nolin, C. (1999) pp. 67

regarded as a practical challenge that was often left aside. Along these lines, the completion of Gothenburg's park belt – all of which had initially started out with a simple promenade esplanade – represents an exceptional national example that physically became a reality.

3.2.4 NYA ALLÉN

Dismantling the fortification proved to take much longer time than planned especially during the Napoleonic Wars, which consequently resulted with a delay in the construction of Nya Allén and the public park. The monstrous fires towards the end of the 18th century were yet another reason why everything was put to a halt.⁸³ As such, the Crown postponed the preparations for this newly extended patch of land in 1817 and decided to lease the plots as gardens and grazing land in the meantime.⁸⁴

Finally, in 1821, fourteen years after signing the contract, Nya Allén was incorporated into the urban grid nevertheless, with some modifications from Carlberg's original proposal. Instead of placing the boulevard outside the fortification's outworks, Nya Allén was constructed on the actual place where the outworks once stood, and it extended eastwards to meet the other planned public park, known as Trädgårdsföreningen (see below section). Nya Allén was fully lined with trees and had two lanes, where one was for pedestrians while the other one was for horses and carriages for private use – commercial carriages that delivered goods were not allowed to use the boulevard. Eventually Nya Allén was also fenced in and was accompanied by a guard that looked over the area.

83 Wetterberg O. (1996) pp. 153

84 Nolin, C. (1999) pp. 124



Illustration 45 & 46 Nya Allén early 1900s



Illustration 47. Nya Allén 2009



3.2.5 TRÄDGÅRDSFÖRENINGEN

Although the construction of Kungsparken had already started in 1839, only parts of it were complete when Trädgårdsföreningen (The Garden Society of Gothenburg) was established in 1842.⁸⁵ Elaborately speaking, Trädgårdsföreningen was a direct influence from the numerous horticulture associations that were established during the first half of the nineteenth century elsewhere in the continent,⁸⁶ and was a private cooperation that was owned by several members of high-educated social elites.

The first plans for Trädgårdsföreningen were designed by the architect Victor von Gegerfelt, the town architect Heinrich Kaufmann and the association's garden architect Frans Töpel but it took several years to finalize the garden's plan layout because of the disagreements on the garden's function. After several discussions and sketches however, it was decided that it would take the form of an open landscape garden. In short, Trädgårdsföreningen's public park was designed similarly to the associations' early urban parks with artificial and planned open spaces in regards to the Horticulture associations' main interest and ambition of developing the art of garden cultivation with botanical and public gardens.⁸⁷ Garden plants

were as such, arranged in a tidy and well-ordered setting as pieces of art rather than nature. Trees from distant countries such as Asia and America aroused cultural and educational interest, and could even adjust the visitors' mood with its different forms and colours. People would stroll around, as if in an exhibition, and study the exotic plants from a distance (as they were forbidden to walk on the grass). Consequently, the location of the park was exposed to a lot of wind and trees had to be planted as a girdle along the former moat by the park's waterfront in order to protect the garden's exotic flowers.

Several buildings that housed cultural and social activities were added to the garden from the 1850s and onwards which made Trädgårdsföreningen into a public park and a social meeting place. Examples of such facilities include, for instance, a restaurant, a butterfly house, a rose garden and a palm house, that in turn has been nominated as a listed building. The park was from the beginning fenced on both sides and visitors were required to pay an entrance fee and follow both the dress code and code of conduct while they were there. At night the park was locked in order to protect the plants from intruders.⁸⁸

85 Kungsparken started as a small park in front of Kungsposten, which eventually became Bältespänneparken. Although there were plans to continue the park towards the south, the construction of Kungsparken somewhat lingered around the Bältespänneparken area.

(Source: Söderberg, E. (1995) pp. 32)

More information on Kungsparken is provided in the next section.

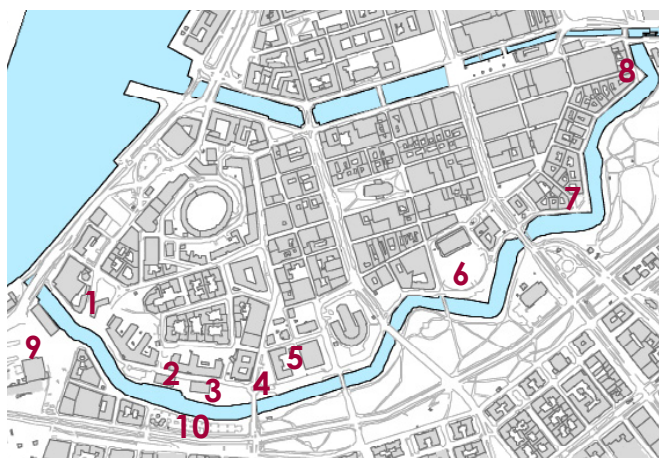
86 Other continental examples include: the Horticultural Society in London, the Garten-Verein in Berlin and the Svenska Trädgårdsföreningen (Swedish Horticulture association) in Stockholm that was established approximately a decade before Trädgårdsföreningen in Gothenburg.

87 Nolin, C. (1999) pp. 41 - 43

88 Nolin, C. (1999) pp. 45, 124. See also, Nolin, C. (2006) pp. 113

3.2.6 KUNGSPARKEN

The construction of Kungsparken started in 1839 but it was not until 1865 that things picked up again, simultaneously as the construction of the freestanding institutional buildings on the other side of Vallgraven. Relatively speaking, it is interesting to compare Kungsparken and Trädgårdsföreningen as the two parks have very distinct features. For instance, the first comparison that can be pointed out is that, in contrast to Trädgårdsföreningen and Nya Allén, Kungsparken has never had any fencing. More important however is the park's landscape and setting. Like Trädgårdsföreningen, Kungsparken followed continental trends that had gradually developed from artificially planned gardens to more "realistic" parks that imitated nature to the fullest. As a result, exotic plants were exchanged for indigenous plants amid the search for national identity. This new aesthetic approach was also added with a new social dimension where a variety of activities engaged people to use the park all year around for different sports and games. Needless to say, people from the lower and middle class were now even allowed to sit on the grass for a picnic!⁸⁹



89 Nolin, C. (1999) pp. 112 – 119, 325. Nolin, C. (2006) pp. 111 – 116. Clark and Javinien, (2006) pp. 19 - 21

3.2.7 NEW SQUARES AND MARKET PLACES

After the partial demolition of the fortification and the placement of Gustav II Adolf's statue in Stora Torget, ('The Big Square' that later became known as Gustav Adolfs Torg), the government authorities strived after establishing an official centre of power, which eventually led to the relocation of the market stalls to new squares. By 1820 Hörtorget, (today known as Nils Ericsonsplatsen), was constructed in the place of the former Johannes Rex bastion. Trädtorget – Gothenburg's most lively market area that later adopted the name, Kungstorget – rose in the place where the Johannes Dux bastion once stood in 1848. Gradually more squares were laid out on Gothenburg's previous bastions and ravelins. Such examples include, for instance, Drottningtorget, Kungsportsplatsen, Grönsakstorget, Fisketorget, Hvitfeldtsplatsen and Bastionsplatsen.⁹⁰

Illustration 48. Map of all the squares along Vallgravsstråket

1. Esperantoplatsen
2. Fisketorget
3. Rosenlundsplatsen
4. Hvitfeldtsplatsen
5. Grönsakstorget
6. Kungstorget
7. Bastionsplatsen
8. -
9. Heurlins Plats
10. Pusterviksplatsen

90 Améen, L. (1985) pp. 53

3.2.8 FREESTANDING INSTITUTIONAL BUILDINGS

The efforts put into integrating green areas into the urban grid also brought forth the construction of freestanding buildings that served as health and educational facilities. Apart from the aforementioned ameliorating health conditions of Industrialisation was the compulsory school attendance that was implemented in 1842 that consequently initiated the need for playgrounds and sports grounds for the children.⁹¹ As a result, Sahlgrenska sjukhuset, (Sahlgren's hospital) and Sociala Huset were the first two of these facilities that were constructed on the former foundation of the Carolus Dux bastion.



Illustration 49. Sociala Huset

From the mid 1800's more civic buildings were built. Examples of educational centres include Småbarnskolan, Navigationsskolan, and the Latinläroverket that was accompanied with a gym. Other freestanding buildings within the vicinity include the English church, Engelska kyrkan, the fire station, Spruthuset, the theatre Nya Teatern, (known as Stora Teatern, the 'Big Theatre' today), as well as a couple of luxurious residential villas such as the Gegerfeltsska villa. These new educational, medical and cultural freestanding monumental buildings

91 Nolin, C. (2006) pp. 116

were surrounded by green spaces that substantially differed from the all the other dense, multifunctional blocks in Gothenburg. With consideration to the contemporary ideals on hygiene and health and the nature of these facilities, they were concentrated on the other side of the park belt between Fisketorget and Grönsakstorget where they advantageously had the magnificent view of both Vallgraven and the green park.

3.2.9 THE DEMOLITION OF ENCLOSED FORTIFICATION AND THE CONSTRUCTION OF AN OPEN PARK BELT - INTERNATIONAL PERSPECTIVE

The dissolution of urban enclosures had several factors such as the new demands of the proliferating number of inhabitants into the urban fabric, the outdated military tactics and the formation of centralized nation-states. Yet another factor that triggered the predestined fate of Gothenburg's urban enceintes was the discontinued use of tariff fences in 1810,⁹² which further discouraged the need of a circumvallation. In this perspective, fortifications were not only to provide protection from enemies but was also considered necessary as it was a way of controlling smugglers from going in and out of the town. In other northern countries, the dissolution of fortifications can also be paralleled to the construction of the complicated semi-detached outworks⁹³ that stretched many hundreds of meters wide that in the long run, signified a gradual decline of the ramparts.⁹⁴

In short, the city densification of the 19th century, linked to the growth of industry and population, developed

92 Améen, L. (1985) pp. 51

93 I.e. demi-lunes, tenailles, double-tenailles, hornworks, crownworks

94 de la Croix (1972) pp. 54 - 56

an urban life that was crowded, dirty, noisy and unhealthy. This brought forth new urban determinants such as parks and boulevards that came to cast conflicts between military and civilian priorities in urban affairs, but the trend of planning public parks in the urban context can, in fact also be seen as a follow up to the efforts made in the seventeenth century when royal gardens and hunting parks became open to the public. International examples include: Hyde Park in London, which became available to the public in 1635, and Tiergarten (translated as Animal Park) in Berlin from 1649 and, Wiener Prater in Vienna from 1766. In Sweden, Stockholm stimulated the first phases of green spaces with royal parks such as Humlegården, Kungsträdgården, Djurgården and Berzerlii Park.⁹⁵

Nonetheless, the demolition of fortification structures and the construction of public green areas was a rather new phenomenon that promptly became a continental solution. One noteworthy example is the famous 60-meter wide Ringstrasse in the Innere Stadt district of Vienna in Austria that was created during the 1860s – 1890s after Vienna's power was liberalised from the Empire to the people. In contrast to Gothenburg's enciente, the walls of Vienna had been kept as a symbol of the Empire's power over the people who lived in suburbs outside the walls. The Emperor who, on the other hand, resided in the Imperial Palace within the old city maintained the glacis under his ruling and forbade any development within the vicinity. Rebellious lower class citizens were, as such, shot down and the glacis was used as a military training and parade ground as well as a recreational area for the noble upper class Vien-

nese. The Revolution of 1848 however, acted as a catalyst for polarizing the city on the issue of the city walls and the glacis: the liberal middle class, students and working class fought for the removal of the walls, while the military and aristocracy resisted. Consequently, as a stop to the uprisings, it was decided to demolish the walls and to incorporate the surrounding suburbs into the city and the area was, as a result, redesigned with a heptagonal broad street that comprised a large park, private residencies and institutional and entertainment facilities such as museums, theatres and art academy.



Illustration 50. Map of Ringstrasse



Illustration 51. One of the spacious pedestrian streets on Ringstrasse

95 Nolin, C. (1999) pp. 32

Green areas, not only improved the town's cultural and aesthetical properties, but also became highly desirable because they also represented the wealth and status of the town.⁹⁶ In relative terms, Haussmann's overwhelming modern renovation of Paris during 1852 – 1870 was one of the first town plans that integrated green spaces within the urban grid pattern. With Paris, Haussmann contributed a new approach in urban planning where a network of circular boulevards and large avenues in north-south and west-east openings were constructed with an interval of intersecting squares.⁹⁷ Medieval Paris, as such, was remodelled into a geometric grid. The widening of streets allowed better accessibility and an increase in the height of buildings that was certainly necessary for the growing population in the city. Haussmann planted rows of chestnut trees alongside these new roads to enhance the geometric and symmetric aesthetic properties and strived after maintaining a visual order with new public spaces and monuments. When put in a Swedish context, Haussmann's overall approach with boulevards and esplanades can be comparatively perceived as an influential motive to the Building Act of 1874.⁹⁸



Illustration 52. L'arc Triomphe in Paris



Illustration 53. Paris city view from the Eiffel Tower

96 Ibid., pp. 69

97 Svedberg, O. (1988) pp. 95-9

(Examples of parks that were included are: Bois de Boulogne, Bois de Vincennes, Buttes Chaumont,

Square des Battignoles and Square du Temple.

Source: Nolin, C. (1999) pp. 59)

98 See section 3.2.3

3.3 COMMERCIAL TOWN TO INDUSTRIALISED CITY

In the middle of the 19th century, the spatial structure of Gothenburg was expanded with a larger commercial and industrial centre. And in a few words, Gothenburg was in the gradual transition of becoming modernized with new installations in the urban infrastructure. Different parts of the town started to separate the daily functions and activities into specific areas: Gustaf Adolf's Torg became the official administrative square and wealthy merchants' residences faced the main harbour canal, Stora Hamnen; market areas were moved down alongside Vallgraven to Kungstorget, Grönsakstorget and Fisketorget while industries were established on the other side of Vallgraven, in the Rosenlund area; luxurious stone façades were constructed from Kungsporsplatsen till Slussbron; and Nya Allén, Kungsparken and Trädgårdsföreningen became places for social and cultural recreation.

In short, the concentration of population and industrial enterprises demanded more space in the central zones of the cities and a town development plan competition was initiated to look at the possibilities of expanding the town towards the south and east, namely in the areas that are today known as Heden, Gullbergsvass, Haga and Vasastaden. The new town plan of 1866 was, in this manner, carried out with the ambition of creating a sturdy connection between the city centre and the newly expanded residential quarters that lay just outside Vallgraven. New roads and bridges were built over Vallgraven in order to improve the traffic flow in and out of the city centre. In 1879 Gothenburg's first tramline was constructed and it was not before long until more space

was required for the proliferating hectic traffic and the development of additional tram tracks.⁹⁹ As a result, Västra Hamnen and Östra Hamnen were tamped and made into the wide roads of Västra Hamngatan and Östra Hamngatan.¹⁰⁰

3.4 REFLECTIONS

Gothenburg was founded in 1621 on a swampy wetland area on the west coast of Sweden that had the advantage of flourishing foreign trade by Göta Älv in the west and protecting the town from the three mountaintops to the south and the east. The town was planned with Dutch Renaissance town planning ideals with a defensive barrier system that was shaped with zigzag patterned ramparts and moat that contained a gridiron plan and a sophisticated canal system. The order of building Gothenburg started out with ditching Stora Hamnkanalen, which was then continued with constructing earthen ramparts all around. Last came the right-angled plots that were measured and planned accordingly. It took however many decades to build the fortification wall and constant modifications demanded a lot of manpower and material that were in turn combined with harsh weather conditions and difficult swampy soil. A crucial determinant in theory as well as in praxis were the improving siege methods and the development of weapons and firearms that further set back the whole project for almost a century without ever getting totally

99 Göteborgs Stadsbyggnadskontor, (2003) pp. 44 - 45

100 Västra Hamnen and Östra Hamnen were tamped in several intervals; Östra Hamnen's southern part was tamped in 1898 – 1900, Västra Hamnen was tamped between 1903 – 1905. Östra Hamnen's north side was not tamped until 1936. (Source: Ahlberg, 2005, pp. 423)
More information on the canals is provided in Chapter 5 Vallgraven's Water.

complete. With time as well, the Nordic War ceased and the unfinished stony masonry was left to a gradual decline shortly after Charles XII's death in 1718.

