Multidisciplinary assessment of public space (MAPS): The case of Ingólfstorg

Astrid Lelarge, Birgir Þ. Jóhannsson & Sigrún Birna Sigurðardóttir

2020

ALTERNANCE SLF
ARKITEKTÚR & SKIPULAG
HRINGBRAUT 119
101 REYKJAVÍK
SÍMI: +354 857 89 81
BIRGIR@BIRGIR.EU
WWW.BIRGIR.EU

Disclaimer:

This work was supported by the Icelandic National Planning Agency research and developmental fund (IS: Rannsóknar og þróunarsjóður Skipulagsstofnunar), received in December 2018.

The opinions expressed in this report are the authors owns and do not reflect the views of the National Planning Agency research.

Publication date:
2020

Publisher:
Alternance Architecture
Hringbraut 119 - 101 Reykjavík
Island
Tel: 00354-857 89 81
E-Mail: birgir@birgir.eu

Authors:
Astrid Lelarge, PhD in History
Birgir Þ. Jóhannsson, Architect
Sigrún Birna Sigurðardóttir, PhD in social- and transportation psychology

Citing the report (APA):
Lelarge, A., Jóhannsson, B.Þ., & Sigurðardóttir, S.B., *Multidisciplinary assessment of public space (MAPS): The case of Ingólfstorg*, Reykjavík, Alternance Architecture & Urban Planning, 2020.

Contents

General Introduction ... 3
First part: Morphology ... 5
Introduction to first part ... 6
Street use in 1902-1905: Ingólfstorg site plan ... 9
Street use around 1915: Ingólfstorg site plan ... 10
Street use in 1949: Ingólfstorg site plan ... 11
Street use in 2018: Ingólfstorg site plan ... 12
1750-1900 ... 13
1900-1944 ... 17
1944-1986 ... 32
1986-2016 ... 44
Conclusion ... 52
References ... 54
Bibliography ... 54
Sources ... 55
Second part: Public life ... 61
Introduction to second part ... 62
Observation ... 62
Aim ... 62
Methodology ... 62
Measurements and variables ... 62
Sampling design ... 64
Findings ... 65
Action framework ... 80
Conclusion ... 86
Attitude survey ... 87
Aim ... 87
Methodology ... 87
Participants and procedure ... 87
Preliminary findings ... 87
Conclusion ... 101
References ... 102
GENERAL CONCLUSION ... 103
Appendix 1. Observation check list ... 104
Appendix 2. The twelve urban quality criteria ... 106

General Introduction

In modern western societies there is a growing consensus that good public spaces are important for thriving public life and can promote a variety of social and psychological benefits in communities that are important in an era of growing urbanization. In Iceland, the National planning strategy (IS: Landskipulagsstefna) is a policy document which is expected to be implemented primarily through local authority plans (regional plans, municipal plans and detail plans). It is being revised and now takes into consideration the UN sustainability goals that are to be achieved before 2030. Followingly, the local authorities, planners and policy makers, are under greater pressure to develop or redevelop public urban spaces of quality to promote good public life. They are also requested to act respecting the concerned urban landscape and historic buildings.

But even though the public realm is owned and governed by local authorities, it is a shared social asset and used by a variety of different users for different purposes, in a world that is undergoing rapid social and technological changes. Also, public spaces are an important part of actions and solutions addressing social- and environmental challenges and can be designed to nudge and support socially acceptable behaviour. Given that environmentally friendly transport modes are on the rise, there is a growing dissatisfaction with respect to the established priority of motorized transport modes and space allocation for cars in public spaces. When there is little room for soft modes of transport (pedestrians and cyclists) it is followed by the lack of manifestations of social life (walking, meeting and entertaining). At the same time, the contemporary urban and suburban landscape has been the subject of criticisms about, amongst other things, the omnipotence of road infrastructures. This disrupts the human scale of the environment and as a result the space becomes an unsightly, vehicle-centric, uncomfortable or even hostile environment for users. In addition to these criticisms there have been also concerns regarding the lack of harmony with the older parts of town, and the future of the historic built heritage. Then there is a risk that the public space becomes a liability, leading to a continuous drain on public resources and escalating various urban challenges.

There are many different professions interested in public spaces and approach the subject differently. In the more traditional sector there are urban designers, landscape architects, architects, geographers and planners that primarily think of public space as physical space and are often concerned with aesthetics, function and form. Then on the rise we have professions in the social dimension. There are urban historians that explore the morphology of the space throughout time in relation to the political, economic, social and cultural context. This approach emphasizes the necessary evolution of built environment but highlights at the same time the historic built heritage. Environmental psychologists explore how the environment e.g. affects quality of life, health and perception and social psychologists explore how the environment induces social benefits such as trust, cohesion, sense of community etc., that influences behaviour and communication. It is therefore clear that different professions study public space with different approach and that a multidisciplinary approach will always give a more holistic insight to the challenges facing policymakers in charge of the asset management of public spaces. Therefore, managing these assets in a way that unlocks it´s potential to support public life is a challenging task with many stakeholders involved.

However, the management of a public space is often approached as a structural task, a problem due to inadequate infrastructure and in need of a costly improvement. With other urgent policy priorities and financial constraints in cities, servicing and regenerating public space to improve it is often overlooked or neglected. Also, the actions that are performed with good intentions are more often not supported with data and nor is the impact or success of the change estimated afterwards.

This report describes a multidisciplinary assessment of a public space (MAPS), created by a historian, architect and a social psychologist. The public space chosen for this project was Ingólfstorg in the heart of Reykjavik's old town, which has elements of a shared space, a square for pedestrians only and surrounded with streets that currently allow car traffic on two sides. The objective was to develop a methodology to study public space that would benefit authorities and practitioners in the pursue to promote public life in such space, an aid for successful management and fulfilment of national planning requirements.

The first part of MAPS involves a morphological study of urban landscape in its historical and contemporary dimension. The concepts of historical urban landscape and streetscape are used. They are the representation of the street/square and its immediate surroundings from the point of view of the user. The morphological analysis focuses on the meso scale, i.e. on the general dimensions of space. But we also note some essential elements of the architecture of the buildings and the streets/square, such as the construction period, style and materials used. For the historical part, existing cartographic material and pictures from public and private collections is used. For the contemporary part, Geographic Information System (GIS) resources are used, as well as cartographic and photographic information of Google Map and Google street. We also use existing scientific literature relating to the chosen public space. The evolution of the built environment is traced based on these resources and support the definition of its main characteristics.

The second part of MAPS involves a two folded study about the public life of the space. First, an observation of the public life at the location was performed over two instances at different time of the day. Second, a detailed questionnaire was designed, using descriptive items about visiting frequency and demography, in addition to items from acknowledged assessment tools used in social- and environmental psychology. The survey was internet based and distributed to a convenience sample through social media.

Using this systematic approach, our findings and assumptions have yielded numerous soft and hard recommendations presented in this report, in addition to checklists and frameworks that are effective tools for policymakers to utilize and support their actions in future asset management of this space.

First part: Morphology

Landscape analysis

December 2019

Introduction to first part

Ingólfstorg square and the streets that compose the square meet the main part of a strict definition of public space. This is a physical space "that is not controlled by private individuals or organisations, and hence is open to the general public"[1]. Ownership, control, access and use are considered to be relevant to define public space. Accordingly, we can specify that such a space is generally owned and managed above all by public authorities. Other definitions are more inclusive, they only focus on access and use.

But squares and streets are urban forms that also define themselves by their formal characteristics. Urban designers, landscape architects, architects and planners have a long-standing interest in the quality of public space. Many are concerned with the relationship between poeple and physical space. Good imageability/coherent impression, human scale, sense of enclosure, memorable architecture are elements considered as essential in determining the attractiveness of public space[2]. Specific studies concern public space in historic areas. In such cases, the historic nature of the public space is seen as the key feature in determining the spatial quality. The contribution that built cultural heritage makes to the social well-being of different groups living within increasingly cosmopolitan towns and cities is generally recognized by specialists, general public and governments.

Today, the development of public space, as well as the planning development of cities in harmony with the built cultural heritage are seen as a prerequisite for sustainable cities by public authorities (Landskipulagstefna 2015-2026[3], goal 3.3; UN Sustainable development goals 2015[4] -goal 11, target 4 and 7).