During the 1700s the town of Gothenburg flourished and functioned as a successful centre for commerce and shipping with West Europe all of which gave the municipality an exceptional position amongst other newly established towns in Sweden. By the beginning of the 1800s, Gothenburg had gradually developed into a pre-industrial urban settlement and more and more people started moving in. In short, the crumbling fortification that comprised about as much as one fourth of the whole town's area stopped serving its military purpose in 1806 and the formation of centralised nation-states and the discontinued use of tariff fences altogether resulted with the demolition of the enclosed structure.

A new town plan proposal was assigned to Gothenburg's town architect, Carl Wilhelm Carlberg and after some modifications the glacis was redesigned with open green areas, freestanding institutional buildings and public squares for commerce. Physically this implied that the moat and the form of the central and eastern part of the fortification walls were preserved while the western part by Rosenlund was straightened out in order to provide more space for residential blocks. The canal was made navigable for smaller boats and was provided with quays. The neglected building ordinance was strictly controlled all of which slowly reconstructed the town's wooden façades into stone. A new grand entrance was constructed with a wide tree-lined boulevard, Kungsportsavenyn that was connected with a costly stone

bridge in replacement of the older Kungsporten.

In short, a green park belt – Vallgravsstråket – was to girdle around the historic core and open up the formerly enclosed citadel town into a booming industrial city. In 1821 the tree-lined boulevard, Nya Allén, was completed in the western end of the town on the place where the outworks once stood. During the 1830s – 1840s the construction of Kungsparken and Trädgårdsföreningen were initiated to further extend the green ring around the heart of Gothenburg. Trädgårdsföreningen was a private cooperation that was owned by intellectual social elites and had continental influence from other Horticulture associations. The park was, in a few words, accordingly planned as an open landscape garden that strived after developing the art of garden cultivation. Exotic plants were arranged as pieces of art and visitors had the possibility of walking around these artificial gardens and marvel from a distance, as if in an exhibition. Kungsparken was completed by 1865 with a different approach that strived after a park that imitated the Swedish nature to the fullest with winding promenade paths, hilly areas and national trees. Unlike Trädgårdsföreningen, Kungsparken had no fencing or entrance fee and a variety of activities were provided for people of all classes.

Significant factors that can be added to the Industrial Era's hopes for improved health and medical care were also the compulsory school attendance that was implemented in 1842. Further, both the Building Ordinance of 1874 and the town's need for creating a fire-safe zone consequently enforced obligatory town plans with a coherent green system of parks of various sizes and esplanades. In prac-

tical terms however, incorporating green areas throughout the urban fabric proved to be more difficult than in theory especially in older towns that already had an established city centre where central residential quarters were often prioritised instead. Green areas were as such, generally planned on the outer districts and borders of the town. On the other hand, Gothenburg and other towns that were enclosed by a fortification had the possibility of planning green areas on the glacis after the demolition.

As a result, Gothenburg underwent a transition of becoming modernized with new installations in the urban infrastructure simultaneously as the different parts of the town got established with separate functions, creating more or less, the townscape and thereby Vallgravsstråket that is known today. In sum, this meant that the industries were located in the Rosenlund area, the market areas were relocated in Kungstorget, Grönsakstorget and Fisketorget, a dense luxurious residential area from Kungsporsplatsen till Slussbron, and Vallgravsstråket with its civic buildings and green lungs, became a place for social and cultural recreation. Towards the end of the 19th century, Gothenburg expanded towards the south and east and new roads and bridges were built over Vallgraven in order to improve the traffic flow in and out of the city centre.

3.4.1 THE FOUNDATION

By unfolding the 400-year-old historical account of Gothenburg, we have been able to follow the rise and fall of different urban developmental phases that commenced from a strategically fortified town to an industrialised city. Firstly, after acknowledging the fact that the most significant determinant in terms of Gothenburg's topography and growth pattern would not have thrived without a healthy climate, fresh water supply, fertile soil and accessibility of trade routes, several conclusions can be drawn from studying the three developmental phases that have been focused on this chapter.

For instance, when looking at Gothenburg's first phase, the overall effect of an enclosed enceinte can be briefly analysed with both positive and negative features. On the one hand, towered ring walls, seen as symbolic and pictorial representations for a settlement, both monumentalized the urban fabric and established definite limits for a civic organism that effectively controlled urban sprawl. Nonetheless, in the same perspective, circumvallation can simultaneously be perceived as a hindrance that hampered a city's development. Planning a town with specific perimeters was, without doubt, no easy task. Although Gothenburg's total enclosed area was larger than that of Stockholm's, inhabitants had already started to spread out and settle outside the walls towards the end of the 1600s, and with the political, economic and demographic changes, Gothenburg's need for urban renewal became critical. On the contrary, it can be assumed that towns that never caught up to its predetermined perimeter generally found it more difficult to defend the town from its rivals.

3.4.2 THE TRANSFORMATION

As follows, when considering Gothenburg's second developmental phase of demolishing the fortification and constructing Vallgravsstråket, we can achieve a better understanding of the underlying conditions for peoples' daily lives during the 19th century. The construction of public green areas, squares and civic buildings, as such, can be interpreted as a time that brought forth a new urban infrastructure and beautification that changed the way of life for people from all classes. Elaborately speaking, although most of the constructed buildings were designed for the middle and upper classes, the lower classes benefited from the new water supply, the newly constructed parks, the new gas lighting, the new drainage system, and the first hospital ever constructed in the city. Consequently, the expansion of the city in the 1860s in many ways eased the overcrowding and lowered the threat of disease (in spite of the fact that the demands for working class housing were not fully met until the 1900s). All in all, however we can infer that Vallgravsstråket's park belt gave rise to a healthier urban environment, as well as to the middle-class sociability.

In the same manner, Vallgravsstråket also significantly bears traces of Gothenburg's cultural history. For example, in physical terms, Vallgravsstråket was constructed on the glacis of Gothenburg's initial fortification from the 1600s and remnants from the growing urban demands of the 1800s include the Rosenlund canal with its swing bridges and the adjacent park belt. In short, these symbolic physical traits provide Vallgravsstråket with a historical legibility that is evaluated with great cultural and historical value. Consequently, there are also other significant proper-

ties, although not visible, that should be noted as Vallgravsstråket bears a long tradition of social and cultural activity as a public meeting place and recreational promenade that has been significant for the development of Gothenburg. In other words, this implies that the town's environmental legibility and processual history can be identified and integrated in the present-day visual and social experience of Gothenburg, all of which further denotes a pedagogic dimension of understanding the evolution of the city. This, in a few words, is the line of thought and reasoning that I would like to define Vallgravsstråket's national and local identity.

Further, from an international perspective, it is worth repeating that there are only a small number of towns with former fortification walls that were actually replaced with a network of wide tree-lined boulevards, avenues and public parks in the same manner as Gothenburg—many of these green areas, including the ones in Vienna and Paris, have been complemented with buildings. When compared with other international examples, as such, Gothenburg's Vallgravsstråket can conclusively be perceived as a unique part of the common European cultural heritage and of international interest.

3.4.3 THE TRACES

In planning terms, the evolution of Gothenburg and the creation of Vallgravsstråket can be traced back to different legislations and town plans. In a few words then, we can conversely conclude that the spatial dimension of Vallgravsstråket's streets, squares and green areas can be traced back to the different legislations and town plans in the same manner. In similar fashion, we can point out that by looking at the growth rings around

Gothenburg's polygonal historic core, we can interestingly see how Gothenburg's urban dimension has continued to develop regardless of its original spatial configuration. The creation of Gothenburg's park belt, as such, can be considered as the breakpoint between the uniform Renaissance urban grid and a modern modification that was, in a few words, planned with an open green urban environment. Re-phrased, one can also say that Camillo Sitte's irregular planning ideals with the winding promenade pathways is a clear demarcation from strict Dutch Renaissance planning ideals and the symmetric historic core.

As a result, we can interpret Vallgravsstråket as the sum of several structural and visual properties that have gradually derived from deconstructing the rampart walls. Significantly, when analysing the area for any future development plans, each urban element (buildings, streets, voids, greens and water) has to be perceived in its entirety with a holistic perspective since every one of them bears a history for itself and can be regarded as distinct puzzle pieces to the complete narration of Gothenburg's evolution. This also makes us understand how Vallgravsstråket is the sum of all of these urban elements, and the absence of one would have resulted with a completely different urban configuration than the one today. In plain terms, it also becomes important to grasp the interdependent relationship of all these urban elements since what happens in a smaller scale affects the larger scale and whatever happens in a larger scale affects the smaller scale.

Nonetheless, with consideration to the above discussion, we can easily point out that there definitely appears to be a gap between how Vallgravsstråket

is perceived by heritage preservationists/urban planners and locals. From a local perspective, Vallgravsstråket's historical urban structure is not clearly passed on as the majority of the squares have lost their original function as public market places. Parked cars are found not only in these public squares but also alongside the canal, which altogether interferes with the area's historical legibility. The canal's quays have disappeared and there are almost no more boats (with the exception of the touring Paddan) that cross the water belt around the historic core. In short, the only feature that remains is the social, aesthetic and environmental properties of the park belt. Clearly then, we can conclude that Vallgravsstråket has, first and foremost, been developed according to the needs of our car-dependent consumerist society at the cost of a weak historical dimension and poor local awareness. Simultaneously, however, we cannot overlook the fact that the park belt continues to be a popular downtown oasis.

To sum up, the foundation of Gothenburg gradually progressed towards a pre-industrial urban development process that flourished with an urban culture that was signified with an organised economic and social life. All in all, the passing of time yielded Gothenburg with a complex built environment that figuratively transformed the settlement's functional identity from a fortified town to a commerce city. Considering all the above, an interesting discussion that can be raised once again is how Vallgravsstråket is publicly represented and understood, especially when considering its classification as an area of national interest:

Is Vallgravsstråket represented as an area of historic military significance, symbolised with fortification that en-

closed a gridiron plan, or as an area of pre-industrial modern movement that is symbolised with public squares and a park belt?

Or... is it possible to preserve the area as a representative to both phases without any conflicts?

Before we ponder over these reflections further, more research and material have to be reviewed in order to come to an understanding. In short, this implies that the remaining urban elements, namely Vallgravsstråket's bridges and water, have to be looked into in order to get a more holistic perspective on the area, as well as the documents that altogether publicly represent and maintain Vallgravsstråket.

4. BRIDGES

After studying Vallgravsstråket's bridges, I felt that I would also need to brush up on a more comprehensive and general picture on the development of bridges as a whole to understand the overall management, materials and time perspective. This chapter as such starts off with an introductory summary on the development of the bridges in Sweden, which is followed by an illustration of all the bridges across Vallgravsstråket.

4.1 THE DEVELOPMENT OF MATERIALS, MANAGEMENT AND MAINTENANCE

Although horse and carriage transportation had already been used since the Bronze Ages, it was not until the 1600s that the increased use of wagons brought forth Sweden's first access roads that were connected over water areas with wooden bridges. While the maintenance of roads, traffic routes and bridges were assigned to noble men in towns and farmers in rural areas, the lighting of the streets were on the other hand, the property and house owners' responsibility. Interestingly enough, this sophisticated distinction implies that access roads and traffic routes were differentiated from the streets of an urban grid already from the 1600s.

In 1752 the Crown constituted a royal decree on reconstructing all public roads and bridges into stone. As a result, construction techniques advanced and stone vaulted bridges became a widespread phenomenon. With time, new materials such as iron and steel were also experimented and the Crown's administration was passed on to the different local authorities that started establishing around the country. In Gothenburg for example, the burghers established the skjuts- och åkeristyreelse (a board of transportation and haulage) in 1811 to take care of the foundation and maintenance of roads.

From 1845 a committee started dividing up the maintenance costs of streets between house owners and citizens, and by 1863 there were three different authorities that ran the management and maintenance of the roads in Gothenburg: the city treasury, the board of transportation and haulage and a committee that cared for

the rearrangements and lighting of the streets. Consequently, it was decided that the skjuts- och åkeristyreelse would take over the administration. As follows, the name of their organisation was changed to gatu- och vägförvaltning and their responsibility was expanded to comprise the maintenance of Gothenburg's parks, streets and open urban spaces, as well as the water and sewage system.

Concrete beam constructions appeared on bridges from the 1920s and onwards.¹⁰¹ In 1955, the gatu- och vägförvaltning once again, divided up into two organisations: gatunämnd, a committee for the management of streets called and, another committee for the water system. Bridges and tunnels had been administered by the hamnstyrelsen (harbour committee) until 1962 when it got appointed to gatunämnden. Today the maintenance and planning of streets are held responsible by the teknisk nämnd, byggnadsnämnd or the trafiknämnd.¹⁰²

101 Länsstyrelsen i Göteborgs och Bohus län, (1983) pg. 7 - 11

102 <http://www.ralphhaglund.info/BeataLoman/15_Vagar.htm> 18 April 2008

4.2 INTRODUCTION TO THE BRIDGES OVER VALLGRAVEN

When the fortification stopped serving its military purpose, the town was redesigned according to its new needs. The rampart walls were demolished and the star shaped moat was redesigned with a straighter canal to form the Rosenlund canal. The property plots to the immediate south and north of Vallgraven were carried out in a predeterminable pattern that assumed that the roads would be placed in accordance to the shape of the fortification wall. Although there probably is no way of finding out for sure, we can assume that Carlberg presumably did not extend the existing roads over Vallgraven with more bridges because Gothenburg still kept its tariff fences.¹⁰³ Perhaps another conclusion that can also be drawn is that the town already had three bridges—Kungsportsbron, Drottningbron and the bridge that led to Carlporten—and there was no need for more.

With time however, several swing bridges were constructed in the Rosenlund canal in order to facilitate the proliferating boat traffic and as a result, Gothenburg gradually transformed from a fortified city to a commercial port town. In short, the bridges between Rosenlundsbron and Kungsportsbron followed the pre-existing gridiron plan and facilitated the development of the public transportation throughout the city. In this perspective, their significant role in the development of the city and the newly established 'suburbs' cannot be underestimated.

Today there are a total of nine bridges that connect Gothenburg's City with the rest of the town. From east to west, they are as follows: Yttre Järnvågsbron, Masthamnsbron, Pusterviksbron, Rosenlundsbron, Viktoriabron, Vasabron, Bazarbron, Kungsportsbron and Slussbron. Bridges that have been demolished throughout the years include: Inre Järnvågsbron, Östra and Västra Pusterviksbron.

103 Tariff fences ceased in 1810, three years after Gothenburg signed the official contract of deconstructing the fortification. See section 3.2.9 The Demolition of Enclosed Fortification and The Construction Of An Open Park Belt - International Perspective

4.3 YTTRE JÄRNVÅGSBRON

Yttre Järnvågsbron is the first bridge one meets when entering Rosenlunds canal from Göta Älv. Although the initial construction date is uncertain, Yttre Järnvågsbron appears from historical maps from 1790 and onwards.¹⁰⁴ Its name, which translated in English, means 'Outer Iron Scale Bridge' (my translation) bears the history of the iron export industry in Pustervik that weighed and inspected all the iron that was to be shipped. The iron export company ran from 1785 to 1892. The bridge still has maintained its original appearance with its flywheel driven cog work and is used only by pedestrians and cyclists.¹⁰⁵

4.4 MASTHAMNSBRON

Masthamnsbron was built in 1980 to replace the deteriorating Inre Järnvågsbron, Inner Iron Scale Bridge, (my translation). Its name derives from the busy mast production by Skeppsbron and Stigberget.¹⁰⁶ The bridge has two asphalted lanes and is used by cars, a local bus, cyclists and pedestrians.

4.5 PUSTERVIKSBRON

Pusterviksbron was initially built in the 1830s and was called "Röda bryggan" – the Red Bridge Deck (my translation) – which was a tall grey stone bridge. In 1860 it eventually became a swing bridge and from 1883 it was officially named Pusterviksbron. In 1954 two adjacent bridges named Västra Pusterviksbron and respectively Östra Pusterviksbron replaced the bridge. When Götatunneln was constructed,

the traffic flow was rearranged and the two bridges were demolished and replaced by Pusterviksbron in 2007.

The grand bridge is made of granite, which stands out from the rest of the aged rustic work around the banks of Vallgraven. There are two quadratic stone pillars and two towering lamp-posts on both ends of the bridge that are illuminated by the four lanterns. The bridge which is already used by cars, cyclists and pedestrians has even plans for a tram track that will stretch from Järntorget till Stora Badhusgatan.¹⁰⁷



Illustration 54. Yttre Järnvågsbron



Illustration 55. Masthamnsbro



Illustration 56. Pusterviksbron

104 Historisk kartverk över Göteborg, (1923) town plans of 1790 and onwards

105 Historisk kartverk över Göteborg, (1923) town plans of 1790 and onwards

106 Historisk kartverk över Göteborg, (1923) town plans of 1790 and onwards

107 Söderberg, E. (1995) pg. 59, Öhnander, B. A. (2007) pg. 65

4.6 KALLES FÄRJA

In the beginning of the 20th century, Karl Alfred Andersson started a hand-driven ferry that transported people across Pustervik and Rosenlund. It was a popular way of crossing Vallgraven and the fare initially cost one öre. Kalles färja stopped in 1916 and was Gothenburg's last rowing passenger boat.



Illustration 57. Kalles Färja



Illustration 58 Rosenlundsbron



Illustration 59 & 60 Viktoriabron



4.7 ROSENLUNDSBRON

Rosenlundsbron was first constructed in 1835. It was a stone vaulted bridge that was accompanied with a draw-bridge and was initially called "Husarbron" because it was erected in the middle of Husargatan (Husar Street) and extended over to Fisketorget. When the fortification walls were demolished to form the Rosenlund canal, Husarbron got replaced with a new swing bridge in 1883 that bear the name of Rosenlundsbron. This bridge is the connecting point of Rosenlund canal and Vallgraven. In 1921 the bridge was reconstructed and was used as a swing bridge until the 1950s. It took twelve minutes for four men to open and close the bridge. Today cars and cyclists mostly use the bridge¹⁰⁸ – pedestrians tend to find the crossing somewhat unpleasant because of the heavy traffic in the roundabout in between Rosenlundsbron and Hvitfeldtsplatsen.

4.8 VIKTORIABRON

Viktoriabron was constructed in 1885 to connect Sahlgrensngatan and the newly extended Viktoriagatan over Vallgraven. The name of the bridge and street were a tribute to the new Crown Princess Viktoria from Germany. The bridge was initially constructed as a steel swing bridge in order to allow access to the markets in Grönsakstorget and Kungstorget. In 1938 it was reconstructed into a permanent iron girdle-bridge and was widened to allow access to cars and trams. Viktoriabron has since then been frequently used which has called for several inspections, readjustments and reconstructions.¹⁰⁹ At the present time, the

108 Söderberg, E. (1995) pg. 59, Öhnander B. A. (2007) pg. 66 - 67

109 Söderberg, E. (1995) pg. 58, Öhnander B. A. (2007) pg. 68 - 69

bridge is being reconstructed and will be ready for traffic again from June 2009. In a few words, the bridge will be reinforced and straightened to an angle to facilitate the tram tracks (see curve to the left in the following illustration), and new one-way bike lanes will be provided to increase the safety of the cyclists.

4.9 VASABRON

Vasabron, which was built in 1907, can be seen as the result of the proliferating influx and the tamping of Västra Hamnkanalen that necessitated another connecting bridge between Vasastaden and the city centre. Yngve Rasmussen, who had already designed the church, Vasakyrkan, was assigned to construct Vasabron. The girdle-bridge was built with iron beams and concrete abutments. On both ends of the bridge, there are four stubby granite columns that are crowned with simple capital ornament. Initially Vasabron was illuminated with heavy iron-cast candelabras that consisted of about twenty lamps but these candelabras were removed at a later stage and only the two tall lampposts were left to illumine the bridge.¹¹⁰ Vasabron has Art Nouveau inspired decorations on the railings that depict different motifs such as a bat, shell, frog, crab, snake, turtle, butterfly and an owl. Trams, cars, cyclists and pedestrians all have access to the bridge, all of which have also resulted in several reinforcements throughout the years in order to withstand the traffic.

110 Söderberg, E. (1995) pg. 58, Öhnander B. A. (2007) pg. 70 - 71

4.10 BAZARBRON

Bazarbron was built in 1883 and was originally a small wooden footbridge that rested on many wooden poles. When Stortorget, (today known as Gustaf Adolfs Torg) became the official administrative square, all commercial activity was moved to other squares. As a result, Kungstorget soon became a vibrant market area and the growing number of grocery shoppers made it necessary to build a bridge. Evidently, Bazarbron got its name from Kungstorget's semi-circular bazaar. By the 1980s the wooden construction had become too deteriorated and was gradually replaced with a new wooden construction in 1988.¹¹¹ Bazarbron is Vallgravsstråket's only footbridge and has been popular among locals since it was constructed. Today, the bridge is even open to cyclists as well.

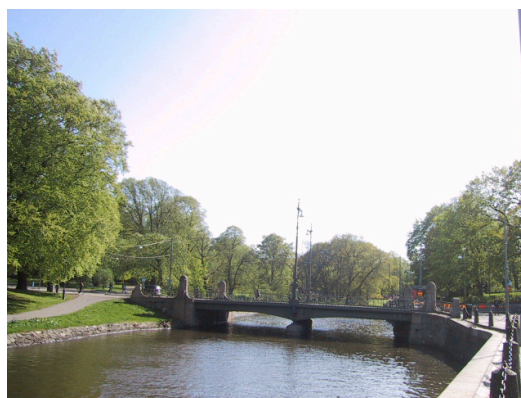


Illustration 61 Vasabron

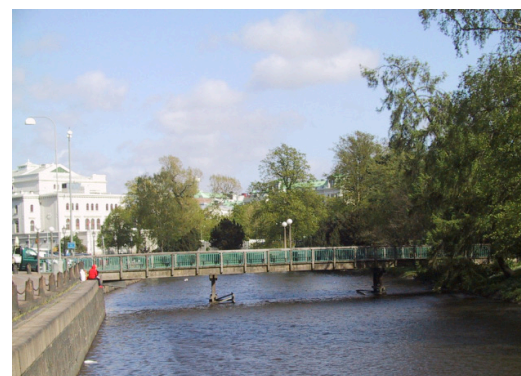


Illustration 62 Bazarbron

111 Söderberg, E. (1995) pg. 57, Öhnander B. A. (2007) pg. 72 - 73

4.11 KUNGSPORTSBRON

Although Kungsportsbron was constructed in 1901, its location has the longest history out of all the bridges over Vallgraven. When Gothenburg was founded in the 1620s, there was a wooden arched portal in its place that was named Söderport, Southern Gate, (my translation). Three decades later it was demolished and replaced by a more impressive gate that stretched over two storeys. The gate was also decorated with lions, figures and the crown. In 1670 Söderport changed its name to Konungsporten, the King's Gate (my translation) and later to Gamle Port, Old Gate (my translation). Eventually the gate was demolished and replaced by a stoned vault bridge in 1811 and was called Gamleportsbro. When the theatre, Stora Teatern opened, the bridge was named Teaterbron after the theatre. Towards the end of the 19th century, it was decided that Teaterbron was to be replaced by a new extravagant bridge that would be a more appropriate connection between the newly constructed Kungsportsplatsen and Kungsportavenyn, Gothenburg's parade avenue. Kungsportsbron's architect, Eugen Thorburn, designed a luxurious Renaissance double vaulted bridge that was inaugurated by King Oscar II in 1901.¹¹² Kungsportsbron is composed of granite, which gives it a very powerful character. The sturdy balustrade and the twelve heavy based cast-iron candelabras with its forty lamps further emphasize Kungsportsbron's grandness. Kungsportsbron is the busiest bridge over Vallgraven today and is used by buses, trams, cars, cyclists and pedestrians and it has, in fact, managed to keep up to the massive weight it holds without any reinforce-

112 Söderberg, E. (1995) pg. 56 - 57, Öhnander B. A. (2007) pg. 74 - 75

ments.

4.12 SLUSSBRON

Slussbron was constructed in 1875 and is the oldest cast-iron bridge in Gothenburg and bears the manufacturer's mark, DW SLOBECK ERIKSBERG. Slussbron was reinforced in the mid-1980s so that it could withstand the traffic that led out to the big thoroughfares. During the reconstruction a part of Vallgraven's foundation wall¹¹³ was resurfaced and the bridge's base had to be moulded on top of the masonry.¹¹⁴ The bridge has four Renaissance inspired candelabra columns with nature motifs that in turn rest on the bridge's hexagonal postaments. The balustrade is composed of delicately arched balusters that are sequenced by a larger and rounder pillar. Today cars, cyclists and pedestrians have access over Slussbron.



Illustration 63 Kungsportsbron



Illustration 64 Slussbron

113 For reference, when comparing Slussbron's position to historical maps, the foundation wall must have been part of Carolus IX Rex.

114 Söderberg, E. (1995) pg. 60, Öhnander B. A. (2007) pg. 45 - 46

4.13 REFLECTIONS

When Gothenburg's fortification walls were demolished and the Rosenlund canal was straightened, several draw-bridges were constructed with consideration to the proliferating boat traffic. In this perspective, the bridges across Vallgravsstråket also can be perceived as a symbol of opening up the formerly enclosed citadel town into an expansive merchant city where each and every one can be perceived to have a significant role in manoeuvring the development of Gothenburg's expansion and infrastructural traffic flow. The bridges in the central part of Vallgravsstråket – Rosenlundsbron, Viktoriabron, Vasabron, Bazarbron and Kungsportsbron – were extended in accordance to the pre-existing grid-iron plan and are considered to be vital urban elements in connecting the city with the surrounding suburbs. In sum, the bridges all bear histories of their own that in turn contribute vital cultural historical meaning to Vallgravsstråket's identity. For instance, Yttre Järnvågsbron is a reminder of the iron export industry in Pustervik while Masthamnbron is a reminder of the mast production by Skeppsbron and Stigberget; Viktoriabron was a tribute to the Crown Princess Viktoria; Vasabron and Kungsportsbron can be marvelled for their architectural features; Bazarbron bears a vibrant social dimension and, Slussbron is Gothenburg's oldest cast-iron bridge. Although the decreasing need of having larger vessels traverse through the canal gradually reconstructed the swing bridges into permanent ones, they are crucial determinants in operating traffic flow around Vallgravsstråket, be it foot, bike or public transportation.

5. WATER

This chapter has been provided with the purpose of approaching Vallgravsstråket with a holistic perspective where water has been studied as an important urban element to the environment. Following the nature of this dissertation, I have started out with a historical outline of Gothenburg's inner water system as an introduction to the latter two sections where the municipality's politically legitimate documents are also analysed.

5.1 HISTORICAL USE

As the third chapter has already stated, Gothenburg was founded on the southern marshy banks of Göta Älv, which provided the necessary topographical features for an inner canal system that was surrounded by fortified walls and a polygonal moat. The two main watercourses that ran through the town were Stora Hamnkanalen, that functioned as a main harbour channel and, Vallgraven that respectively functioned as a moat. Goods came in with bigger vessels that were moored by Göta Älv and transported into town via Stora Hamnkanalen in smaller boats. Some houses along Stora Hamnkanalen were even constructed with tunnels under the streets that were directly connected to the canal.¹¹⁵

Two more watercourses were planned with the names Östre Hamnen (Östra Hamnkanalen) and Västre Hamnen (Västra Hamnkanalen)¹¹⁶ in a north-south direction that intersected Stora Hamnkanalen and ran down towards Vallgraven. Östra Hamnkanalen commenced from Lilla Bommen in the north and extended south by Kungsporten where it was made a bit narrower. Västra Hamnkanalen was lined with tree plantations and was also made narrower in the southern end.

In 1641 the creek by the workhouse in the eastern part of town, namely Fatfighusån, was connected with Mölndalsån, (Mölndal's stream) to improve the canal's water circulation. This made the water flow into the canals through a dam that was built below the connecting junction by Mölndalsån, all of which was controlled by a lock by Drottningporten.

Gothenburg's canal system was a vital feature since it supplied the town with the necessary water requirements until it was prohibited in the early 1800s for sanitary reasons. In 1715 certain parts of the canal were designated as appropriate laundry places and were supplied with wide laundry rafts until it was forbidden in 1801. Two years later, the leather industry was also regulated and animal skins could no longer be rinsed in the canal. Water was considered somewhat fresher around Lejonbron and Tyska bryggan and that was where most of the drinking water was collected. In 1787 a water pipeline was constructed on the mountains to the southeast and drinking water was then provided by the springs in Kallebäck that was collected from the town's three fountains and during the 19th century, a big cistern was constructed in Kungsportsplatsen.

Although the canal had ceased to function as a source of drinking water, it had simultaneously been used as a sewage drain as well, which caused hygienic problems. Apparently, the canal smelled really bad during the hot breezeless summer months when the water stood still. Gradually with the development of the horse-driven trams and decreasing water transportation, it was decided to tamp the southern part of Östra Hamnkanalen in the late 1800s to provide more space for the proliferating traffic on land. Västra Hamnkanalen was then also tamped within the next consecutive years. Östra Hamnkanalen's northern part had a relatively better water circulation, which in turn delayed the tamping for some time. Nevertheless even that part of the canal was filled and reconstructed as an access road to Götaälvsbron in 1936. Simultaneously Stora Hamnkanalen was shortened and the harbour by Lilla Bommen was

115 Öhnander, B. A (2007) pg. 10 - 11

116 GLA, A424 A1ac:3, Gaturegister T-Ö

filled.

A lot of small private boats traversed Stora Hamnkanalen and Vallgraven and provided the canals with a very lively atmosphere. Towards the end of the 1930s a water-driven tourist route was established that started from Kungsportsplatsen. These boats, known as Paddanbåtarna, (the Paddan Boats) are still a popular tourist attraction which to some extent can compensate the nostalgic water life in Gothenburg's inner water system.



Illustration 65. Paddan boat



Illustration 66. Boats by Kungsparken 1958



Illustration 67. Boats by Trädgårdsföreningen 1930s



Illustration 68. Fiskkajen 1906



Illustration 69. Kalles Färja crossing Rosenlundskanal 1903



Illustration 70. Grönsakstorget 1921

5.2 WATER PLAN

Gothenburg's Water Plan, "Vatten – Så Klart" was constituted by the City Council in the fall of 2003 and is a complementary appendix to the municipality's development layout plan that has been initiated and partially financed by the EU project – Water City International I. The fact that the municipality of Gothenburg has developed a Water Plan both represents Gothenburg's advanced stage of water management and planning and signifies that water is acknowledged as an important urban element in urban planning.¹¹⁷

The Water Plan discusses the aesthetic, technical and ecological matters of water with the ambition of providing the operating authoritative organisations with a common perspective on how to evaluate water. The document also gives a detailed account for the parliament's Environmental Codes that in turn, are associated with the municipality's water issues. Each code is presented with a background description, comments, strategies and recommendations. The overall message derives from the fact that water is a vitally important asset and a source of happiness for all. Consequently the Water Plan also has a pedagogic value of spreading knowledge on how it can be managed and developed with the necessary measures. Relevantly, the Water Plan also includes a list of prioritised watercourses that have to be safeguarded. Ex-

amples in the city include Vallgraven, Rosenlundskanalen, Hamnkanalen, Fattighusån and, Göta Älv.

To sum up, the Water Plan sets out a number of guidelines that are as follows:

- Maintain the ground water level
- Decrease the amount of polluting substances in watercourses
- Increase the possibilities for a greater biodiversity
- Sustain and create a recreational water environment
- Increase the use of water in the urban environment
- Decrease the risk of flooding in inhabited areas¹¹⁸

117 For further reading on the Water Plan: Frida Ekfeldt's dissertation on Göteborgs blå struktur – Med studie av Osbäcken; Sveriges Lantbruksuniversitet [Water Structure in Gothenburg – Case Osbäcken] provides a critical study over Gothenburg's Water Plan with focus on the function and importance of water in the city. Ekfeldt also describes an overall picture on the municipality's watercourse and discusses the problems of sewage water and flooding.