For some years now, morphological studies of built environment seek to provide information to be used by planners to meet the objectives of sustainable development. It is in this context that the landscape approach has been developed. The ELC (European Landscape Convention), ratified by Iceland in 2019, provides a general definition of the concept: 'Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'[5] (Art.1—definitions). In other words, this approach also used for urban studies/in an urban context emphasis the user perception. Urban landscape studies have been undertaken for different reasons in fundamental and applied research. American researcher, Chester Harvey seeks to provide a method to evaluate design quality of streetscape, i.e. the three-dimensional outdoor space surrounding the street. Its objective is to identify physical characteristics that "contribute to perceptions of them as safe,

[1] Ali Madanipour, *Design of Urban Space*, New York, Wiley, 1996, p.144.
[2] Vikas Mehta, "Evaluating Public Space", pp.53-88, *Journal of Urban Design*, vol.19, n.1, pp.61-69.
Planner Vikas Mehta reviews work on public space quality. Inspired by Stephen Carr and Jan Gehl, he provides its own theoretical framework to evaluate public space. This includes 5 criteria: inclusiveness, meaningful activities, safety, comfort and pleasurability. The built environment is mainly discussed in the latter criteria. To evaluate its quality, he uses the Kevin Lynch' concept of imageability. Imageability is the "quality in a physical object which gives it a high probability of evoking a strong image in any given observer". He says that "Most imageable places are ones where several factors come together to create a coherent impression" (p.61). Along with imageability, specific factors contribute to spatial quality: human scale, sense of enclosure, memorable architecture... The sense of enclosure is "the degree of definition of a space by way of physical elements that surround it".
[3] Skipulagsstofnun, *Landskipulagsstefna 2015-2026*, [online] http: www.landsskipulag.is/media/pdf-skjol/Landsskipulagsstefna2015-2026_asamt_greinargerd.pdf
[4] UN, *UN Sustainable development goals 2015*, [online] http: www.un.org/sustainabledevelopment/cities/
[5] Council of Europe, *European Landscape Convention*, [online] http: www.coe.int/en/web/conventions/full-list/-/conventions/rms/0900001680080621

comfortable urban spaces"[6]. To this end, he proposes a methodology based on the analysis of the "streetscape skeleton". We'll look at this concept to select main morphological factors to be taken into account in our study, i.e. streetscape proportions and scale as well as building geometry and tree canopy (when relevant).

Urban landscape approach is also promoted by UNESCO for urban heritage issue. It is the purpose of the "Recommendation on the Historic Urban Landscape"[7], adopted in 2011. "Considering, that in order to support the protection of natural and cultural heritage, emphasis needs to be put on the integration of historic urban area conservation, management and planning strategies into local development processes and urban planning" and "the need to better integrate and frame urban heritage conservation strategies within the larger goals of overall sustainable development", the Recommendation "suggests a landscape approach for identifying, conserving and managing historic areas within their broader urban contexts, by considering the interrelationships of their physical forms, their spatial organization and connection, their natural features and settings, and their social, cultural and economic values". the Recommendation defines the concept as follows: "The historic urban landscape is the urban area understood as the result of a historic layering of cultural and natural values and attributes, extending beyond the notion of "historic centre" or "ensemble" to include the broader urban context and its geographical setting". The urban context comprises "the site's topography, geomorphology, hydrology and natural features, its built environment, both historic and contemporary, its infrastructures above and below ground, its open spaces and gardens, its land use patterns and spatial organization, perceptions and visual relationships, as well as all other elements of the urban structure. It also includes social and cultural practices and values, economic processes and the intangible dimensions of heritage as related to diversity and identity".
Located in the historic quarter of Reykjavík, the public space of Ingólfstorg certainly requires such an approach. That's why we study the historical landscape of Ingólfstorg, i.e. we show its evolution over different phases in order to highlight the different historic layers of the current landscape.

Our morphological analysis of the landscape therefore concerns: the natural and built environment, the public space itself (streets and square) and building edges (buildings and empty areas surrounding it), the architecture of buildings and architecture of public space. In this study, we look at the height and general design of building, positioning of the building to the public space and alignment, structuring of public space, construction period, style and materials used.

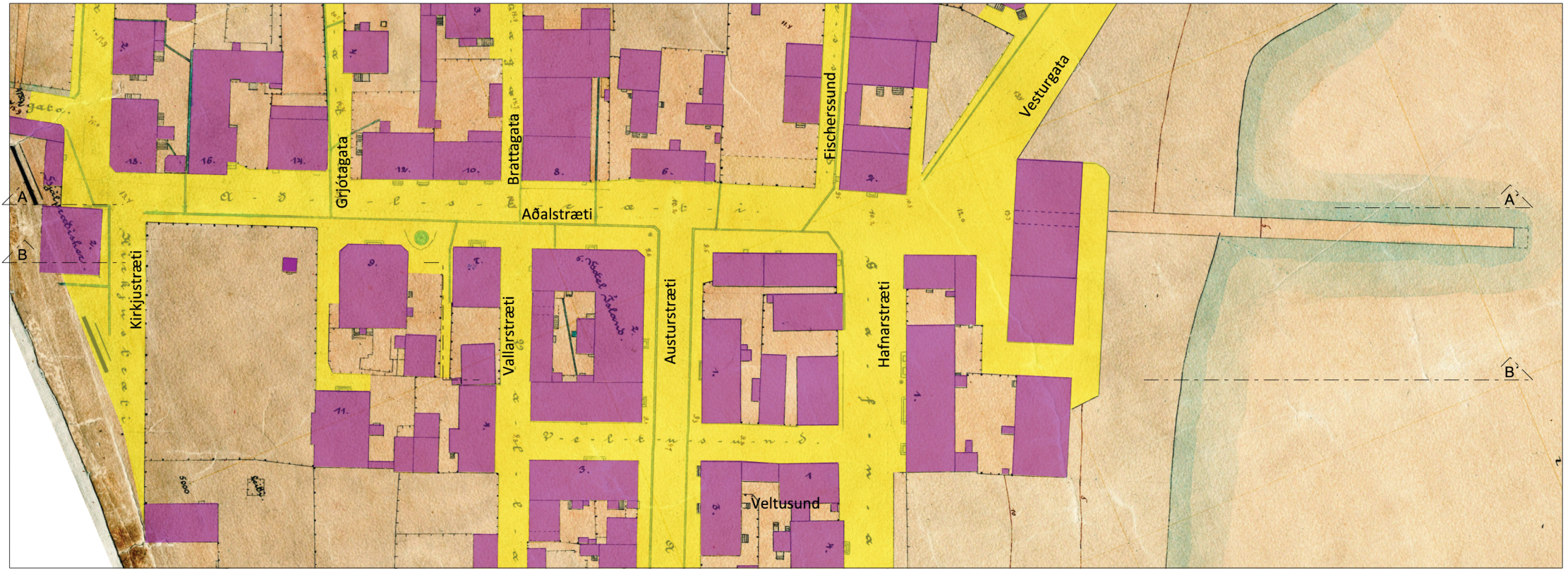
The morphological study of the landscape concentrates on Ingólfstorg square, on the portions of streets that constitute it and on those that lead to it: Aðalstræti, Veltusund, Vallarstræti, Austurstræti, Hafnarstræti and to a lesser extent Vesturgata and Naustin. We evoke the landscape seen from the square, but also the landscape offered in perspective from the square. Finally, we also look at the landscape of the square from the streets leading to it. The purpose of this study is to identify the main characteristics of public space morphology.

The historical evolution of the landscape is contextualised, namely that is included as part of the urban planning history of Reykjavik, for earlier and even later time period. The goal is to contextualized every layer of the historic buildings. The political, social, economic and cultural context explaining the evolution of the built environment is related, with a special focus on public policies and public projects developed to plan the site. That is why the morphological analysis is reported in the form of drawings

[6] Chester Harvey et al., "Effects of skeletal streetscape design on perceived safety", pp.18-28, *Landscape and Urban Planning*, 142, 2015, p.18.
[7] UNESCO, *Recommendation on the Historic Urban Landscape, including a glossary of definitions*, [online] http: portal.unesco.org/en/ev.php-URL_ID=48857&URL_DO=DO_TOPIC&URL_SECTION=201.html

and in the form of a narrative with illustrations. The objective is to understand the societal processes occurring in the morphological evolution of the Ingólfstorg landscape until today.

For earlier time periods, we therefore used existing cartographic material and pictures from the collections of Ljósmyndasafn Reykjavíkur, Borgarskjalasafn Reykjavíkur, Umhverfis -og skipulagssvið Reykjavíkurborgar, Landsbókasafn Íslands-Háskólabókasafn, and Skipulagsstofnun. We also used existing scientific literature relating to the history of the site, especially studies on historic built heritage. For the contemporary part, we used cartographic and photographic information of Google Map and Google street, as well as Geographic Information System (GIS) resources of the City of Reykjavík such as *Borgarvefsjá*. These documents allowed us to trace the evolution of the site from 1750 to 2016, divided in four phases: 1750-1900, 1900-1944, 1944-1986, 1986-2016. They also made it possible to reconstitute more specifically the landscape at certain times: 1902-1905, 1915, 1949, 2018. These phases were chosen, in because of significant changes in the site and the available cartographic material and pictures to describe landscape.