118 Göteborgs Stadsbyggnadskontor, (2003) *Vatten – Så Klart*

5.3 CANAL PLAN

The Canal Plan is part of the Water Plan that focuses on the use of Vallgraven and Stora Hamnkanalen in further detail. Members of the “canal group” included representatives from the municipality, the Traffic and Public Transport Committee, The Real Estate Committee, the City Museum and the Park and Nature Administrative Committee.

Gothenburg’s Canal Plan is important in that it acknowledges the canal system’s urban environmental qualities and cultural and historical values. In short the Canal Plan can be summarized as a recommendatory guideline to how the whole quay berth can be used. The Canal Plan also ensures that any alterations to Gothenburg’s inner water system have to be carefully considered and evaluated in relevance to the irreplaceable qualities of the canals, reflections on the water, beaches, quays and bridges. Four section drawings are provided to the canal’s ten different segments that were initially introduced in the Cityplan of 1997. (See the diagrams to the right). Other significant features include safeguarding the general access to the water; protecting the beautiful environment around the canals and Vallgraven; pointing out where boats can be moored; and, recommending guidelines for the different kinds of commercial activities for stationary boats.

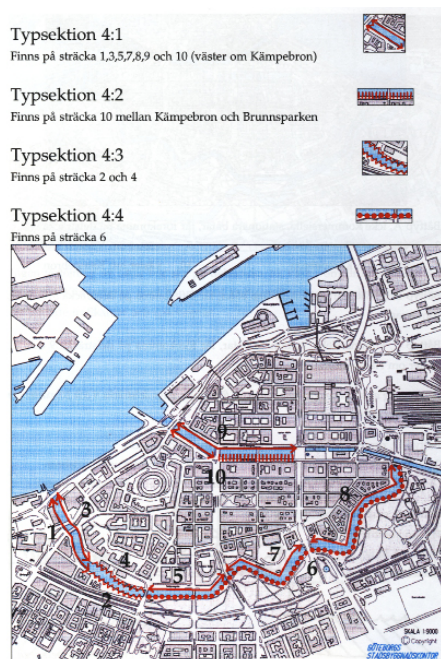
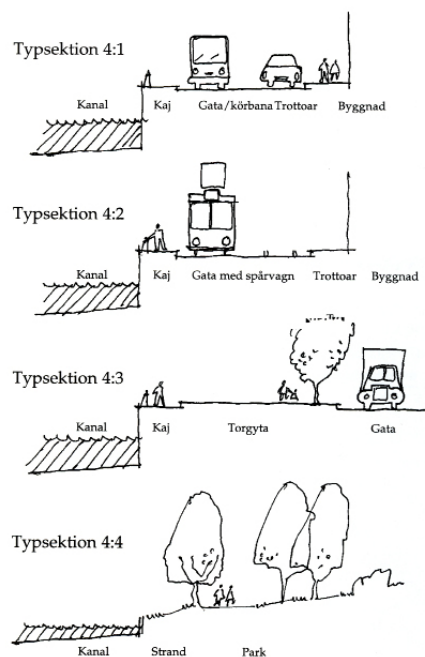


Illustration 71 & 72 The recommendations according to Cityplan 1997



5.4 REFLECTIONS

Vallgraven and the canal system are significant urban elements located in the heart of Gothenburg. In short, having the possibility of maintaining a close relationship with water is associated to Gothenburg's historical development and identity. Like Gothenburg's park belt, Vallgraven's water significantly contributes with a symbolic visual property of high cultural and historical value, as well as vital social and environmental qualities.

In planning terms, Vallgraven provides a necessary breathing space in between building blocks, which, together with the adjacent green spaces makes the centre of Gothenburg less compact and dense. Taking in consideration that Vallgravsstråket's canal system is integrated in the most central part of Gothenburg, it should be used to its best advantage. Along those lines, it is important to look at all the potential uses of this urban element, as we can also recall from the previous chapters how frequently it was used in the past. Consequently, it should also be pointed out then, that the function of water can be used and interpreted in many different ways. On an environmental level, for instance, water can contribute with an increased biodiversity whereas from an aesthetic point of view, water can be used as an expressive structural element. It is significant to even take the mirrored reflection on the water into account, as we can easily understand that the reflection represents the constantly developing urban rooms and walls¹¹⁹ that have played a crucial role to the vivid illustration and experience of Vallgravsstråket.

119 I.e. the rebuilding of a building complex, or the climatic cycle of the public parks



Illustration 73 Reflection of autumn trees and St. Nygatan



Illustration 74. Reflection of Vasabron and Grönsakstorget



Illustration 75. Sloping waterfront by Kungsparken



Illustration 76. Steps along Rosenlundskanal

6. DOCUMENTS

As all the chapters have been building up so far, Gothenburg's historic core and Vallgraven reveal a long tradition of urban development where several unique architectural and town planning ideals from different time intervals provide the area with historical urban legibility and cultural and historical value. Nevertheless the city is a dynamic organism that adapts to human interaction and it is not sufficient to solely understand the city as a multifaceted historic construction. Equally important is also analysing the area's legal documents and conservation programmes that in turn, control and guide the decision-making processes. The following study as such, provides a brief description of Sweden's legal system and documents and programs that concern Vallgravsstråket from a local and a national level.

6.1 LOCAL DETAILED PLAN

A local detailed plan (detaljplan) can be perceived as a legitimate contract between the municipality, property owners and the surrounding neighbours that regulates mandatory provisions and general recommendations on how the land area or water area is to be maintained. In other words the local detailed plan is used to classify the land and water areas into a residential, commercial, business or green area and also lists detailed specifications that concern the overall appearance, dimension and location of the existing and new properties. In this manner, the plans can also ratify legitimate protective measures that safeguards particular cultural and historically valuable architectural features in a property and are considered significant in cultural heritage management.¹²⁰

Although the constitution of the Planning and Building Act (Plan och bygglagen; also abbreviated as PBL) in 1987 resulted with a large number of municipalities ratifying up-to-date local detailed plans, some areas like Vallgravsstråket, maintained local detailed plans that were ratified according to old legislations.¹²¹ The whole of Vallgravsstråket is, as such, still regulated with a local detailed plan from 1866¹²² whereas Kungstorget

and Kungsportsplatsen are regulated by later local detailed plans that were established in 1975 and 2002 respectively.

After having read Vallgravsstråket's local detailed plan however, it is difficult to comprehend how much power a local detailed plan from the 1800s wields today or why no attempts have been made in modernising one, especially when considering Vallgravsstråket's central location. Is it wrong then to assume that the municipality does not have a legitimate document that can provide a local authoritative position over the area?

How much of Vallgravsstråket's cultural and historical values and economic performance are being prevailed on a local scale and under what conditions?

120 Boverket (2004) pg. 11 - 12

121 The PBL system acknowledges town plans that have been ratified according to older legislations such as the building legislation from 1947 (byggnadslagen), the town planning legislation from 1931 (stadsplanlagen), the Planning Act of 1907 (1907 års planlag), the building regulations from 1874 (byggnadsstadga), as the plans have no specified validation. Town plans that were constituted after 1978, on the other hand, had a specified execution time until 1992 and were therefore revoked and renewed according to the PBL regulations.

More on the establishment of the PBL in the following sections of 6.3 and 6.5

122 See appendix

6.2 CITYPLAN

A number of provisional Cityplans analysed several different parts of the city during the course of finalising Gothenburg's Comprehensive Plan.¹²³ In the municipal planning document hierarchy, these documents are in between the Comprehensive Plan and the local detailed plan, and can be regarded as direct recommendations to the municipality's development layout plan.

6.2.1 CITY S- RAPPORTEN

During 1983 – 1985, the municipality ratified the *City S-rapporten* whose main objective was the reorganisation of the car parking area in between Grönsakstorget and Bastionsplatsen. The municipality's vision of Kungstorget and Kungsportsplatsen, as such, were presented with the rebuilding of the row of bazaar stalls and the relocation of Charles IX's statue to its original place. This proposal was further emphasized with two more reports that were ratified in 1987 and 1989 respectively.

6.2.2 VALLGRAVSSTRÅKET: GRÖNSAKSTORGET – KUNGSTORGET – KUNGSPORTSPLATSEN – BASTIONS- PLATSEN. DELRAPPORT SOM UNDER- LAG FÖR DETALJPLAN

In 1992 *Vallgravsstråket: Grönsakstorget – Kungstorget – Kungsportsplatsen – Bastionsplatsen. Delrapport som underlag för detaljplan* was published with the purpose of creating a dialogue on the future urban development of Vallgravsstråket. This implied that the previously discussed parking situation and the development of an alternative traffic flow was analysed

in economic terms. The document as such, speculates that reducing the number of cars and parking spaces in the centre would not be profitable in economic and environmental terms in that businesses would be impelled to move further away to an alternative location. This, in a few words would cause motorists an extended journey to another location simultaneously as an increased difficulty for non-motorists.

Consequently, Kungstorget is presented as Vallgravsstråket's centre for retail trade and "*Stadens Själ*" (the city's soul) that would definitely benefit with a proliferated number of parking spaces. Vital points of departure are also accordingly presented as finding means of ensuring the accessibility of cars and public transportation at the same time as maintaining (and even improving) the square's aesthetic qualities. Nonetheless, in contrast to the stance taken with Kungstorget, the two squares Grönsakstorget and Bastionsplatsen are illustrated with the ambition of enhancing the visual properties of the urban environment and decreasing parking spaces.

6.2.3 Cityplan

In 1997, the final *Cityplan* was ratified with concluding recommendations on: how the land should be used; what kind of urban elements the areas should be furnished with; and, how the traffic flows should be regulated. The Cityplan has no legal imposition but is considered influential because it has been positively supported by a majority of business owners and has, in this manner also been politically accepted. Interestingly, the municipality's ambition of refurbishing Vallgravsstråket's squares both environmentally and economically are emphasized as 'locally representative'

¹²³ Discussed later in this chapter. See section 6.4 The Comprehensive Plan

proposals but what is not provided is methodological information on the kind of researches or approaches taken in order to achieve such a detailed representative local perspective.

Following this line of thought is the document's overall subjective perspective that is confusingly interpreted with a strong local representativeness. Elaborately speaking, the document's choice of words were sometimes difficult to grasp, as words like "skönhet" (translation: beauty), were frequently used throughout the proposals in the Cityplan in favour of the municipality's vision of Gothenburg. How are the boundaries and standards of such an individualised adjective formed, and how is it that we all share similar tastes and visions of Gothenburg? In this perspective, one could appropriately ask oneself whether the Rosenlund area or Kungssportsplatsen are considered as equally beautiful areas as Kungsparken or Trädgårdsföreningen. Much comes to my head when I read sentences such as:

*"Historia, identitet och skönhet (Stadens Själ) är vår förankring med vår stad, men svåra att uttrycka i siffror och pengar."*¹²⁴ (We associate with our city through its history, identity and beauty that altogether comprise the City's Soul; something that is difficult to express in numbers and money; my translation).

All in all, there appears to be a thin line between Vallgravsstråket's economical assets and political legitimacy, but where does Vallgravsstråket's cultural landscape assimilate? Should the squares along Vallgravsstråket be prioritised as parking places to keep the businesses running in the downtown CBD area because of their political recognition, or will it ever be pos-

sible to alternatively prioritise the visual legibility of Vallgravsstråket?

124 Göteborgs Stadsbyggnadskontor, (1992) pg. 1

6.3 CONSERVATION PROGRAMMES

The municipality's efforts in coming up with preventive measures in safeguarding the area within Vallgraven can be reflected by the numerous conservation programmes that have been constituted from the 1960s and onwards. Although these programmes have had different angles, the overall objective has been to protect and preserve typical built environments that reflect the municipality's development. In brief, the municipality worked with two conservation programmes from 1975¹²⁵ and 1986¹²⁶ respectively that were used as referential resources during provisional work for various programmes, plans and building permit inspections.

In 1987 the constitution of the PBL changed the whole legislative system and a new program was created for official approval and political recognition. As a result, the *Kulturhistoriskt värdefull bebyggelse – Ett program för bevarande* from 1999 comprehensibly merged the designated areas from all the previous programmes into one single programme. This program describes Vallgravsstråket's cultural and historical qualities but does not go in further detail on what is considered as the appropriate approach and necessary preventive measures to the area, which can be perceived as a flexible and open programme that optimises integrated conservation methodological development. On the other hand, however, the programme is also very unclear considering that it does not provide any information on what kind of measures are permissible when planning any alterations to the environment. In short, the *Kulturhistoriskt*

värdefull bebyggelse – Ett program för bevarande mainly focuses on the architectural and historical values of the area and apart from the listed buildings within the vicinity, the programme provides no clear indication of what exactly it is that should be preserved.¹²⁷

125 Bevaringsprogram för kulturhistoriskt värdefull bebyggelse i Göteborg, 1975.

126 Värdefulla miljöer i Göteborg, 1985.

127 Göteborgs stadsbyggnadskontoret, (1999) pg. 8 – 9, 38 - 43

6.4 COMPREHENSIVE PLAN

Municipal planning is regulated in the Natural Resources Act (Naturresurslagen; also abbreviated as NRL) and the Planning and Building Act. Unlike the previously mentioned local detailed plans, the Comprehensive Plan is not legally binding but it is considered as a document with great political legitimacy in that it describes the municipality's visions and goals. The Comprehensive Plan, as such, can be perceived as a document that not only specifies the practical use and function of the land and water areas, but also makes provisions and guidelines for municipal development plans where new constructions, reconstructions and the conservation of existing building stock are concerned.¹²⁸

Other mandatory requirements entail administering the municipality's common and national interests. In short, this implies that the Comprehensive Plan must evaluate the impact or eventual damages the document may have on areas of national interest. Relevantly speaking, the County Administrative Board supervises that the national interests are locally handled in accordance to the law. It is, in other words, the County Administrative Board's duty to coordinate the government's demands on the national interests on a local level with the municipality. Any divergent points of view between the municipality and the County Administrative Board must be reported in the document.¹²⁹

128 Göteborgs stadsbyggnadskontoret, ÖP99, pg. 41 – 43, (my translation)

129 Göteborgs stadsbyggnadskontoret, ÖPXX, Del 2, pg. 52

6.4.1 ÖP99

The ÖP99 was adopted in 2001 and consists of two sections, a consultation report, an issue statement and three maps. The first part comprises points of departure and strategies whereas the second part covers guidelines and national interests. Considering the extensive amount of municipal areal coverage, the Comprehensive Plan maintains a broad macro-perspective on all areas with general recommendations that basically lack any direct measures. The document as such, acknowledges the significance of maintaining cultural and historical values but tends to provide a rather vague and non-specific stance, as one may for example read:

"When evaluating and determining the appearance, location etc, special attention must be given to the area's and building's cultural and historical values. The buildings and areas that are presented in the municipality's conservation programmes are especially valuable from a cultural and historical perspective and cannot be vitiated according to PBL 3:10§ and 3:12§..."¹³⁰

Vallgravsstråket is represented with cultural landscapes, valuable built environments and ancient monuments under the section, "Områden med stora kulturvärden" (Areas With Great Cultural Values) in the latter part of ÖP99. To my surprise, the document's overall macro perspective is especially evident in Vallgravsstråket's representation, in that the text has been copied word for word from the county administrative board's Göteborg – Kulturmiljöer av riksintresse;¹³¹ a

130 Göteborgs stadsbyggnadskontoret, ÖP99 Del II pg. 19

131 Further discussed in section 6.5.1 Vallgravsstråket - An Area Of National Interest

document that was already published seven years prior to the establishment of the ÖP99. When considering the document's extensive coverage of the whole municipality, it may seem reasonable on the one hand but it also becomes difficult to overlook the fact that Vallgravsstråket has not been particularly studied when establishing the document. The document's comprehensive – but nevertheless – tentative approach infers, as such, a very generalised presentation of Vallgravsstråket, which consequently makes it difficult to determine how much Vallgravsstråket is affected by the Comprehensive Plan's vague recommendations and guidelines, conversely as it is also difficult to understand how much the Comprehensive Plan's general recommendations and guidelines can actually influence Vallgravsstråket's urban milieu.

Consequently, problems also arise when the municipality's vision of the future are considered in line with Vallgravsstråket in that the two visions of maintaining an economically competitive and sustainable city are promoted with the ambition of densification – a commonly debated urban planning strategy that is considered to yield an attractive city with minimum transportation requirements. This implies, in other words, that even though the ambition of high exploitation and densification of Gothenburg's central area is considered as a positive approach in some areas, it simultaneously suggests a negative effect on Vallgravsstråket's cultural and historical landscape.

6.4.2 ÖPXX

The latest ÖPXX was adopted in 2009 and consists of three sections and maps, a consultation report and a summary. The first section covers the municipality's goals, visions and strategies that are significant for how the area is maintained and developed. While the first half of the second part focuses on guidelines that concern the use of land and water areas, the latter half of the section can be pointed out as relevant in terms of Vallgravsstråket in that it provides a description of how areas of national interest are handled and catered for by the Comprehensive Plan. Equally important is the third section and map that describes and illustrates all areas of national interest.¹³²

Out of the thirteen strategies that are presented in the first section, the following three can be pointed out as relevantly interesting in understanding the municipality's vision with the city centre and Vallgravsstråket: "*attraktiv stadsmiljö*" (an attractive urban environment, my translation); "*växande och en förändrad handel*" (a flourished and developed commerce, my translation); and, "*natur- och kulturmiljöer för attraktivitet*" (nature and cultural environments as a main attraction, my translation). In sum, vital points of departure in promoting an attractive urban environment can be outlined as maintaining and developing a city centre with a diverse supply of forms and functions that can consequently provide diverse social activities and meeting places. Along these lines, the municipality's ambition of a maintaining a complex and diverse mixture of operative qualities and prioritising the accessibility of

132 [http://www5.goteborg.se/prod/stadsbyggnad/dalis2.nsf/vyFilArkiv/OPDel3Nyy.pdf/\\$file/OPDel3Nyy.pdf](http://www5.goteborg.se/prod/stadsbyggnad/dalis2.nsf/vyFilArkiv/OPDel3Nyy.pdf/$file/OPDel3Nyy.pdf)

people and foot traffic in urban rooms is clearly, of no doubt. Other noteworthy strategies include central green and water areas that are represented as vital features worth preserving and developing in a town that is being complemented with a denser building mass. Equally important is developing commerce with improved and ameliorated service in local squares and markets. Consequently, nature and cultural environments are emphasised as aesthetic magnets that substantially contribute to the development of the municipality. In short, areas such as Vallgravsstråket that are described as valuable and irreplaceable natural and cultural landscapes, are represented with the municipality's overall ambition of reviving, safeguarding, and developing better accessibility.

Considering all the abovementioned points, the first section of the ÖPXX can be interpreted with positive developmental guidelines within the context of Vallgravsstråket in for instance, developing the parks and reorganising the parked cars from the squares, but in a few words, the ÖPXX does not provide any comprehensible practical measures. The document, as such, can be interpreted as connote a superficially grand vision of the municipality with no direct means of apprehending the document's impact on actualising planning measures and, like the previous ÖP99, the ÖPXX continues to maintain a broad generalised outlook on all areas. This implies that despite its efforts on covering recommendations and guidelines for national interests, it is, in sum, approached with a lot of vague sections that appear to lack any concrete practicalities. A relative example can be found in the second section where areas of cultural and historically valuable areas are discussed as follows:

"Built environments shall be handled cautiously so that the existing qualities shall not be vitiated and new buildings shall be designed with consideration to the existing environment and its historical context. It is vital that considerable amount of knowledge is obtained on the qualities of the built environment and its settlement when planning and building in areas that are evaluated with high cultural and historical significance. No harmful or disadvantageous measures ought to be taken in areas of national interest. When planning in such areas, environmental impact assessments (MKB) may be required in order to elucidate the probable future consequences."¹³³

Following the abovementioned broad-ranging outlook, the Comprehensive Plan's macro-perspective can also be traced with similar conflicts that are presented in the ÖP99 in that the municipality's ambition of densifying and expanding the city centre are confronted with a questionable implication. Elaborately speaking, although the document reports that the municipality's objective is to avoid any tangible damages, the document's overall comprehensive scope does not entail drawing any conclusions on the eventual impact or risk that can occur and instead emphasises the need of a thorough cultural-historical evaluative study and an environmental impact assessment to do so. Thus, although the PBL obliges the municipality to report how national interests are attended, the ÖPXX evidently fails to do so.

Consequently, the ÖPXX further indicates that there is a need to update evaluative studies on several national interests but does not render an account of the areas in detail. Neverthe-

133 Göteborgs stadsbyggnadskontoret, ÖPXX Del 2 Pg. 27, (my translation)

less, considering that the document briefly reviews Vallgravsstråket and the historic core in the third section, we can assume that Vallgravsstråket is not an area that is being looked into or that needs to be updated. Although it is difficult to understand how much research has been carried out since the previous Comprehensive Plan, it is evident that Vallgravsstråket has been discussed to some extent in that the actual term, Vallgravsstråket, has been replaced by the term “*parkstråket längs Vallgraven*” (the park ‘*stråk*’ along Vallgraven, my translation). This can be pointed out to have a puzzling implication on the area as the discontinued use of the term also reflects a change in the municipality’s outlook on the area as a single entity and as a national interest. A vital question that can be raised at this point concerns the probable reductionism of the whole of Vallgravsstråket: does “*parkstråket längs Vallgraven*” include even the squares within the area or, is it just the green park belt that is in focus now? And, most importantly, what are the municipality’s motives in using another term?

The “*parkstråket längs Vallgraven*”, as such, is briefly represented in the third and final section together with the historic city centre with Nordstaden, the area within Vallgraven, and Fattighusån as a unique environment that is principally comprised of diverse, small-scale buildings. It is described and motivated in two short sentences as an area that reflects Gothenburg’s historical development where a lot of the original town plan with moat, canals, fortification walls and streets have been preserved. The text then abruptly stops and refers to the abovementioned conservation programme¹³⁴ and the County Administrative Board’s

Göteborg – Kulturmiljöer av riksintresse¹³⁵ as referential material.

134 See section 6.3

135 Further discussed in section 6.5.1

6.5 AREA OF NATIONAL INTEREST

During the 1960s the government worked toward establishing a modernised building legislative system and initiating a national planning project (den fysiska riksplaneringen; abbreviated as FRP). In a few words, the FRP is perceived as a groundbreaking process for the cultural heritage management that commenced on a national level with the conservation department indicating substantial areas of cultural and historical interest. These areas were then passed down on a local level where municipal authorities formulated recommendations based on the area's cultural and historical values. The result of the FRP can be summed up with the constitution of the Plan and Building Act, (a set of regulations on how the land and water areas should be used), the Natural Resource Act in 1987, (a legislation that is used as an instrument in safeguarding a holistic perspective on the sustainable use of our environment), and the Environmental Code in 1999. In short, the interest and motivation of appointing areas of national interest along with the abovementioned PBL, NRL and Environmental Code brought forth an instrument where national interests could be positioned with an authoritative role in the management of land and water resources on a local level. In other words, the FRP and the whole process of initiating areas of national interest can be interpreted as the government authorities' will of officially safeguarding the site's cultural and historical values in municipal planning.

Areas of national interest can be defined as cultural landscapes with architectural and aesthetic values and/or unique cultural, historical or social

identity.¹³⁶ Apart from being loosely regulated in the NRL with guidelines that simply states the protection of cultural values from measures that tangibly harm the area,¹³⁷ areas of national interest are not legally binding and are inclined with a problematic vague area. Fundamental obscure statutes have been criticised during several researches and instances throughout the years and according to the National Board of Housing, Building and Planning (Boverket) that have the collective responsibility of monitoring areas of national interest according to the third and fourth chapters of the Environmental Codes, there have been difficulties in managing the regulations that concern these areas. Elaborately speaking, although the law ensures the indication of areas of national interest in both the comprehensive plan and in local development schemes, monitoring the regulations for areas of national interest implies the usage of two different legislations that consequently requires different kinds of preparatory work that are not clarified in constitutional statutory. Challenging conflicts in distinctive analytical approaches and poor consultation have not only caused complications but also insufficient means of dealing with the matter at hand.¹³⁸

136 3 kap MB

137 2:6§ NRL

138 [<http://www.boverket.se/templates/Page.aspx?id=2615&epslanguage=SV>]

6.5.1 VALLGRAVSSTRÅKET - AN AREA OF NATIONAL INTEREST

In 1992 the county administrative board in the Gothenburg and Bohus district published *Göteborg – Kulturmiljöer av riksintresse* (Gothenburg – Cultural Landscapes of National Interest, my translation), where the municipality's twenty-five areas of national interest were all evaluated after a lengthy historical overview. This publication is significant in that Vallgravsstråket is also reasoned as an area of national interest, nonetheless in a surprisingly brief outline that is summed up in the following two sentences:

“The green belt around Vallgraven is a representation of the significant role parks and other green spaces had in the 19th century town planning ideals. Palmhuset (the Palm House in Trädgårdsföreningen) and Stora Teatern are two significant public buildings from the 1800s that have a dominating location in the park environment around Vallgraven.”¹³⁹

Although introducing a historical background to Vallgravsstråket illustrates the essence of Vallgravsstråket to a certain extent, the abovementioned motivating argument lacks any details on what Vallgravsstråket can imply on a national level and to the national identity. What is it that makes Vallgravsstråket into an area of national interest, its physical morphology of a park belt or, its previous function as a military fortification, or its social nature? Another noteworthy aspect is the emphasis on the area's historical dimension and the absence of present-day values and needs. In other words, by centralising the motivating argument solely to the 19th century

simply freezes Vallgravsstråket into a single time dimension that becomes intractable in our everyday life.

139 Länsstyrelsen i Göteborgs och Bohus Län (1992) pg. 29; my translation

6.6 REFLECTIONS

The content of this chapter presents the different documents and official planning instruments that concern Vallgravsstråket. A brief description of Sweden's legal system has also been provided in relevant terms. The order of the documents as such, starts on a local level with the local detailed plan, Cityplan, conservation programmes and the Comprehensive Plan. The latter part of this chapter discusses Vallgravsstråket on a national scale as an area of national interest.

As mentioned in the first chapter, there is a tendency to valorise the area highly especially in terms of its historical and cultural significance, when Vallgravsstråket is concerned. Nonetheless, although labelling something as heritage is a value judgement in itself, after having studied the documents and conservation programmes, Vallgravsstråket's hype and publicity are overshadowed with a predominant superficiality that permeates in all the documents. For instance, with the outdated local detailed plan we have come to realise how the document has little (or perhaps no) authoritative power over current decision-making processes and it simultaneously becomes difficult to understand the value of this document in regards to Vallgravsstråket.

When considering the *Cityplan*, the documents all represent a politically and economically biased view of the possible changes over Vallgravsstråket where reality is recognized within the given frames. What measures have been taken by the municipality to obtain such a determined local perspective? Is it wrong to take the municipality's fact-finding sources and dominating subjective perspective for granted? In reference to the

knowledge we have acquired in the study so far, all that can be concluded however is that there is an inconsistency between the municipality's engagement in obtaining the stated local interests and the restricted amount of public knowledge on what Vallgravsstråket is and what it represents.¹⁴⁰

Consequently, although the Comprehensive Plan infers Vallgravsstråket's complex dimension and provides a debatable status in practical planning matters, the document sustains a rather macro-perspective on the named area that in turn can be perceived as a shortcoming. Further, the conservation programmes that are referred in the Comprehensive Plan describe Vallgravsstråket's culturally and historically valuable properties but do not provide any further information on what should be preserved and how. In short, the document can conclusively be said to promote cultural and historical values within their visions on the one hand, simultaneously as the influence and impact of the economic and political interests and the distorted distribution of power and resources, cannot be overlooked on the other hand. Having said that, I am still tackling around understanding how Vallgravsstråket is being acknowledged and safeguarded by the municipality. What role does Vallgravsstråket really have in the municipality's visions?

Finally, the motivating argument for listing Vallgravsstråket as an area of national interest is summarised in two sentences whose focus is concentrated on Vallgravsstråket as a representative feature of 19th century architecture and planning and does not embrace any of the area's intangible

140 Referring back to the interview results of the previous assignment to this dissertation, (see Introduction and section 1.1. Background).

qualities or relevance to our present society. How do locals associate with Vallgravsstråket and, how do they evaluate it and use it? In this perspective it becomes significant to understand that the practical use and the development of the city are constantly in flux with time and Gothenburg has to be perceived as a dynamic town that cannot be solely limited to the past.

Although there is no doubt that Vallgravsstråket is acknowledged as an entity in itself, the problem seems to rise from the assumption that policymakers and development controllers tend to accommodate to a mode of thinking based on the historical process by which the physical environment was structured and as such, a locational mismatch occurs between what is stated in legal documents and Vallgravsstråket's potential users. At this point it seems as if the main problematic obstacle grounds from the uncertainties that concern Vallgravsstråket's identity and function. What is it that is being preserved – its parks and its social and environmental values, or its vacant squares that are used as parking lots, or the actual morphology of the fortification – and for who?

Questions that concern how Vallgravsstråket's common interests and cultural historical values are safeguarded still remain unanswered and it consequently becomes difficult to fully grasp how the local association and identity are established and maintained. The constant dilemma of finding common grounds in the challenging dichotomy between conservation and development is a debatable town planning matter. All in all however, we can conclude that Vallgravsstråket is only analysed from a macro-perspective and safeguarded

with minimal measures. This demonstrates the overall passive representation of the cultural heritage management in urban planning practicalities. Along these lines, it becomes crucial that the cultural heritage management more actively specifies long-term goals already from the decision-making process and is regarded in equal terms with the economic and political goals. It is necessary that visions of the future represent preservation issues and development issues in a harmonised equilibrium, and this only emphasises the need for a more dynamic interaction between the two sciences. Having obtained such a perspective, can a morphological analysis possibly help bridge this gap and provide a more comprehensive understanding of Vallgravsstråket?

Before commencing with the next chapter however, it should be noted that this chapter marks the end of the empirical research and the bachelor part of the thesis. At this point, it is worth summarising that the thesis has maintained a cultural and historical outlook where Vallgravsstråket's urban environment, historical development, bridges, water and documents have been studied, all with the attempt of providing a holistic comprehension of the area. The master part of the thesis commences with the following chapter that turns towards an integrated conservation approach where a morphological analytical tool is studied and experimented in terms of its ability of further developing our field with new ways of formulating and defining values for structure, function and typology and visual character.

7. URBAN MORPHOLOGY

In *Values and Heritage Conservation*, Mason points out that the role of conservation and the opportunities to shape and support civil society develop in flux with our dynamic society. This implies that the future relevance of the conservation field relies on better cohesion, connection and integration with other disciplines as well as finding means of contextualising research in larger ongoing social contexts. Yet despite the fact that the concept of integrated conservation was engendered in the late 1960s, little has been done towards setting interdisciplinary studies into conservation practice and the development of relevant methodologies has had little consideration for adapting its competence to the needs of a growing conservation market. In a few words, this implies that although cultural-historical assessment is used as a vehicle to inform decisions about how best to preserve the values of the object or place, there are no instrumental tools or strategies that can be used to explicitly solve current problems in maintaining, preserving, transforming or developing an environment. The paradox of cultural-historical assessment can also be identified with shortcomings within the field as encapsulating multiple values to objects, buildings and landscapes has a tendency of categorising into specific groups and ranks with a narrow and reductionistic approach.

In short, the remaining part of this study sprouts from this very need of creating a more comprehensive base of urban analytical methods within the field of integrated conservation that in the long run can progress and extend current cultural-historical assessment and development projects. The motivation behind selecting urban morphology as a potential methodological approach can be pointed out as an individual interest as well as an opportunity to explore an urban analysis system that uses a classification scheme that, in a few words, studies the relation to scale, structure and connections between the underlying urban elements, as opposed to studying the relation between different objects and their values that cultural-historical assessment is generally confined to.