Drawing of Reykjavik by Knud Zimsen, 1902-1905. Scale 1:500

Actural scale 1:1000

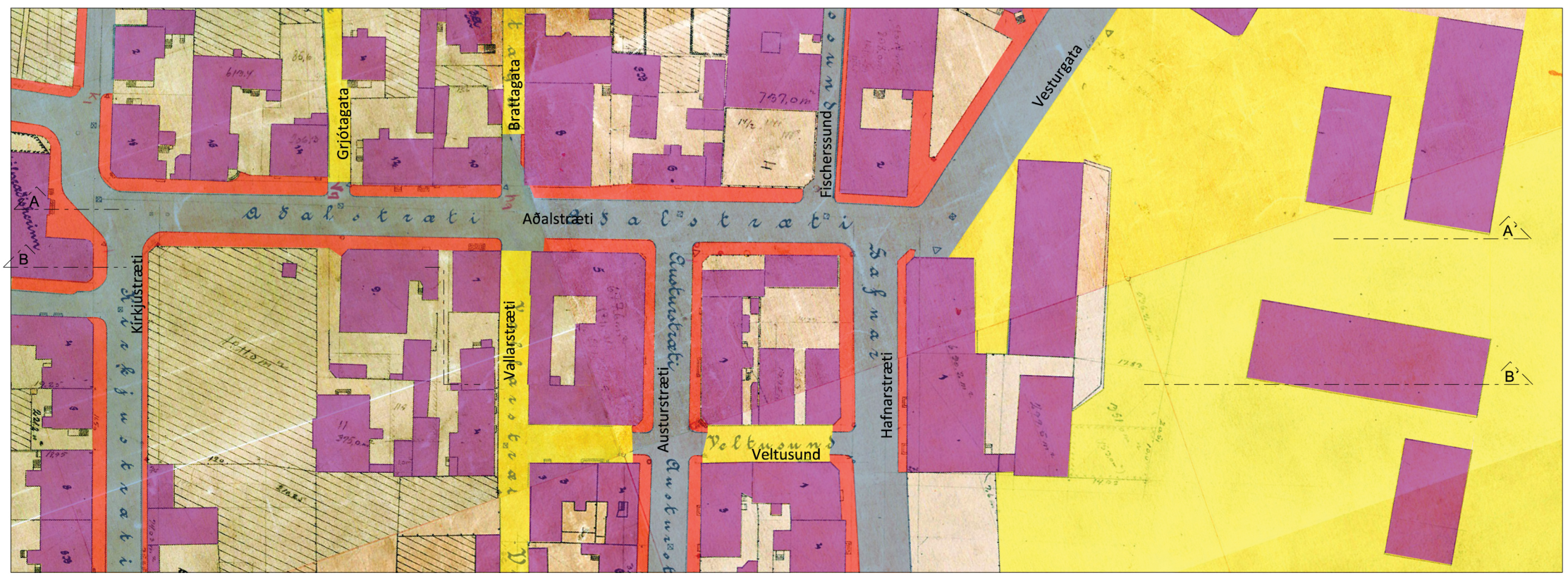
LEGEND

- mixed-use (shared space)
- pedestrians (pavement)
- cars (road)

STREET USE IN 1902-1905 : INGÓLFSTORG SITE

SECTION AA´

SECTION BB´



LEGEND

- mixed-use (shared space)
- pedestrians (pavement)
- cars (road)

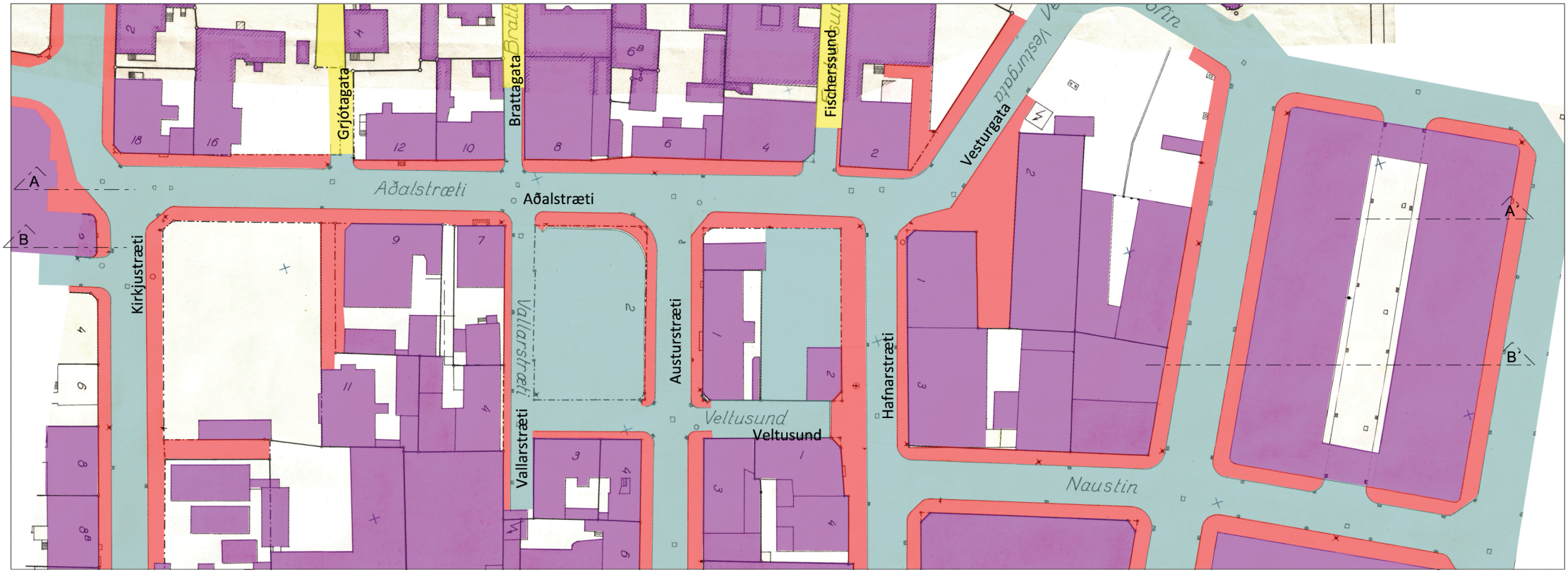
STREET USE AROUND 1915 : INGÓLFSTORG SITE

Drawing of Reykjavik (by Knud Zimsen), 1910-1915. Scale 1:500

Actual scale 1:1000

SECTION AA´

SECTION BB´



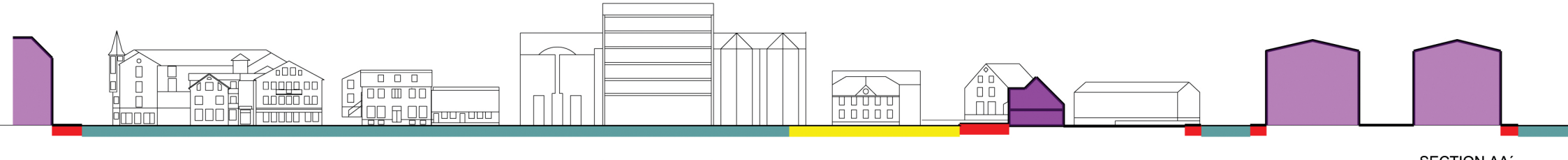
LEGEND

- mixed-use (shared space)
- pedestrians (pavement)
- cars (road)

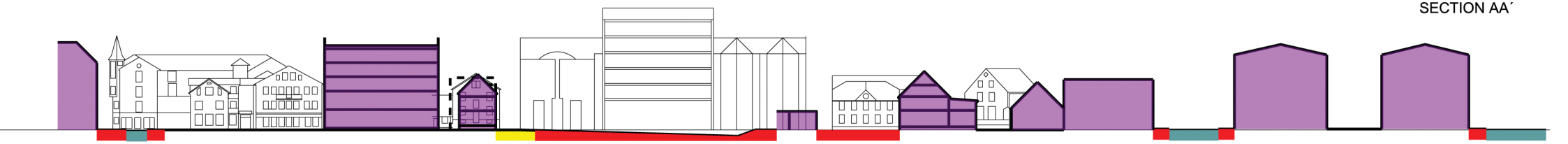
Drawing of Reykjavik by Haukur Pétursson, 1949. Scale 1:500

Actual scale 1:1000

STREET USE IN 1949 : INGÓLFSTORG SITE



SECTION AA´



SECTION BB´

LEGEND

- mixed-use (shared space)
- pedestrians (pavement)
- cars (road)