7.1 THE STUDY OF URBAN FORM: AN EPISTEMOLOGICAL BACKGROUND

Urban morphology, that can simply be described as the study of urban landscapes, develops from a wide range of epistemological and philosophical perspectives with varying analytical approaches. Some of the different schools of thought that critically practice urban morphology include for instance, architecture, planning, history and geography.

7.1.1 ARCHITECTURE, URBAN DESIGN AND PLANNING

In the fields of architecture and by extension urban design and planning, scholars have focused on theoretical typomorphology and understanding the contextual planning and management of urban forms created by previous generations. In sum, the discipline and practice of the field has had a prescriptive and utopian approach has pervaded for centuries. Noteworthy examples of literature that strive after the ideal city include E. Howard's *Garden Cities* (1898), Le Corbusier's *Ville Radieuse* (1929) and F. L Wright's *Broadacre* (1945).¹⁴¹

From the middle of the 20th century however there was an interest in developing new analytical and methodological tools within the disciplines. With authors like Jane Jacobs¹⁴² the tradition of urban planning took a revolutionary turn in the 1960s with a more humane approach that grounded from place-based discovery. This change of perspective not only gave

a jumpstart to bottom-up community planning, but also perceived cities as dynamic organisms that adapted according to human interaction over time. Simultaneously, multiple analytical approaches were introduced by influential individuals such as Kevin Lynch whose work on cognitive mapping, legibility and navigation widened the scope for evaluating the visual perception of the urban form.¹⁴³ Another notable researcher is C. H. Alexander's whose work on urban connectivity also opened up new doors in integrating mathematical concepts and tools within the field.¹⁴⁴ Following this line of thought, came Hillier and Hanson's space syntax theory to play a significant role in the study of urban form.

7.1.2 GEOGRAPHY

While the perspective has been covered to a lesser extent until recently within history, the study of urban landscapes reflects a longer following within geography with researches in cultural geography, historical geography, human and urban geography.

The field's progress amongst geographic scholars has its roots in the urban morphogenetic tradition that developed in the late 19th century. The research tradition was instigated by Otto Schlüter who postulated a morphology of the cultural landscape (*Kulturlandschaft*) as the counterpart in human geography of geomorphology.

¹⁴¹ See for instance: Fishman, R. (1982) *Urban Utopias in the Twentieth Century: Ebenezer Howard, Frank Lloyd Wright, Le Corbusier*. M.I.T Press: Cambridge, Massachusetts

¹⁴² See: Jacobs (1961) *The Life and Death of Great American Cities*, Random House: New York

¹⁴³ See: Lynch, K. (1960) *The Image of the City*. M.I.T. Press: Cambridge, Massachusetts

¹⁴⁴ See: Alexander, C. H. (1969) "A City is not a Tree" in: *Arkitekten* 1969: 1

gy.¹⁴⁵ Elaborately speaking, this cultural approach developed its focus on the significance of cultural forces that shaped the landscape with a huge interest in studying the urban landscape (*Stadtlandschaft*) in German-speaking countries. The German contribution within the study of urban landscapes, as such, were mainly concerned with settlement geography and the visible cultural landscape and often explained the historical dimension it took.

The foundations of urban morphogenetics was further disseminated with a huge following to the English-speaking world by M. R. G. Conzen. In Britain, however, a majority of the work focused mainly on description and classification than in conceptualising the developmental processes.¹⁴⁶ By the late 1920s, in the United States, the so-called 'Berkeley School' within cultural morphology developed independently from the contemporary European trends and concentrated on rural landscapes.

Significantly, by the end of the 1960s, the scope of urban morphology was widened in accordance to the wave of 'quantitative revolution'. A lot of scholars, as such, started carrying out morphographic researches that described physical forms rather than analysing their origins and development. These studies were mainly ahistorical in character, even when they considered the survival and distribu-

tion of historical buildings. Another notable development in geographical urban morphology was paralleled in the United States with researches that sought after using concepts based on economics and land-use patterns.¹⁴⁷

7.1.3 ISUF AND THE INTERDISCIPLINARY VENTURE

As discussed above, urban morphology comprises a wide diversity of disciplinary, linguistic and cultural backgrounds. Although this diversity can be perceived as a positive factor in advancing the understanding of the multifaceted complexity of urban form, an apparent shortcoming with the different philosophical and epistemological backgrounds has been identified with differences in vocabulary and language and a challenging incompatibility. This, in a few words, has necessitated the intellectual need for identifying the commonalities, distinctions and tendencies within the study of urban morphology. It is upon these grounds that the ISUF was finalised in 1996 by a group of international urban morphologists.

Depending on the academic discipline – be it geography, architecture, urban planning, architecture or history – the researcher's theoretical formulation, research problems, objectives, and methodology may be distinguished with different contributions to the field. Relevantly, a distinction can be made between cognitive and normative approaches as well as internalist and externalist approaches.¹⁴⁸ Although it may appear rather superfluous to differentiate these perspectives, mapping out such an explanatory foundation will facilitate understanding some of the most prominent researches on urban form.

145 As Schlüter wrote: "The geographical scene, shaped for me the persuasion that above all it was necessary in geography to find a clearly delimited area of research within its human aspects. This I perceived to be in the visible cultural landscape (*Kulturlandschaft*), just as the natural landscape gives us the object of study for physical geography". (Source: Schlüter, "An Autobiography", (1952), quoted in: R. C. West (ed.), *Pioneers of Modern Geography*, Baton Rouge, Louisiana State University, 1980, pp. 69)

146 Further discussed in section 7.3

147 Whitehand & Larkham (1992) pp. 1-2

148 Gauthier & Gilliland (2005), pp. 41, 45

A simplified configuration of the different theoretical and epistemological perspectives will, as such, be provided after introducing the different schools within the field.

7.2 THE URBAN MORPHOLOGICAL ANALYTICAL PERSPECTIVE

Urban morphology can, in simple terms, be defined as the study of city forms as a human habitat and the processes of its development. Although there are a lot of different kinds of approaches and schools, the conceptualisation of the field stems from the understanding that a city can be 'read' and that there is a particular logic in the systemic organisation of a city where development is not perceived as random but rather follows certain laws. Morphological research can, as such, be summarised as studying the various systems of spatial symbolisations of an urban fabric by analysing the different scales and patterns of movement, land use, ownership and occupation.

In praxis, this implies identifying and analysing the morphological relationship between the different elements that form the urban fabric. In other words, in morphological studies, the tight interrelationship between the primary elements is perceived to be in a state of flux with the dynamic state of the city that is relatively understood as the product of the combination of these and many other forces. This means that some morphological researches even focus on the social movements and forms that are expressed in the urban fabric and conversely, how the physical layout of a city produces or reproduces various social forms. In physical terms, constructed spaces are considered to both shape and get shaped by open

spaces,¹⁴⁹ just as streets are also comparably both serving and being used by plots. In short, this perspective significantly acknowledges the dialectical and interdependent relationship between the part and the whole – that is, the social determinants and urban form, and, the building types and urban forms - that is vital in morphological analysis.¹⁵⁰

To facilitate an understanding of how urban morphologists methodologically analyse the relationship between the building type and urban fabric and, between typology and morphology, a simplified table has been provided as a paradigmatic example. (Look on following page)

7.2.1 SYNCHRONIC APPROACHES

- A *morphological analysis* methodologically requires studying the table column by column: P/OS, P/CS, P/S, P/P, S/OS, S/CS and so on. This approach may yield slightly different kinds of studies, since certain researchers, depending on their academic background and interests, may lay emphasis on different relationships.
- A *typological analysis* methodologically requires studying the table diagonally. The outcome with such approach yields an overview of: the typology of plots or the classification of lots; the typology of streets or the inventory of types of streets; the typology of constructed spaces or the identification of types of buildings; and, the typology of

¹⁴⁹ 'Open space' can be defined as urban spaces other than streets; some examples are for instance, squares, gardens and courtyards.

¹⁵⁰ Levy, A. (1999), pp. 79-80, see also Moudon, A. (1997) pp. 3-4

	Plot (P)	Street (S)	Constructed Space (CS)	Open Space (OS)
Plot (P)	P/OS	S/OS	SC/OS	OS/OS
Street (S)	P/CS	S/CS	CS/CS	OS/CS
Constructed Space (CS)	P/S	S/S	CS/S	OS/S
Open Space (OS)	P/P	S/P	CS/P	OS/P

Table 1. *The primary elements of the urban fabric* (Source: Levy, A. (1999) *Urban Morphology and the problem of the modern urban fabric: some questions for research*)

open space or the identification of types of urban spaces and squares

- A *typological analysis* can methodologically be approached by studying the relationships between the same elements: P/P, S/S, CS/CS, OS/OS.
- A *typological process analysis* methodologically requires the study of the relationship between the building type and the urban fabric. The study commences with the 'elementary cell' and the accumulation of functionally different 'pseudo types'. All these 'pseudo types' are then collectively perceived as a part of the 'basic fabric' that are in turn studied by extension of hierarchic streets as an organic component to the 'particular fabrics'.
- A *topological analysis of the urban built environment* methodologically requires studying the relationship of constructed space to other elements: C/OS, CS/CS, CS/S, CS/P.
- A *town-plan analysis* methodologically requires studying the plan elements: the streets and their arrangement in a street; plots and their plot pattern; the block-plans of buildings that respectively analyses the building arrangement within the street and plot patterns.

7.2.2 DIACHRONIC APPROACHES

- A *morphogenetic analysis* methodologically requires studying the persistent and constant elements throughout the development of the urban fabric. The outcome with such an approach yields valuable information in determining the present configuration of the city that are linked to conservation and planning.
- A *morphogenetic analysis* can also methodologically be approached by studying the transformative components of the urban fabric. This requires the studying of the relationship between the building type and urban fabric over time.
- A *morphogenetic approach* can also methodologically be approached by studying the layering of fabrics or in terms of the superimposition of an older fabric on an existing one. The outcome with such an approach yields the mapping of successive urban growth rings.

7.3 THE SCHOOLS OF URBAN MORPHOLOGY

During the ISUF meetings, urban morphologists confirmed that the urban morphological approach had broadly been developed into three research traditions, namely English, Italian and French through several generations of scholars. Two prominent researchers that have been influential in the field's development were also represented as M. R. G. Conzen and S. Muratori.

M. R. G. Conzen was a German geographer who moved to England before WWII to study and practice urban planning. Much of his morphogenetic inspiration derived from Schlüter,¹⁵¹ Fritz¹⁵² and Geisler.¹⁵³ M. R. G. Conzen's fruitful work has instigated several significant concepts within the field that will be shortly discussed in the following section. Vital points of departure in his work can be pointed out as the 'town plan analysis' approach and his concern for terminological precision.¹⁵⁴

Saverio Muratori, on the other hand, was an Italian architect who taught first in Venice and then in Rome. His influences were rooted in the Roman interpretation of Italian rationalism and his work concentrated on establishing a theoretical framework for an 'opera-

tional history' of towns for new architectural and urban design within the urban fabric.¹⁵⁵

7.3.1. BRITISH URBAN MORPHOLOGY

M. R. G. CONZEN

In M. R. G. Conzen's notable *Alnwick, Northumberland: a study in town-plan analysis*, he recognised the tripartite division of townscape that were identified as the town plan, the building fabric, and the land and building utilisation.¹⁵⁶ Of these three, M. R. G. Conzen's work focused a great deal on analysing the town plan and its three interrelated plan elements.

M. R. G. Conzen was especially interested in using historical evidence as a referential base for elucidating the development of towns and cities in Britain. In his study of Newcastle upon Tyne, he worked with an evolutionary method of plan analysis where the physical development of urban structural elements could be discerned by studying the city's cultural and historical development. It was from this line of thought that M. R. G. Conzen also introduced the concept of 'management' of the urban landscape that was accordingly determined by the landscape's historicity or historical expressiveness.

M. R. G. Conzen's recurring conservation perspectives and ambition of understanding the urban form and the processes of physical development also led to cartographically representing the different morphological regions. Such mapping can, in simple terms, be described as primarily dividing up areas into sections that follow

151 Work concerning the ground plan of towns and wider aspects of settlement geography: Schlüter, O. (1899), 'Über den Grundriss der Städte', *Zeitschrift der Gesellschaft für Erdkunde zu Berlin* 34, 446-62; Schlüter, O. (1899) 'Bemerkungen zur Siedlungsgeographie', *Geographische Zeitschrift* 5, 65-84

152 Work that recognized the scope within programmatically analyzing development stages of town plans: Fritz, J. (1894) 'Deutsche Stadtanlagen', *Beilage zum Programm 520 des Lyzeums Strassburg* (Strassburg).

153 A dissertation that comprised a map of inner Danzig that visually and cartographically represented the land and building utilization and the number of storeys in residential buildings: Geisler, W. (1918) *Danzig: ein siedlungsgeographischer Versuch* (Kafemann, Danzig).

154 J. W. R. Whitehand (2001) pp. 103-104

155 Cataldi, Maffei & Vaccaro (2002), pp. 3

156 See: Conzen, M. R. G. (1960) *Alnwick, Northumberland: a study in town-plan analysis*. Institute of British Geographers Publication 27 (George Philip, London)

some sort of pattern, and consequently determining a hierarchic order in accordance to the landscape's geographical manifestation and historical development. Mapping morphological regions usually requires combining separate maps of plan type, building type areas and land utilisation use. Relevantly speaking, this methodological approach has the possibility of integrating conservation principles with urban planning, in that it not only illuminates the historical development of the area, but that it is also used as a referential base for the management of historic and contemporary townscapes and future planning decisions. The following illustration is an example of a map of morphological regions in his study of the English market town of Ludlow.¹⁵⁷

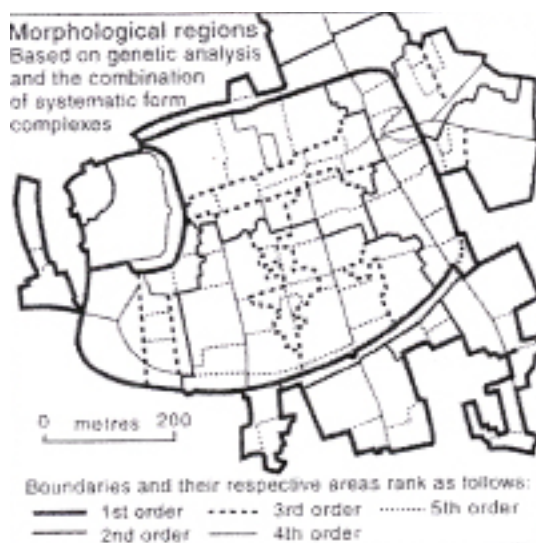


Illustration 77. Ludlow's morphological regions (Source: Whitehand, J. W. R. (2001) *British urban morphology*)

Unlike the remaining of the British colleagues and followers, M. R. G. Conzen had an interest in exploring the roots of words that in turn engendered conceptualising terminologi-

¹⁵⁷ See: Conzen, M. R. G. (1988) "Morphogenesis, morphological regions and secular human agency in the historic townscape, as exemplified in Ludlow" in Denecke, D. and Shaw, G. (eds) *Urban historical geography*, (Cambridge University Press, Cambridge) pp. 255-61.

cal precision within the limits of the language. Some of his most important work represents significant conceptual findings on the developmental processes within the urban fabric. Examples of such conceptual findings include the burgage cycle and the fringe belt.