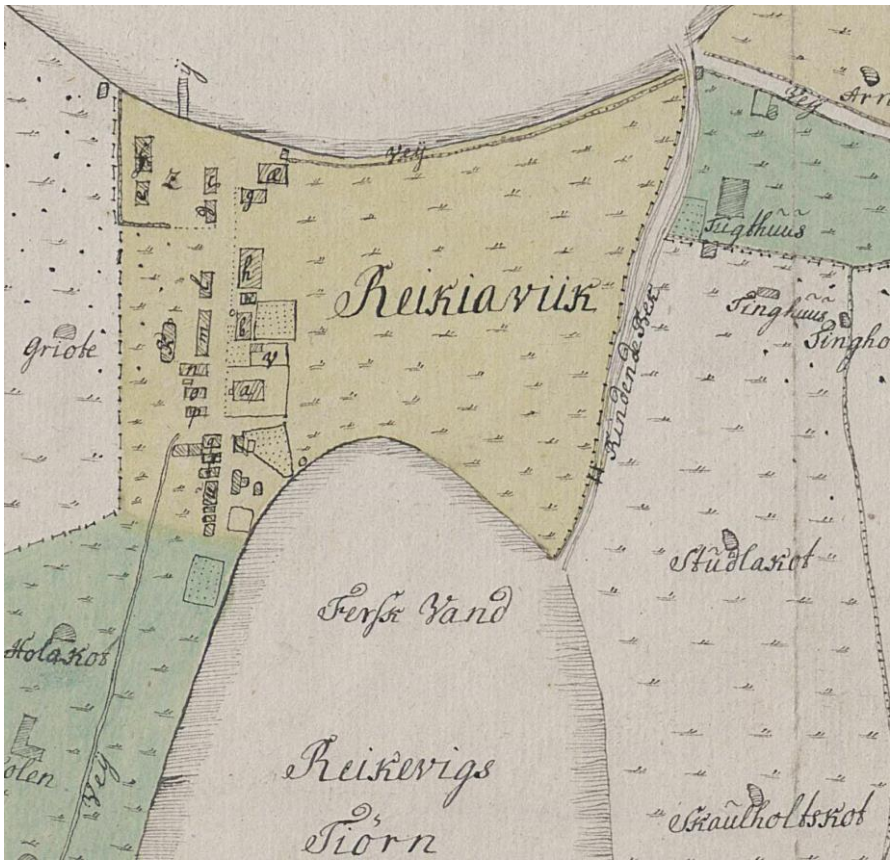
Drawing from LUKR and aerial photo of Reykjavik, 2018, Loftmyndir ehf

Scale 1:1000

STREET USE IN 2018 : INGÓLFSTORG SITE

1750-1900

The occupation of the site, and more precisely its nearby approaches, goes back to the time of colonization[8]. Archaeological excavations have unearthed remains from the Viking age, ranging from the 9th to the 11th century, in the Aðalstræti comprised between Vallarstræti and Kirkjustræti, at numbers 9, 12 and 18. The colonization museum *Settlement Exhibition -Reykjavík 871 +-2*, Aðalstræti 16, provides evidence of that history. Remains from the same medieval period in an area between Suðurgata and Tjarnagata, therefore confer a heritage of major importance to the site.
But the history of the site in its urban – and no longer rural -- phase really commences in the 18th century, when keen to urbanize the island, the Danish government decided to grant charter city status to six commercial ports, including Reykjavík, in 1786[9]. Somewhat earlier, as of 1750, a small manufacturing settlement was established between the coast and Lake Tjörnin, on the land of an old farm owned by the Danish crown. The structures of the *Innréttingar* wool works were erected along the path from the buildings of the farm to a natural dig on the coast called *Grófin* (the Hollow). This road, which communicates to the south with the path leading to the governor's residence in Bessastaðir, is the city's oldest. It was named *Aðalstræti* (Main Street) in 1848. A plan of 1787 by the astronomer Rasmus Lievog also shows a path running eastwards along the beach[10] (M1).

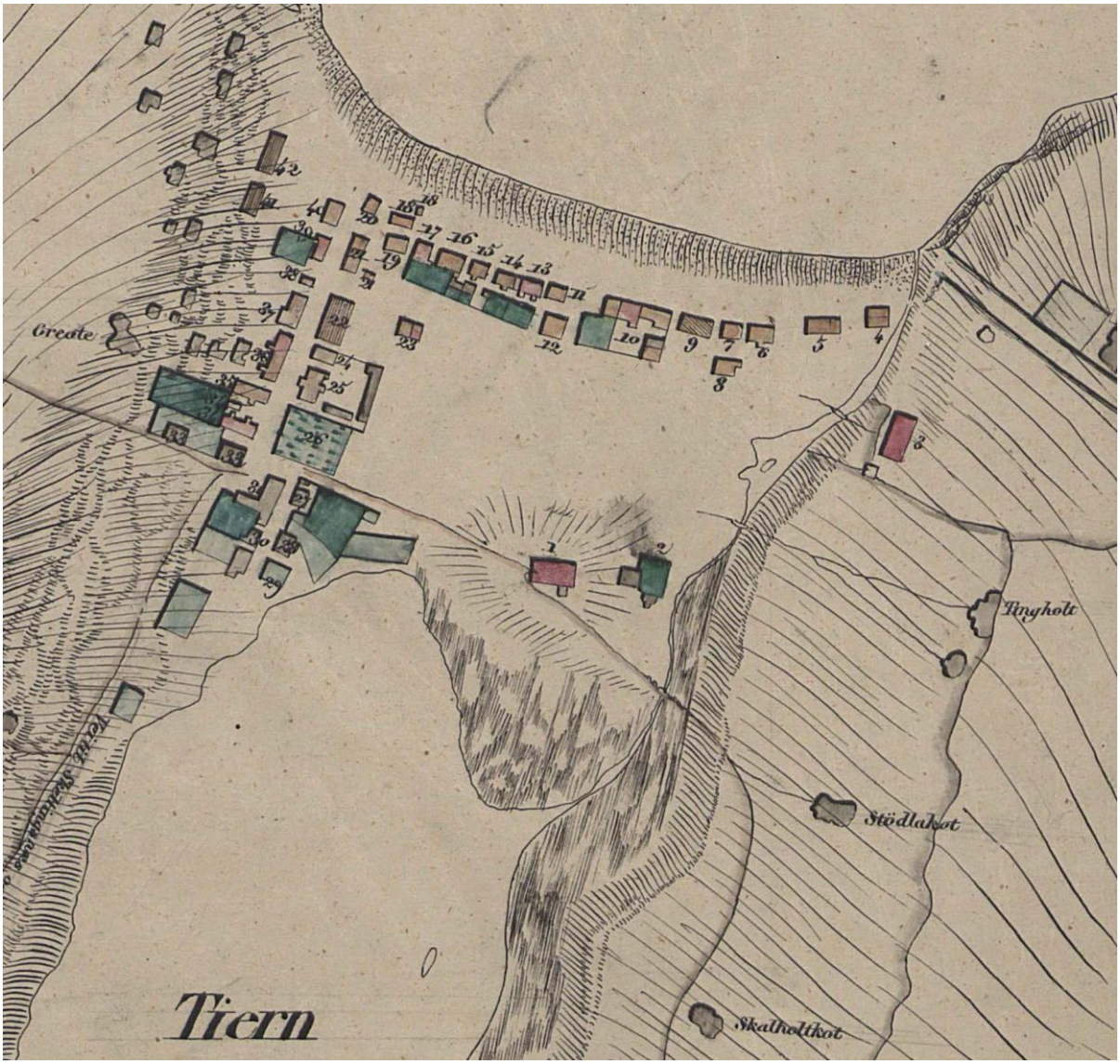


M1. Rasmus Lievog,
"Kort og Grundtegning over Handel Stædet Reikevig i Island…", 1787 (detail)

[8] Guðný Gerður Gunnarsdóttir, Anna Lísa Guðmundsdóttir, Drífa Kristín Þrastardóttir, *Ingólfstorg og nágrenni. Skrá yfir fornleifar og hús í vesturhluta Kvosar*, Skýrsla 157, Reykjavík, Minjasafn Reykjavíkur, 2011, pp.3-6.
[9] Anna Agnarsdóttir, "The Urbanization of Iceland in the 18th and early 19th centuries", pp.115-140, in Thomas Riis (ed.), *Urbanization in the Oldenburg Monarchy*, Ludwig, Kiel, 2012, pp.118-125.
[10] Lbs-Hbs, Rasmus Lievog, "Kort og Grundtegning over Handel Stædet Reikevig i Island med angrændsende Huusmænds Pladser, som efter Kongelig Allernaadigste Befalning skal anlegges til Kiöbstæd", 1787, [online], available on: https://islandskort.is/is/map/show/1123

Shortly thereafter, the structures of merchants who settled in the village were erected at this spot on the crest of the beach[11] (M2). Their plots will soon determine the layout of two streets directly connected to Aðalstræti, which would be later named *Hafnarstræti* (Seaport Street) and *Austurstræti* (East Street). Erected essentially along the shoreline, on either side of the Aðalstræti, these structures are made of wood, peat, and rarely of stone.