The recognition of the burgage cycle was developed by a relational micro-morphological study of the plot and the block-plan of buildings. The burgage cycle can, in simple terms, be explained as having three cyclic phases, starting with the "*progressive filling-in of plots with buildings, leading to a climax phase of maximum coverage and, ultimately, the clearance of plots preparatory to redevelopment.*"¹⁵⁸ In more recent years, in the early 1990s, Slater further developed the conceptual finding with a metrological analysis that in turn studied the dimensions and boundaries of the plots with the purpose of understanding medieval surveyor's intentions when the area was first laid out for development.¹⁵⁹

The notion of fringe belts that was initially stimulated in 1936 by Louis as *Stadtrandzone* in a study of Berlin,¹⁶⁰ was further developed by M. R. G. Conzen in his studies of Alnwick and Newcastle upon Tyne. Fringe belts can be described as the "*physical manifestations in the landscape of periods of slow movement or even standstill in the outward extension of the built-up area; they tend to be occupied initially by land uses seeking large sites and*

¹⁵⁸ Whitehand & Larkham (1992), "The Urban Landscape: Issues and Perspectives" in: J. W. R. Whitehand & P. J. Larkham (eds.), *Urban Landscapes - International Perspectives*, 1992, Routledge, London and New York. pp. 6

¹⁵⁹ Whitehand, J. W. R. (2001), pp. 105

¹⁶⁰ Louis, H. (1936) 'Die geographische Gliederung von Gross-Berlin' in Louis, H. and Panzer, W. (eds.), *Landerkundliche Forschung: Krebs-Festschrift* (Engelhorn, Stuttgart), pp. 146-71

having a low requirement for accessibility to the commercial core."¹⁶¹ Characteristically, in other words, fringe belts can be discerned with large vegetated areas with large and often institutional or landmark buildings and the absence of housing and an under-developed road network.

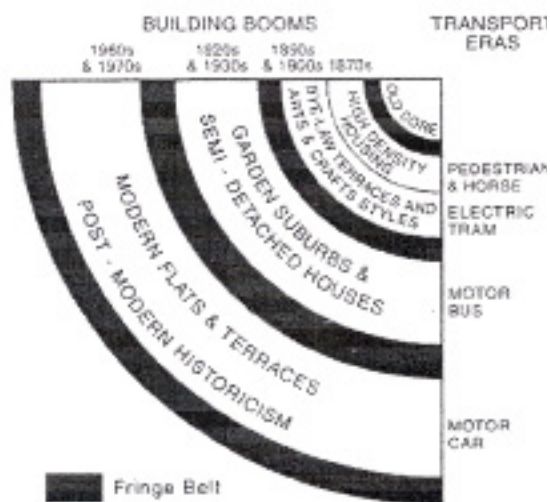


Illustration 78. An innovation/building-cycle model (Source: Whitehand, J. W. R. (2001) *British urban morphology*)

As understood from the above illustration, the developmental relationship of fringe belts are depicted as a product of building cycles, land values and innovation adoption. This implies that the creation of fringe belts are dependent on the fluctuations in between a period of decreased housebuilding and low land value and contrarily, a period of building booms and high-density housing when land values are high. When these fluctuations are combined with the locational geographical conditions that determine the outward growth of the constructed area, an urban area is created with fringe belts in between the residential growth zones. In this perspective, fringe belts can also be

¹⁶¹ Whitehand & Larkham (1992), "The Urban Landscape: Issues and Perspectives" in: J. W. R. Whitehand & P. J. Larkham (eds.), *Urban Landscapes - International Perspectives*, 1992, Routledge, London and New York. pp. 6

perceived as boundary zones between historically and morphologically distinct housing areas.

Fringe belts are also crucial in understanding M. R. G. Conzen's fundamental concept of the morphological frame. In a few words, the morphological frame is used to understand how elements are created on the ground, especially when a rural area is morphogenetically configured into an urban form. The morphological frame, as such, takes the urban elements and uses in consideration, that in turn sustain and act as a long-term constraint during development. In relevant terms, streets and plot boundaries can be pointed out as having a strong, long-term influence that tend to remain unchanged. In this perspective, town plans are considered to have a strong impact on how future forms are planned.

CURRENT RESEARCH

The 1980s played an significant role in developing the morphological following in Britain. The decade flourished with an increasing amount of publications. One such example is the *Urban Morphology Newsletter* that was regularly published from 1987. In addition to that were several projects that sought after developing the methods and objective. Another notable advancement was the establishment of the Urban Morphology Research Group in the School of Geography at the the University of Birmingham.

The morphological perspective has been taken up widely into various lines of thought and researches, where they all have some direct or indirect influence from M. R. G. Conzen's ideas. Relevantly, this has also coined the term 'Conzenian' school of thought. Since listing all the different strands of current research would be too over-

whelming, the following is a simplified list of some of the most important ones.¹⁶²

- Studies that concern the planning and management of the urban landscape. The methodological approach has been reconstructing the processes of decision-making; from interviewing the agents, management procedures and policies.¹⁶³ Some of the earlier researches have worked with historical documentation and plan analysis. Some researches have even dealt with scrutinising medieval town planning by identifying the differences between ideal and reality in the urban layout, and by studying the relative sizes and shapes of individual plots.¹⁶⁴
- Studies that analyse the types of agents that have triggered the development of current urban landscapes. The methodological approach has been reconstructing urban development through the local authority's records with detailed building analyses and build-

ing plans.¹⁶⁵

- Studies that concern the analysis of the diffused spatial relationships of the physical changes of 20th century dwelling houses. The methodological approach has been micro-morphological, that is, on the scale of the individual plot and even, within the plot.¹⁶⁶
- Studies that concern the analysis of the relationship between morphological periods and the typological process. The methodological approach has been looking at the geographical differences in the morphological phases and comparing them with the characteristics of houses that are of a transitional type.¹⁶⁷
- Studies that concern the analysis of the relationship between decision-taking and urban form. The methodological approach has been looking at how the ways that separate decisions can create regularities on the ground.¹⁶⁸

162 Whitehand & Larkham (1992) pp. 7 - 8
J. W. R. Whitehand (2001) pp.106 -108

163 See: Freeman, M. (1988) 'Developers, architects and building styles: post-war redevelopment in two town centres,' , *Transactions, Institute of British Geographers*, NS 13, 2 pp. 131 - 47
Larkham, P. J. (1988) 'Agents and types of change in the conserved townscape' in: *Transactions, Institute of British Geographers*, NS 13, 2 pp. 148 - 64
Jones, A. N. (1991) 'The management of residential townscapes', unpublished PhD thesis, School of Geography, University of Birmingham.

164 See: Slater. T. R. (1987) 'Ideal and reality in English episcopal medieval town planning' in: *Transactions of the Institute of British Geographers* Ns 12, 2 pp. 191-203

Slater. T. R. (1988) ' English medieval town planning' in Denecke, D. and Shaw G. (eds.) *Urban Historical Geography: Recent Progress in Britain and Germany*, Cambridge: Cambridge University Press
Slater. T. R. (1990) 'English medieval new towns with composite plans: evidence from the Midlands' in: Slater. T. R. (ed.) *The Built Form of Western Cities*, Leicester: Leicester University Press

165 See: Aspinall, P. J. & Whitehand, J. W. R. (1980) 'Building plans: a major source for urban studies', in: *Area* 12, 3, pp. 199-203

Larkham (1988) ' Changing conservation areas in the English midlands: evidence from local planning records', in: *Urban Geography* 9, 5, pp. 445-65

166 See: Whitehand, J. W. R. (2001) ' Changing suburban landscapes at the microscale', in: *Tidschrift voor economische en sociale geografie* 92, pp. 171-7

Whitehand, J. W. R., Morton, N. J. and Carr, C. M. H. (1999) 'Urban morphogenesis at the microscale: how houses change', in: *Environment and Planning B: Planning and Design* 26, pp.514

167 Maffei, G. L. & Whitehand, J. W. R. (2001) 'Diffusing Caniggian ideas', in: *Urban Morphology* 5, pp.47-8

168 Whitehand, J. W. R. & Morton, N. J. (2003) 'Fringe belts and the recycling of urban land: an academic concept and planning practice. In: *Environment and Planning B: Planning and Design* 2003, vol 30. pp. 819-839

7.3.2. ITALIAN PLANNING TYPOLOGY

S. Muratori

During the early 1950s when Muratori was actively working with post-war reconstructions,¹⁶⁹ he was also involved in planning four major public buildings in three different towns.¹⁷⁰ It was through these experiences where he was challenged with fundamental modern technical problems of materials, style and environment that made him realise how there was a conceptual gap between the plans of entire blocks and the actual buildings that occupied the block in that they were often constructed with poor consideration and integration to the complexity and originality of the block plan. Muratori, as such, perceived towns as living organisms and as collective works of art where new constructions had to be planned in accordance and continuity with the pre-existing building culture of the place.

As a professor in Rome, he lectured on the importance of understanding the operative history and the inherent values of urban formation processes. In practical terms, this implied studying the influences and implications of new constructions in historic downtown areas that already had a pre-existing compact built area, as well as in undeveloped suburbs that conversely were more susceptible to a wide range of solutions. Another point of departure was maintaining a good spatial arrangement with consideration and respect to the building's architectural organisms. Essentially,

this meant that the building's materials, structure, compositional plan and site all had to be evaluated and perceived holistically.

By the 1960s however, Muratori's ideas were opposed by student movements that considered his line of thought to be lacking the cutting-edge formalisms and the technicalities of the modern movement. He experienced isolation even from his colleagues that criticised him as being a traditionalist academic. This made Muratori seek for answers outside the specific disciplinary field of architecture, and was instead more interested in focusing on philosophical reflections on wider issues.

Nonetheless, Muratori was encouraged by a group of dedicated students that received non-institutional planning courses. Sandro Giannini was one of these students that later became Muratori's first assistant to follow him on large-scale territorial studies in Reggio and Genoa. Giannini is also known for his contributive work on interpreting the types and fabrics in Ostia and Antica where he came up with a systematic comparison between architecture, music and philosophy.¹⁷¹ Other significant studies involved his unique overview on Muratori's ideas¹⁷² as well updating his fundamental terms. Later noteworthy works include introducing the paralleled conceptual term of 'open spaces'¹⁷³ (as opposed to 'constructed spaces') and, his dedication in developing a specific meth-

169 For instance the house plans of the Istituto Nazionale delle Assicurazioni (INA) that were gradually widely implemented in all major Italian towns.

170 The Romanesque church of S. Giovanni al Gatano in Pisa, the Ente Nazionale di Previdenze ed Assicurazione Sociale Gothic office buildings in Bologna, the Renaissance headquarters of the Christian Democratic Party and, the incomplete Baroque church of Tuscolano

171 See: Giannini, A. (1970) 'Ostia', Quaderni dell'Istituto di Elementi di Architettura e Rilievo dei Monumenti (Università di Genova) 4, 9-108; idem (1971-72) Corso di indirizzi dell'architettura moderna (Università degli Studi di Genova, Genova).

172 See: Giannini, A. (1983) La filosofia di Saverio Muratori (Corso di Pianificazione Territoriale e Urbanistica, Genova)

173 Giannini, A. (1995) La periferia e il progetto (Alinea, Firenze)

odology for territorial interpretation of the outer peripheries.¹⁷⁴

G. Caniggia

Already from a young age, Caniggia was involved in some major works. One such significant project involved the Trinitá dei Pellegrini complex in Rome that was constructed in three different time frames. By studying the complex's processual development, Caniggia noticed how the dome element was a recurring type of substratum in Roman row houses. This led to several researches on the formation processes of medieval courtyard houses in European historic cities.

Like all of Muratori's assistants, Caniggia was also obliged to teach. During his planning courses in Genoa and Florence, Caniggia sought after developing the methodology for the interpretation of towns and their components. This resulted with the publication of *Composizione architettonica e tipologia edilizia* that are commonly used as a manual in many architectural courses. While the first two volumes deal with the interpretation and design of basic building, the remaining two deal with the interpretation and design of special buildings.

Caniggia's main concern was to spread Muratori's ideas in architectural terms as he thought that the dissemination was challenged with comprehension difficulties. He therefore simplified and reduced the theoretical system by highlighting its more directly operative aspects with most significance. These terms and concepts were presented as 'type', 'building fabric', 'basic building' (as opposed to Zevi's term, 'architecture', that was perceived as purely invented and unrepeatable phenomena).

During the 1980s, Caniggia and his colleagues competed in major national competitions where they expressed how the only innovative way of planning towns is to interpret them with their historical background as a referential base and avoiding any extemporaneous solutions that more represent unjustified individual artistic endeavours.

Current Research

Muratori ideas are being followed and practiced in a number of universities in Italy today. Some examples include Reggio Calabria, Genoa, Florence, Rome, Ferrara, Cesena and Bari. Of these, the Florentine group has been most active with ongoing efforts in holding seminars, exhibitions and conferences to further develop the methodological strategies with interdisciplinary perspectives.

By 1981 the CISPUT (Centro Internazionale per lo Studio dei Processi Urbani e Territoriali) was founded with the intention of providing occasions for architects and architectural historians to meet and make comparisons. This opened up new doors for studying how Muratori's ideas could be used in different disciplines. Since 1993, annual meetings have been arranged.

One obvious shortcoming that has been surfaced the Italian typologists' need to work closer as a team in order to strengthen their work. Further, in order to distribute the Italian school of typology, the typologists recognised that there is a need to clarify the use and significance of terms in various languages. Current work, as such, involves redefining the in-depth thesaurus of the so-called 'fragments' of Muratori's definitions in English, French and Spanish.

174 Cataldi, Maffei & Vaccaro (2002), pp. 3 - 7

7.3.3 FRENCH MORPHOLOGICAL RESEARCH

In broad terms, until the early 20th century, the study of urban form principally focused on the historical evolution and physical aspects of particular cities. With a dominating influence from the historiographical perspective, French urban researchers concentrated on the history of urban planning and topographical/morphological histories.

After WWII, amid a growing interest towards anti-modernist approaches, urban studies were conducted with a growing concern for reconstruction and regional planning. In relevant terms, ongoing morphological research has, under these conditions, been developed by the postmodern findings of the archaeological, architectural, art historical, geographical and historical disciplinary traditions.

In sum, the French research tradition is understood as having a typo-morphological approach that partially has its roots in the Italian Aymonino-Rossi line of thought that studies the dialectical relationship between the physical evolution of a town and its building types. Although Aldo Rossi and Carlo Aymonino both criticised urban morphology as a field that provided outdated solutions to topical urban problems and architecture, both were significant in diffusing Muratorian ideas and stimulating a considerable rise in the popularity of traditional building types in the architectural discipline. This renewed interest had an influential impact on the schools of architecture that were being established after the dissolution of the Beaux-Arts.

Nonetheless, with intellectual thinkers such as H. Lefebvre and H. Raymond, French urban morphological research

simultaneously developed an interest in various social aspects of urban and architectural forms that consequently can be distinguished from the Italian school of planning typology. An exquisite piece of work on the complicated relationship between the material forms and social forces includes for instance, M. Roncayolo's study on Marseille.¹⁷⁵

Noteworthy researchers include architects J. Castex and P. Panerai from the School of Architecture in Versailles who ambitiously sought after ways of integrating Muratori's theoretical and methodological ideas in their work. Together with sociologist J. Depaule they introduced the "closed block" after studying five large urban transformations such as the Haussmanization of Paris, Unwin's design of Letchworth and Hampstead, and Le Corbusier's unités d'habitation.¹⁷⁶ The conceptual finding of the closed-block, that revealed how the modern urban block was planned to progressively open up until it disappeared again, was also applied on a meticulous study on Versailles that in turn got recognised as one of the most significant typo-morphological studies in France.¹⁷⁷ The study entailed dividing up the historical development of Versailles into several morphological frames where each period analysed the development of urban form and housing types. By physically perceiving the urban design of Versailles as a collec-

175 See: Roncayolo, M. (1990) *L'imaginaire de Marseille* (Chambre de Commerce et d'Industrie de Marseille, Marseille); Roncayolo, M. (1996) *Les grammaires d'une ville, essai sur le genèse des structures urbaines à Marseille* (Editions de 'Ecole des Hautes Etudes en Science Sociales', Paris); Roncayolo, M. (1996) *Marseille, les territoires du temps* (Editions locales de France, Paris)

176 See: Castex, J., Depaule, J.-Ch. & Panerai, Ph. (1977) *Formes urbaines: de l'îlot à la barre* (Dunod, Paris)

177 See: Castex, J., Celeste, P. & Panerai, Ph. (1980) *Lecture d'une ville: Versailles* (Moniteur, Paris).

tion of urban fragments, rather than as a town, the researchers came to realise how the 'garden city of Enlightenment' progressively transformed towards a 'normal city' when the large peripheral plots with detached aristocratic mansions were reconstructed with apartment blocks.