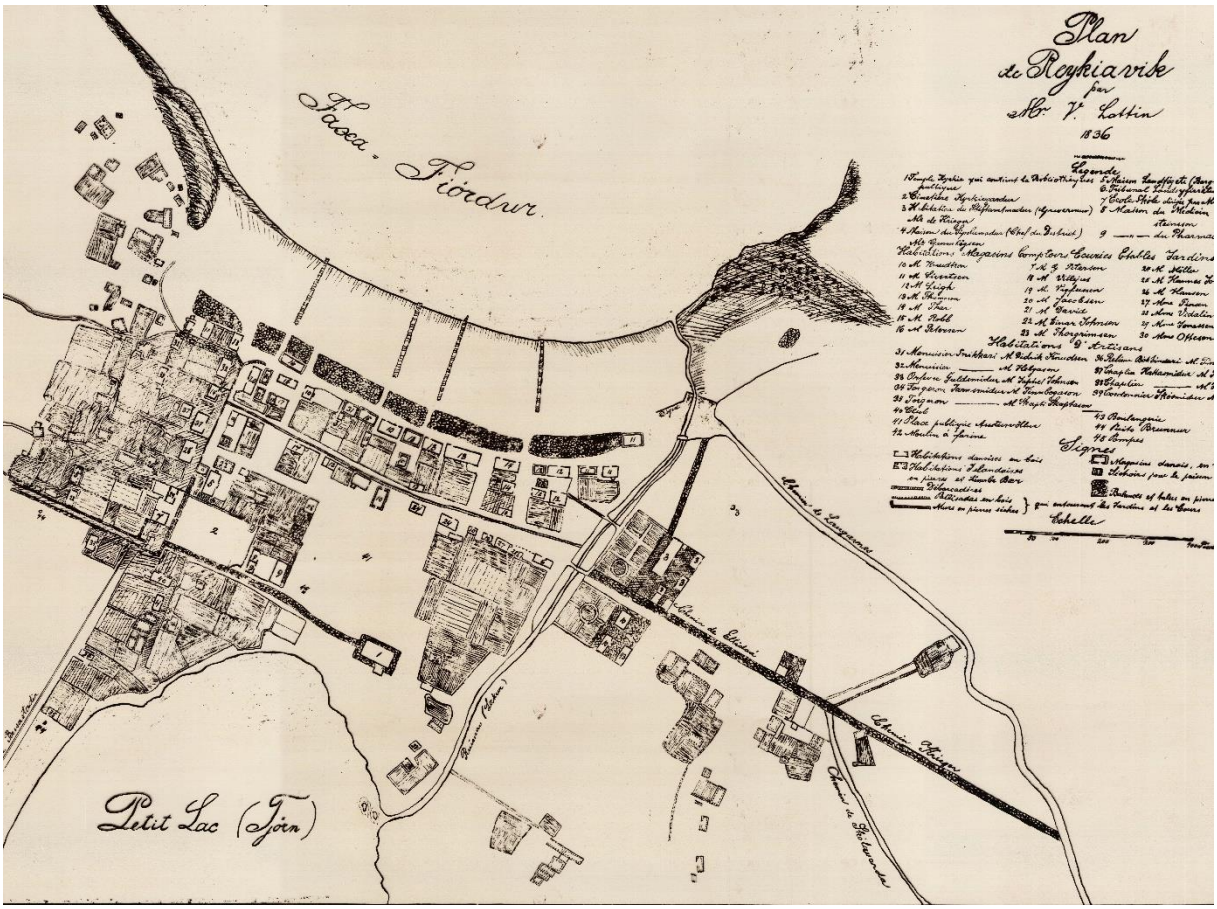
So, apart from the archaeological remains, the layout of the Aðalstræti and the house situated at number 10 of the street have survived from that period. Renovated on several occasions, this is the oldest house in the city. The trace of the future Hafnarstræti and Austurstræti also dates from the period.



M2. Ole Mentzen Aanum, Ole Ohlsen, "Kort over Reikiavik med Omliggende Baijer", 1801 (detail)

[11] Lbs-Hbs, Ole Mentzen Aanum, Ole Ohlsen, "Kort over Reikiavik med Omliggende Baijer", 1801, [online], available on: https://islandskort.is/is/map/show/1128

The urbanization of the small town continued slowly during the first half of the 19th century. The future Hafnarstræti and Austurstræti are clearly distinguishable in the town plan produced by the French geographer Victor Lottin in 1836[12] (M3). The two streets are partially subdivided into plots as of the Aðalstræti and head towards the east of the city where, once the *Lækur* stream is crossed, they communicate with two paths: the *chemin de Laugarnes* (Laugarnes path), which is the oldest to head inland from the peninsula and toward Hafnarfjörður, and the *chemin de Ellidaá* (Ellidaá path) which joins the former higher up on the hill. Laid out in a straight line, the latter path continues more or less from the end of Austurstræti and along the same axis. What would later become a major artery of the city centre and of Ingólfstorg therefore stems from that age. The observation of the plot plan on the same site shows two more paths between the plots: the future Vallarstræti and Veltusund.



M3. Victor Lottin, "Plan de Reykiavik", 1836 (detail)

The urbanization of the small town picked up speed in the second half of the century under the combined effect of the concentration and development of the country's political, economic, religious, cultural institutions, but also fishing, the fish processing industry, maritime transport and trade.

[12] Rb, Victor Lottin, "Plan de Reykiavik", 1836, [online], available on: https://reykjavik.is/sites/default/files/plan-de-reykjavik_web.jpg

The plan produced in 1876 by Sveinn Sveinsson[13], at the request of the *Byggingarnefndin* (Building commission) shows the road network (M4). The streets are henceforth generally named. From the *Aðalstræti*, there is the *Vallargata*, *Strandgata* (later called Hafnarstræti) and of course the *Austurstræti* - the axis of which is extended to the east of the city by *Bakarastígur* (later called Bankastræti) and *Vegamótastígur* (later called Laugavegur). Again starting at the Aðalstræti, but heading towards the west of the city, there is *Brattistígur* (later called Brattagata) and the street that would be called Götuhúsastígur, then later Fischerssund, in the *Grjótahverfi*. Finally, *Hlíðarhúsastígur* (later called Vesturgata) is located in the north-west.

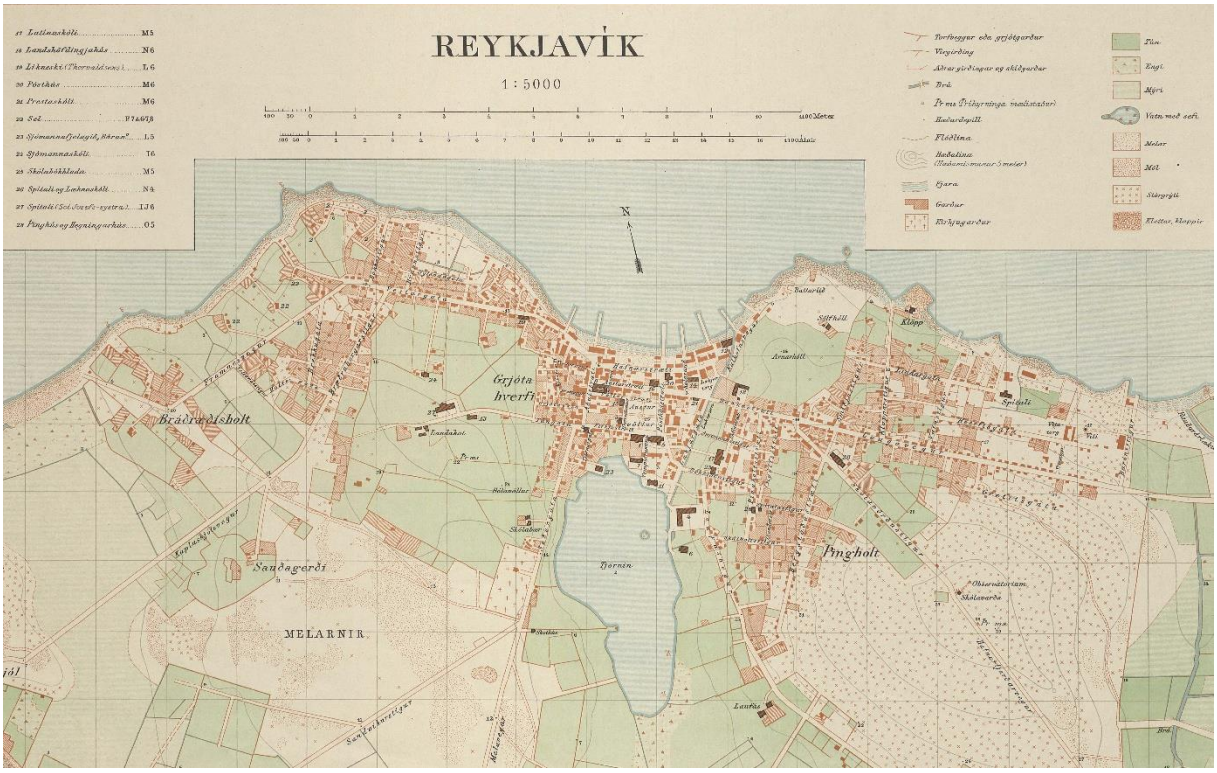
M4-5. Sveinn Sveinsson, "Uppdráttur Reykjavíkur", 1876 (details)

At the end of the 19th century, the road network constituting Ingólfstorg had been created for the most part and partially built (M5). Let us now attempt an initial description of the landscape at the turn of the last century using plans and photographs of the site.

[13] Lbs-Hbs, Sveinn Sveinsson, "Uppdráttur Reykjavíkur", 1876, [online], available on: https://islandskort.is/is/map/show/1126

1900-1944

In 1902-1903, the plan of Reykjavík produced by the *Generalstabens Topografiske Afdeling* (Topography department of the Danish army[14]) shows an urbanized Kvosin (M6). It also shows the city which extends towards the east around Skólavörðuholt hill and to the waste around Landakot hill.