As follows, with consideration to the numerous morphological contributions within the French research tradition, the work of the architects, A. Borie, P. Micheloni and P. Pinon can also be pointed out. In similar terms with the English school, their systematic morphological methodology entails disaggregating the urban fabric into different components. Explicitly, this implied the dialectal study of the urban forms and road system in accordance to their topology, geometry and dimensions. In contrast to the traditional typo-morphological approach, this morphological way of studying the urban form is said to have been influenced by Gerard Hanning from the Institut d'Aménagement et d'Urbanisme de la Région Ile de France.¹⁷⁸

Another prominent development in the French school of thought has also been developed by M. Darin, M. Denés, T. Roze, J. Scavennec and J. Treuttel where comparative morphological regions have been studied to attain a better understanding of the relationship between the city centre, the old *faubourgs*, the new suburbs and the countryside. Even public housing belts (HBM belt) from the 1920s and 1930s in Paris have been analysed by B. Huet.

M. Darin has also carried out several case studies in cities such as Montpellier, Paris and Toulouse where the towns' boulevards, *percées* (break-

through streets), ordinary streets and places have been analysed. Such research have in turn resulted with an understanding of the conflicts and implications caused by the dynamic forces of the decision-makers, ranging from those up high up in the social ladder of the decision-making process (i.e. mayors, architects, engineers) and those from the lower half, (i.e. house owners and residents).

Current Research

Up until recently, most the study of urban form in France has only been concerned with the historical aspects of towns. The epistemological gap in the understanding the modern urban fabric has, as a result, led to several researches on other types of urban fabric. Such examples include the study of suburbs¹⁷⁹ and, the evaluative study of modern green areas.¹⁸⁰

Consequently, some scholars within the disciplines of architecture and art history have also looked in the planning policies and documents by carrying out evaluative studies on the urban fabric with the ambition of adopting preservation measures. This type of research, is however, regarded as a questionable contribution to the field as all case studies have been lacking a widespread knowledge on the methodological tools of comparative research.

179 See: Demorgon, M., Panerai, Ph. (n.d.) *La banlieue comme territoire structuré; étude d'une route: la N192 et la N308 de la Défense au pont Maisons-Lafitte* (Association de Recherche de l'Unité Pédagogique d'Architecture de Versailles / Service de la Recherche Architecturale, Versailles).

Eleb-Harlé, N. & Biau, V. (n.d.) *Pantin; peripherie et projet urbain* (Institut d'Etudes et de Recherches Architecturales et Urbaines / Bureau de la Recherche Architecturale, Paris)

180 See: Darin, M. (1997) *Les 'bons' espaces publics modernes* (Ecole d'Architecture / Ville Recherche Diffusion, Nantes)

177 Darin, M. (1998) pp. 66

A completely different morphological approach has also been expressed by some urban researchers that have also shown an interest in studying the urban fabric and culture of countries outside of France, with much dedication to the Middle East¹⁸¹ and North Africa.¹⁸² These studies are considered important in obtaining a holistic perspective on the general processes and explanations of how a city can be formed. A secondary ambition has been noted as essential in critically evaluating the evolution of French cities and modern urbanism.

7.4 MAPPING THE STUDIES OF URBAN FORM

With the practical ambition of elucidating all the different theoretical and epistemological perspectives in the study of urban form, a distinction can be made by identifying the cognitive or normative backgrounds and externalist or internalist approaches within the three schools of urban morphology. Mapping out a Cartesian grid will, as such, identify similarities, differences and patterns of concentration that will facilitate an overall understanding and visualisation of some of the main contributive studies on urban form.

For reference, cognitive studies can be summarised as explanatory researches that are directed towards producing knowledge and developing theoretical and methodological analytical tools. Normative studies, on the other hand, have a prescriptive character with tendencies of articulating a vision for the future, or at formulating an approach to planning practice.

Consequently, internalist approaches are distinguished with a heuristic outlook on urban morphology and focuses on understanding the internal logic of the urban fabric. This implies that internalist studies considers the urban form as a relatively independent system. In contrast to the internalist perspective, externalist approaches perceive the city as the passive product of external determinants. In other words, the externalist urban form is perceived as the end product of political, anthropological, geographical, economic, historic and perceptual processes, systems and structures.

181 See: Borie, A., Pinon, P., Yerasimos, S. (1989) *L'occidentalisation d'Istanbul au XIXe siècle* (Ecole d'Architecture Paris-la-Défense / Bureau de la Recherche Architecturale, Paris); Arnault, J.-L. (1993) *Le Caire: Mise en place d'une ville moderne 1867-1907* (Université de Provence / Ville Recherche Diffusion, Aix-en-Provence)

182 See: Vilan, L. (1988) *Alger ou le lit de Procuste, la naissance de la ville coloniale en Algerie* (Laboratoire de Recherche 'Histoire architecturale et urbaines - société' / Bureau de la Recherche Architecturale, Versailles);

Santelli, S. (1992) *Atlas de médinas tunisiennes* (Institut Parisien de Recherche Architecture Urbanistique Société / Bureau de la Recherche Architecturale / Ville Recherche Diffusion, Paris).

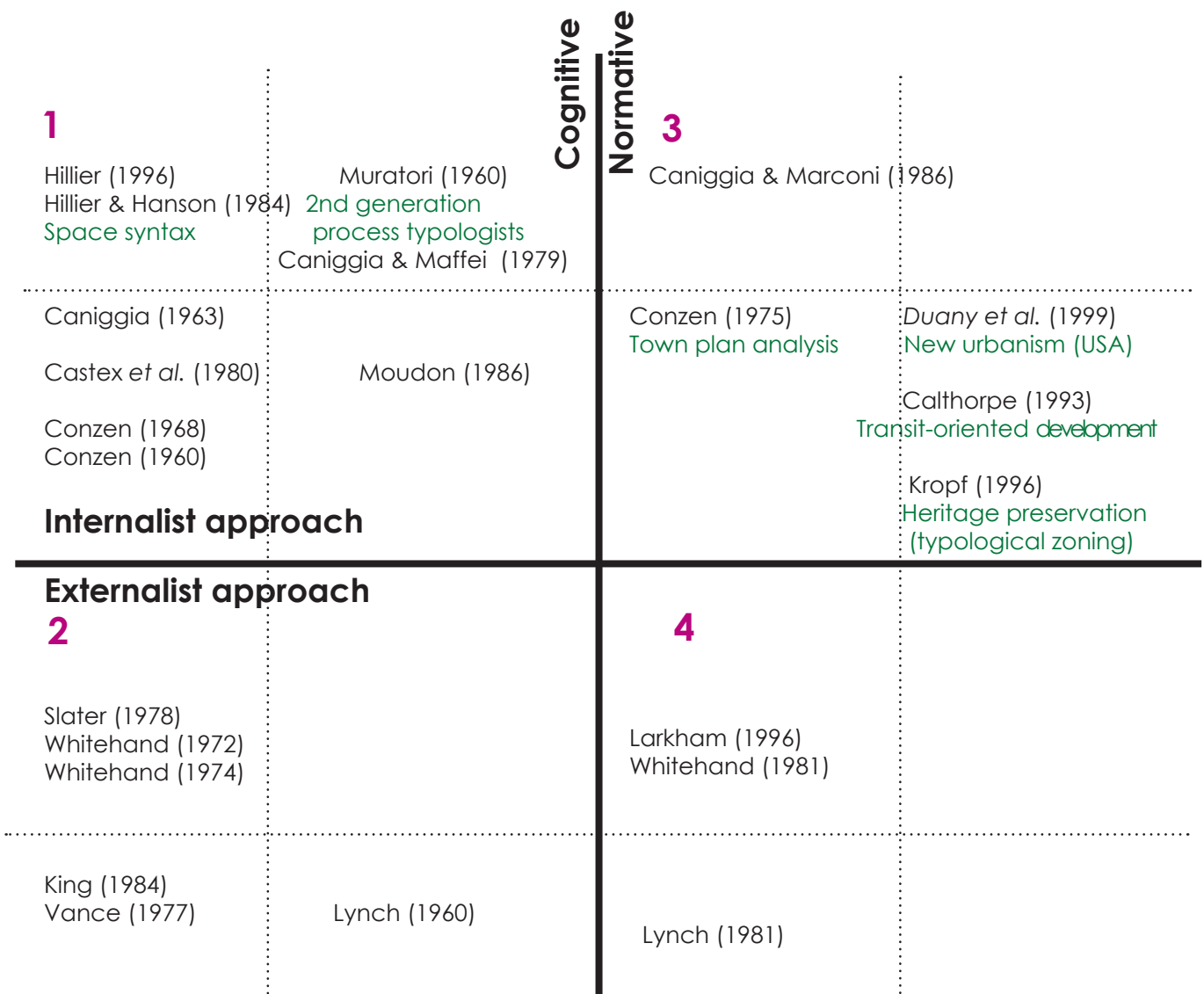


Illustration 78. Mapping contributions to the study of urban form. (Source: Gauthier & Gilliland (2005) Mapping urban morphology: a classification scheme for interpreting contributions to the study of urban form)

1 The internalist/cognitive quadrant comprises researches that consider the city as an artifact and spatial form - the built environment is perceived as a system.

2 The externalist/cognitive quadrant comprises externalist explanatory researches that consider the forms and transformations of the urban built environment.

3 The internalist/normative quadrant comprises researches that consider normative urban design approaches.

4 The externalist/normative quadrant comprises externalist explanatory researches that deal with the operational processes of the urban fabric.

7.5 REFLECTIONS

Urban morphological researches involve studying the urban form and the evolutionary and transformative processes of the urban fabric. A common theory that is shared amongst self-proclaimed urban morphologists is the belief that a city can be 'read' by identifying the dynamic relationship of individual and small group actions and the decision-making processes. This implies that the core of morphological researches lies on understanding the dynamic interrelationship of the organisms that coexist in the urban fabric. These urban elements, that comprise buildings, monuments, plots, gardens and streets, are identified as the primary elements of constructed spaces, open spaces, streets and plots. Although there have been debates over how these urban forms should be studied, the general agreement focuses on the different agents and processes that altogether have shaped the ground and our cities. In this perspective, the morphological tradition can broadly be considered vital in several disciplines that concern the urban landscape.

The ISUF (International Seminar on Urban Form) was established in 1996 by a group of international morphologists from different disciplines with the ambition of establishing a solid forum for thought in the growing field. Acknowledging the emerging interdisciplinary perspective and the need of finding a common theoretical base, the meetings confirmed that the morphological research tradition had broadly been developed into three research traditions by M. R. G. Conzen, S. Muratori and a second generation of international scholars.

The English school of morphology is the most intelligible as far as the produc-

tion and integration of knowledge is concerned. The establishment of the Urban Morphology Research Group at the the University of Birmingham and the accessible dissemination of publications have played a significant role in field's current thriving status with the British planning profession. This in turn developed a strong link with the area of urban conservation, an interest directly related to M. R. G. Conzen's ideas on townscape management.

In short, much of the theoretical and methodological approaches within this research tradition have, in one way or another, been influenced by the findings of M. R. G. Conzen. Some of M. R. G. Conzen's most well-known and followed conceptual ideas include the tripartite division of the townscape, fringe belts, burgage cycles, town plan analysis, and the mapping of morphological regions. These concepts are fundamental in geographically understanding how the urban parts of the earth's surface has been configured and reconfigured.

The Italian school of planning typology has been instigated by S. Muratori, G. Caniggia and a later generation of researchers. S. Muratori's theoretical framework is based on the conceptual understanding of contextualised architecture. This implies that the Italian tradition advocates the need of holistically and organically cohering the overall spatial arrangement in terms of the urban formation phases.

In contrast to the English tradition, the Italian typological perspective faced several challenges in becoming acknowledged within the field of architecture and urban planning. At a time of controversial historical interest, the typological perspective was severely criticised as being too academic with

an antiquated perspective on topical issues.

G. Caniggia, as such, sought after simplifying Muratori's method of interpreting towns and their components in architectural terms. Along these lines, he put emphasis on the fundamental concepts of type, building fabric and basic building. The significance of this line of thought lies on the operative aspects and history of the urban environment.

The French school of urban morphology was, in similar terms with the Italian school, developed at time when the architectural discipline experienced a strong anti-modernist ideological turn. Before the 1970s, studies on the urban landscape focused mainly on two different types of historiographical traditions, namely, the history of urban planning and, the topographical and morphological histories. Despite the different areas of interest however, French morphological researches has broadly practiced a typo-morphological methodological approach that analyses the development of the urban form and the typology of buildings. This line of thought derives partly from Aymonino's and Rossi's work.

Unlike the English and the Italian schools of urban morphology, the French tradition is apprehended as ambiguous with an intricately fragmented background and a tenuous interdisciplinary communication. Although the interest in the analysis of urban form has been practiced for several centuries, the French field of urban research is presented with a lack of uniformity and paucity. Considering the above, it seems also strange how the widest ranging review on urban morphology is in French.¹⁸³

183 Whitehand, J. W. R. & Larkham P. (1992) pp. 10

In sum, all three schools can be linked together in their common interest of exploring the urban forms and processes of urban landscape development. Fundamental to the field is the conceptualisation that the urban built environment can be understood as a dynamic system of spatial relations. This implies that morphological research entails disaggregating the urban elements of constructed spaces, open spaces, plots and streets and, analysing their dialectical relationship. The common hypothesis lies in the belief that there is a particular logic in the systemic organisation of the urban fabric. Explicitly, this means that the development of the urban landscape is not random but that it follows certain laws of transformation that the field tries to identify.¹⁸⁴

The exploration of the morphological empirical reality commonly proceeds from studying the historical elements of an urban environment. In the English school of thought, for instance, the historical expressiveness of the urban landscape has enabled the systematic and hierarchic mapping of morphological regions, and the comprehension of morphological frames and developmental cycles. Such studies analyses the historico-morphological processes that are necessary in integrating conservation measures in the management and development of a town. The importance of applying a historical dimension in planning is also practiced by the Italian school, where the local tradition of the urban landscape is used as a referential base for topical planning issues. Such studies eloquently examine the development and typology of buildings as a theoretical framework for understanding the contemporary urban fabric.

184 Levy, (1999) pp. 79

This perspective, as such, can be perceived as a means of integrating future design innovations with historical references. In similar fashion, the contributions of the French research tradition can also comparatively be summed up with operative morphological studies where the roots of modernism were traced back to the 18th century.

Nonetheless, the historiographical approach can be pointed out with contrasting points of departure within each research tradition. While the English school, for instance, frequently focuses on the analysis of the townscape and links the urban landscape's processual development with cultural, social and economic external determinants, whereas the Italian research tradition, on the other hand, focuses on the physical and architectural transformations of the urban landscape. Further, the French research tradition, has shown ambitious tendencies in both typological and morphological studies with an interest in understanding the social dimension of urban forms.

A major shortcoming is presented as the field's problematic incapability of establishing a common source of knowledge. Along these lines, several researchers have expressed the field's underdeveloped potential of comparative international research. This points out an epistemological gap in researches that cover "other" types of urban fabrics. Two recurring subjects are modern urban landscapes from the 1900s and onwards, as well as unfamiliar urban landscapes of countries and cultures outside of Europe.

In short, the field's inadequacy of a reliable empirical ground can also be linked to the lack of a professional systematic methodology. A parallel can

also be drawn to M. R. G. Conzen's work that has been criticised to be scant for not devising a solid technique to his conceptual findings.¹⁸⁵ Along these lines, even the researches in the French school have, as mentioned above, been criticised as lacking uniformity. Studying the different morphological analytical perspectives in section 7.2 and the practical need of mapping the different studies of urban form in section 7.4 further confirms a confusingly vast amount of methodological possibilities within the field.

Following this line of thought, the field's ambition of delineating a relevant philosophical and theoretical base can also be seen as a result of field's need of establishing a solid source of knowledge and methods. Overlooking the challenges within interdisciplinary and language differences, this can be understood as the questionable scope of the field, that in turn has regularly shown tendencies to meet new interests and criticism. This, in sum, can be perceived both as the field's weakness and strength.

185 Whitehand & Larkham (1992), pp. 43; Jivén, G. (2003) pp. 69, 282

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