M6. Generalstabens Topografiske Afdeling, "Reykjavík", 1903 (detail)

The plan carried out by the engineer Knud Zimsen[15] between 1902 and 1905 at the request of the Municipal Council conducts a more precise survey of the site. The road and sanitation network, the plot plan, structures and open spaces are depicted in detail (M7).

The streets differ in size. The *Aðalstræti*, *Hafnarstræti*, *Austurstræti* and, to a lesser extent *Vesturgata*, are the most important on the site. Then comes the *Veltusund* and *Vallarstræti* which leads to *Pósthússtræti*. *Brattagata* and *Fischersund* are clearly smaller and serve only Grjótahverfi. As regards the building edges (M8), the plan shows the streets lined unevenly by private plots, i.e. the buildings and enclosures are not strictly aligned against each other. Some spill out while others are recessed from the street. The structures are at times semi-detached (Aðalstræti-Vallarstræti-Veltusund-Austurstræti block), but most often, they are separated by more or less sizeable spaces, often closed by barriers, hinting at courtyards or vegetable gardens. At issue, the legislation on fire, but also the difficulty of supplying the town with food which forces the residents to have vegetable gardens[16]. The stairsteps of the front doors of houses frequently extend to the street. The lands bordering the Hafnarstræti are for the most part not subdivided into plots. The site is clearly in the process of urbanization on the shoreline side.

[14] Lbs-Hbs, Generalstabens Topografiske Afdeling, "Reykjavík", 1903, [online], available on: https://islandskort.is/is/map/show/1136

[15] Rb, R1-II-14-1-016, Knud Zimsen, "Reykjavík", 1905.

[16] Trausti Valsson, *Planning in Iceland from the settlement to present times*, Reykjavík, University of Iceland Press, 2003, p.117.

M7-8. Knud Zimsen, "Reykjavík", 1905 (details)

M9. Aðalstræti. View to the numbers 8 (*Fjalakötturinn*) and 6, summer 1905 (LmsR, 2001 11 1 001.jpg, Unknown)

The size of the structures on the ground varies. Photos taken around 1900 hundreds show that the height varies also, generally comprising 1 to 2 levels, and more rarely 3 levels (*Fjalakötturinn*, *Aðalstræti 8* (M9) and *Hótel Ísland* at *Austurstræti 2*). The houses made of timber, covered with wood boards or corrugated sheet. The main facades usually face towards the street, semi-detached facades also have windows.

M10. Austurstræti. View to the *Aðalstræti 6*, 1908 (LmsR, MAÓ ÁBS MR 076.jpg, Magnús Ólafsson (detail))

Coming from Austurstræti, which is the main artery of the city, the perspective reaches the house located on the *Aðalstræti 6*[17] (M9-10-12). Coming from the Hafnarstræti, the perspective reaches the store of the merchant W. Fisher, acquired in 1904 by the merchant H. P. Duus[18] (*Aðalstræti 2*) (M11). Houses erected on the hill in Grjótahverfi can also be seen from these two streets (M12).

[17] Guðný Gerður Gunnarsdóttir, Anna Lísa Guðmundsdóttir, Drífa Kristín Þrastardóttir, *op cit.*, p.31.
[18] *Ibid.*, p.28.

M11. Hafnarstræti. View to the *Aðalstræti 2*, 1895 (LmsR, ADF 2005 5 24-5.jpg, Sigfús Eymundsson (detail))

M12. Austurstræti. View to the *Aðalstræti 6* and Grjótahverfi, 3. February 1900
(LmsR, 2001 21 7.jpg, Sigfús Eymundsson (detail))

If we look in the other direction, towards Austurstræti, we see wooden houses built on either side of the street. In the distance, the view reaches Arnarhóll hill on one side and Bankastræti on the other. If we look towards Hafnarstræti, we are bound to see unbuilt areas allotted to port activities on the left, and wooden houses on the right, erected in the street which follows the shoreline then bends once beyond the Pósthússtræti.

M13. *Austurstræti 16* and Pósthússtræti. View to the barrier visible from Vallarstræti, 1910 (LmsR, MAÓ 150.jpg, Magnús Ólafsson)

Coming from the Vallarstræti from Austurvöllur, we arrive directly at Brattagata which serves Grjótahverfi. On the right we see the *Fjalakötturinn* theatre, the first cinema in Iceland which opened in 1906[19] (*Aðalstræti 8*) (M9) and on the left the store the merchant Helgi Zoëga had run since 1894 in the old buildings erected by the firm *Innréttingar* in 1765[20] (*Aðalstræti 10*). In the other direction, the view reaches far in the distance until the wooden barrier located on the Pósthússtræti (M13).

M14. Aðalstræti. View to the *Vesturgata 2*, 1900 (LmsR, ADF 2005 5 24-7.jpg, Sigfús Eymundsson (detail))

If we proceed on the Aðalstræti from the Kirkjustræti, the perspective reaches the house with an open public passage to the port (presently numbered Vesturgata 2) (M14). It houses another store of the merchant H. P. Duus[21].

[19] *Ibid.*, p.32.
[20] *Ibid.*p.33.
[21] *Ibid.*, p.39.

M15. Kirkjustræti. See to right *Hjálpræðisherinn* (N. 2) visible from Aðalstræti, around 1910 (LmsR, MAÓ 337_2.jpg, Magnús Ólafsson)

In the other direction, the view reaches the wooden house of the Salvation Army *Hjálpræðisherinn*[22] (*Kirkjustræti 2*) (M15).

M17. *Hafnarstræti 1*. *Fálkahúsið*, 1914-1920 (LmsR, MAÓ 154.jpg, Magnús Ólafsson)

M16. Veltusund. View to the *Vallarstræti 4*. *Björnsbakarí*, 1910 (LmsR, MAÓ 146.jpg, Magnús Ólafsson)

Finally, if we walk on the Veltusund, the eye falls on the large house on the right which the goldsmith Björn Símonarson bought in 1901 to set up his store, while his wife Kristín Björnsdóttir, opened the *Björnsbakarí* bakery in the same house, which is elevated and has a balcony, in 1905[23] (*Vallarstræti 4*) (M16). On the other side, there are two adjacent houses (*Hafnarstræti 1*) belonging to the merchant Bryde (M17). In 1907, the latter had a third house built to the west of the two others and joined the three structures which were christened *Fálkahúsið*[24]. Finally, coming from Vesturgata, we see first the latter house – and also the one in wood which existed before the former was built. The rest is more difficult to recreate for this period from photographs, but we are bound to see rapidly the house situated at the corner of the Aðalstræti and the Hafnarstræti, then the warehouses along the Hafnarstræti[25], which are not numbered on Kund Zimsen's plan.

[22] *Ibid.*, p.59.
[23] *Ibid.*, p.50.
[24] *Ibid.*, p.40.
[25] *Ibid.*, p.66.

M18. Aðalstræti. Street, building edges and constructions. See the numbers to left: 12, 10, 8 (*Fjalakötturinn*), 6, 4 and 2. View to the *Vesturgata 2*, 1898 (LmsR, GOE 002b.jpg, Guðmundur O. Eiríksson)

The whole is not built very densely – there are still open areas, often fenced in wood on the street side (M18). The built area, composed of wooden houses erected or renovated for the most part in the second half of the 19th and the very beginning of the 20th century, is architecturally coherent. The urbanization espouses the geography of the site. The neighbourhood is still partially open onto the shoreline and communicates naturally with the Grjóta neighbourhood.

The presence of stairsteps in front of the entrance doors of houses shows that there is no clear frontier between private and public spaces. The streets are not architectural in design (M18). But the area is lightly separated nonetheless, as the street tends to be subdivided into more specialized areas depending on whether the users move about on foot, by bike, on horseback or by sledge. Because the streets are flanked – and even crossed – by stone ditches used to drain rainwater and wastewater which are brought all the way to Laekur.

At the Austurstræti, where two ditches flank the street, they divide the latter in a central lane and two side lanes that serve as pavements (M19). The photographs show that carts, where present, take the central lane, while the pedestrians seem to use all three on occasion. This undoubtedly depends on the weather conditions that have an impact on the state of the street and of the traffic. The authorities actually cover the streets with soil which make them dusty when the weather is dry, and above all muddy and interspersed with puddles in rainy or thawing conditions[26]. In a general manner, there are still no pavements that beckon pedestrians ever so clearly to use them, as is the case in front of the *Fjalakötturinn* (M18). Some oil lamps, free-standing or attached to the facades of the houses, provide public lighting.

M19. Austurstræti. View to the *Aðalstræti 6* and Grjótahverfi. Street (space division, road surface and lighting), building edge and constructions, 3. - 4. July 1910 (LmsR, FFF 0062.jpg, unknown French traveller)

The photographs provide necessarily specific information on the use of the streets, but the feeling is conveyed clearly in the testimonials in the literature which concur on the state of the streets, the danger that galloping horses pose for children, the bad odours from open sewers and the health risks they posed, and the lack of sufficient public lighting[27]. A water pump was purchased in 1908 to wet down the streets in dry weather conditions and thus avoid dust clouds, an additional policeman was taken to help direct traffic, etc., but at the time when the city was undergoing significant changes, more radical investments were made to meet the need of its inhabitants.

[26] Knud Zimsen and Lúðvik Kristjánsson, *Úr bæ í borg : nokkrar endurminningar Knud Zimsens um þróun Reykjavíkur*, Reykjavík, Helgafell, 1952, p.43.
[27] Guðjón Friðrikson, *Saga Reykjavíkur. Bærinn vaknar (1870-1940)*, Reykjavík, Iðunn, 1991, p.283.

M20. Hafnarstræti. View to the *Aðalstræti 2*. Street (space division, road surface and lighting), building edge and constructions, 3. - 4. July 1910 (LmsR, FFF 0068.jpg, unknown French traveller)

For the population is growing rapidly. It nearly tripled between 1901 and 1920, from 6,667 to 17,679 inhabitants, thereby requiring the construction of dwellings in particular. The city's political, economic and cultural function was also asserted, entailing greater needs in public building of course, but also industrial, commercial and transport infrastructure and facilities. Icelandic planning professionals (construction engineers) newly trained abroad would bring new ideas, practices, materials and techniques as regards the construction of buildings but also of streets and other transport, electricity, sewer networks, etc[28]. The public discussion on urban planning intensified and fed on the work of stakeholders such as the Medical Officer Guðmundur Hannesson and the architect Guðjón Samúelsson. Finally, new modes of transport would come into being, particularly the automobile. The public authorities adapted their legislation and action accordingly. In 1904[29], a new convention on building and street construction recommends extending the width of streets to 12,5 metres minimum; following the fire of 12 wooden houses in the Austurstræti and Hafnarstræti in 1915, the municipality banned the construction of new wooden houses except in open spaces. Whereas wood had essentially been used for construction up to that time, new structures in concrete started to be erected. The road network was developed and transformed in the case of existing roads; a sewer system was developed; public lighting in gas then electricity appeared; the port was built. All these actions transformed the site, its landscape.

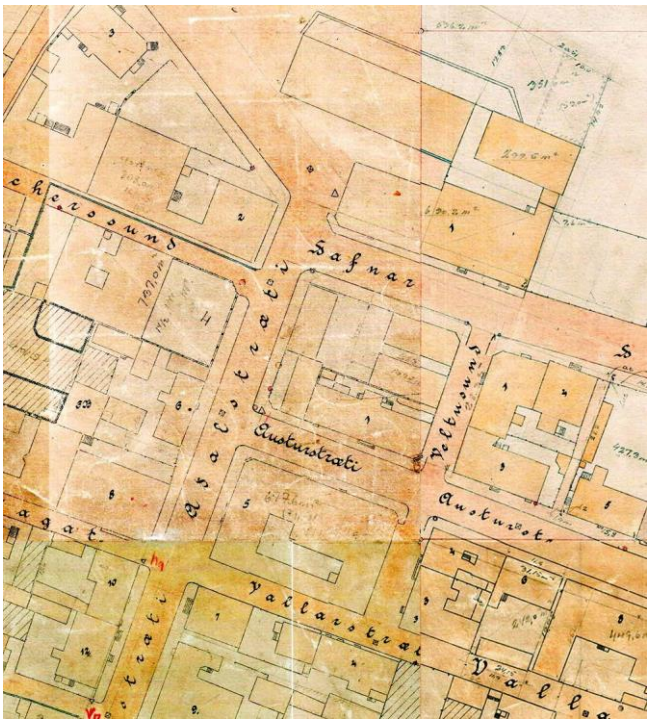
The plan probably produced by the engineer Ólafur Þorsteinsson[30] around 1915 for the municipality show some of these changes. The site was first of all permanently transformed by the development of the port. The creation of a new port district on infilled land, between 1913 and 1917, moved it away from the shoreline once and for all (M21).

M21. Assembly of maps produced around 1915 by Ólafur Þorsteinsson (detail)

[28] *Ibid.*, p.38.

[29] Guðmundur Jónsson and Magnús S. Magnússon (ed.), *Hagskinna. Icelandic Historical Statistics.* Reykjavík, Hagstofa Íslands, 1997, p.87.

[30] Rb, II-10-2-004, 55; II-10-2-005, 54; II-10-2-008, 45; II-102-009, 44, Anonymous (Ólafur Þorsteinsson) and undated (around 1915).



M22. Assembly of maps produced around 1915 by Ólafur Þorsteinsson (detail)

The building edges have been slightly transformed by some new structures (M22). For example, at the corner of the Veltusund and Hafnarstræti, the merchant Gunnar Þorbjörnsson had a wooden house (designed by the architect Rögnvaldur Ólafsson) built in 1907 at the location of an old structure[31] (*Veltusund 1*).

M23. *Austurstræti 16*. View to the building of Nathan & Olsen, 1916-1918 (LmsR, MAÓ 205.jpg, Magnús Ólafsson)

New concrete structures have emerged in perspective from the site. If we look towards the Pósthússtræti, we now see the large 4-storey concrete building (*Austurstræti 16*) designed by the architect Guðjón Samúelsson for the firm Nathan & Olsen in 1916, on the site ravaged by the fire of 1915[32]. The building stands out very clearly from the existing structures owing to its materials and its style, drawing inspiration from Danish national romanticism and Jugendstil [Modern Style]. Finally, its size announces above all the ushering in of a new age in terms of scale of construction, breaking with the existing such scales.

If we now look at Kirkjustræti, we see the concrete building designed by the architect Einar Erlendsson that the Salvation Army *Hjálpræðisherinn* had erected in 1916 and which replaced to old establishment[33]. (M24)

[31] Guðný Gerður Gunnarsdóttir, Anna Lísa Guðmundsdóttir, Drífa Kristín Þrastardóttir, *op cit.*, p.42.
[32] Hjöleifur Stefánsson, Guðný Gerður Gunnarsdóttir (ed.), *Kvosin. Byggingarsaga miðbæjar Reykjavíkur*, Reykjavík, Torfusamtökin/Forlagið, 1987, pp.160-161.
[33] Guðný Gerður Gunnarsdóttir, Anna Lísa Guðmundsdóttir, Drífa Kristín Þrastardóttir, *op cit.*, p.59.

M24. Aðalstræti. View to the *Hjálpræðisherinn*. Street, building edges and constructions. See to left *Hótel Ísland*, around 1920 (LmsR, 2011 1 01.jpg, unknow)

On the site of Ingólfstorg itself, it is the design of the streets that changes above all. Various works were undertaken almost simultaneously. The open sewers disappeared as of 1911. Waste water was now drained through underground system designed by the engineer Sigurður Thorodssen for Miðbær[34] as a whole. That same year, it was also decided to build raised pavements covered with concrete pavers or any other pavement of quality[35]. The operations were to be financed at a rate of two thirds by the city and the remaining one third by the owners of the plats. Ólaf Þorsteinsson's plan around 1915 shows pavements were built on the streets, except for the Vallarstræti, part of the Veltusund, and the Brattagata and Fischersund alleyways. Finally, during the same period, the streets were paved with asphalt at the initiative of the engineer Knud Zimsen. It started with the Austurstræti in 1912 (M26). New pavements were built on this street on that occasion. That same summer, the asphalt paving continues on the low part of the Brattagata until the *Gamla Bío* in *Fjalakötturinn* because, according to Knud Zimsen there are "so many things at the corner of this street."[36] According to him, the owner of the premises, Jóhann Jóhannesson, volunteered to finance half the costs. Finally, in 1913, the works continued on the Aðalstræti which was also renovated, with a 7,5 m lane and 2,5 m pavements on either side (M24-25).

[34] Guðjón Friðrikson, *op cit.*, p.289.
[35] *Ibid.*, p.285.
[36] Knud Zimsen and Lúðvik Kristjánsson, *op cit.*, p.47.

M25. Aðalstræti. View to the *Vesturgata 2*. Street and constructions, around 1920 (LmsR, 2014 37 alb 004 3-1.jpg, Kristinn E. Magnússon)

M26. Austurstræti. View to the *Aðalstræti 6* and Grjótahverfi. Street (space division, road and pavements surfaces, lighting), 1926 (LmsR, ÓSG GLE 135.jpg, Óskar Gíslason (detail))

In spite of these works, certain observers were still dissatisfied with this public development, as they advocated for urban planning. Championed by Guðmundur Hannesson, Guðjón Samúelsson and the engineer Geir Zoëga, this practice was finally imposed when the Act of 27 June 1921 required municipalities with more than 500 inhabitants to devise an expansion plan[37]. The first expansion plan designed by Guðjón Samúelsson, between 1924 and 1927, initiated a long tradition of plans recommending a more or less radical transformation of Kvosin in general, and of the site of Ingólfstorg and Grjótahverfi in particular. In the plan of 1927[38], the transformation affected both the road network, hierarchical by now, and the structures. The road network was given a makeover to improve performance depending on motor vehicle traffic, and parking spaces were provided in well specified places, such as Lækjartorg for instance. On the Ingólfstorg site, Brattagata and Fischersund were to disappear as part of the restructuring of Grjótahverfi, along with Velstusund and a part of the Vallarstræti. As the aim was to build more densely, semi-detached three-storeyed buildings aligned on the streets were also planned for the site. Whereas the road network was still preserved in part, existing structures were destined to disappear. The plan was not formally approved but the rationale for the reconstruction and densification of Kvosin, initiated by the fire of 1915 and undertaken by private developers, was enshrined by the public authorities for a long time. In 1931, a 5-storey concrete building designed by Guðjón Samúelsson was built on the *Thorvaldsensstræti 4*[39], i.e. in the immediate vicinity of Ingólfstorg.

Two distinct phenomena occurred at the time and slightly later which announced the possibility of creating a public square. The first concerned the recomposition of the plots in the Veltusund-Hafnarstræti-Aðalstræti-Austurstræti block and the gradual destruction of the structures there. In the 1920s, Steindór Einarsson opened a taxi stand on the plot located at *Hafnarstræti 2*[40] (M27). In 1935, we know that he also owned the adjacent plot located *Aðalstræti 3*[41]. The old structures on both were destroyed in the years 1920-1930[42]. A wooden building plastered on the outside was erected according to the plans of Guðmundur Þorláksson on the corner of the Hafnarstræti and Veltusund[43] to house the company's reception and offices. The second, an accident, was the fire of the *Hótel Ísland* which also housed stores on the ground floor[44] (M28). The fire broke out on 3 February 1944 and destroyed the three-storey building and all the other wooden houses on the Veltusund-Vallarstræti-Aðalstræti-Austurstræti block.

[37] *Alþingistíðindi*, 1921, p.1427.
[38] Guðjón Samúelsson, "Skipulagsuppdráttur af Reykjavík innan Hringbrautar", Reykjavík, 15 December 1927.
[39] Guðný Gerður Gunnarsdóttir, Anna Lísa Guðmundsdóttir, Drífa Kristín Þrastardóttir, *op cit.*, p.56.
[40] *Ibid.*, p.66.
[41] *Ibid.*, p.65.
[42] *Ibid.*, p.66.
[43] Hjöleifur Stefánsson, Guðný Gerður Gunnarsdóttir (ed.), *op cit.*, p.96.
[44] Guðný Gerður Gunnarsdóttir, Anna Lísa Guðmundsdóttir, Drífa Kristín Þrastardóttir, *op cit.*, p.68.

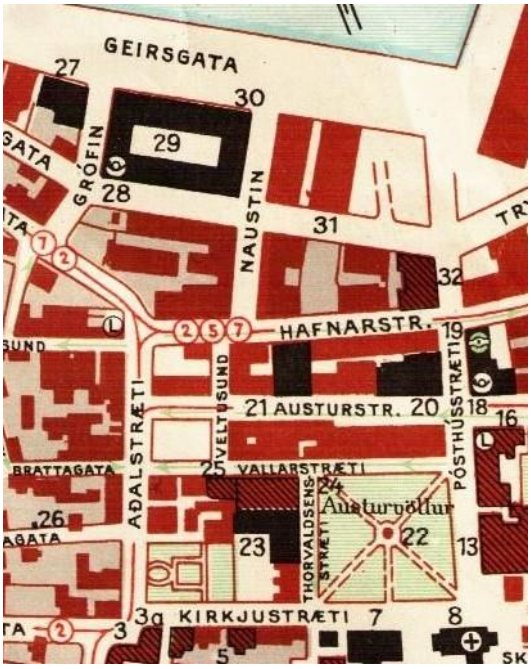
M27. Vesturgata. Foreground, from left: *Vesturgata 2*, *Hafnarstræti 1*, *Hafnarstræti 2* (Steindór Einarsson taxi stand) and *Aðalstræti 2*, 1937-1940 (LmsR, KAN 001 043 4-2.jpg, Karl Christian Nielsen (detail))

M28. Vallarstræti and Aðalstræti. Foreground: *Hótel Ísland* fire.
Background: *Vallarstræti 4* and *Aðalstræti 7*, 3 February 1944. (LmsR, LOG 020 3-2.jpg, Sigurhans Vignir)

1944-1986

Let us provide a second description of the landscape of the partially unbuilt site in the 1950s.

M29. Ágúst Böðvarsson,"Reykjavík og Seltjarnarnes", 1947

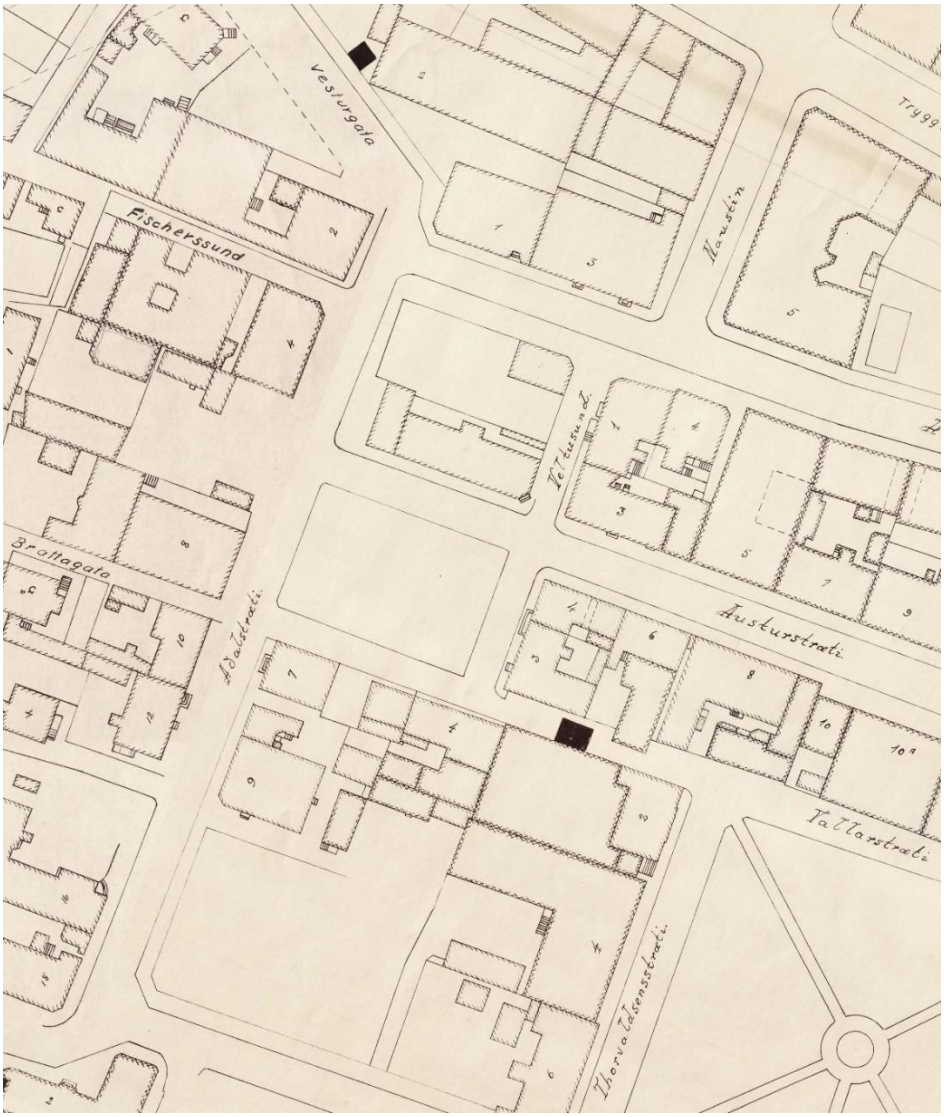


M30. Ágúst Böðvarsson,"Miðbærinn", 1947 (detail)

In 1947, the "Reykjavík og Seltjarnarnes"[45] plan shows that the city had by now expanded beyond the *Hringbraut*, the ring road around the city centre (M29). The road network of the port district, which is at the heart of the city's economic activity, is clearly featured in the vicinity of the site (M30). A new street, *Naustin*, is represented on the corner of Hafnarstræti 1 and Hafnarstræti 5. The city's main arteries in terms of traffic are represented on the plan, and several of them go through the site. The plan moreover shows that *Aðalstræti*, continuing from *Suðurgata*, then *Vesturgata*, but also *Hafnarstræti* and *Austurstræti* are considered to be roads of the utmost importance for motor vehicle traffic. The latter, located where *Laugavegur-Bankastræti* axis leads into the city, is one way from from *Lækjargata*, as is *Vallarstræti* from *Pósthússtræti*. And both lead to *Aðalstræti*. Finally, the plan shows the bus transport network; confirming the importance of the site for urban transport, the bus lines pass by *Aðalstræti* and *Hafnarstræti*.

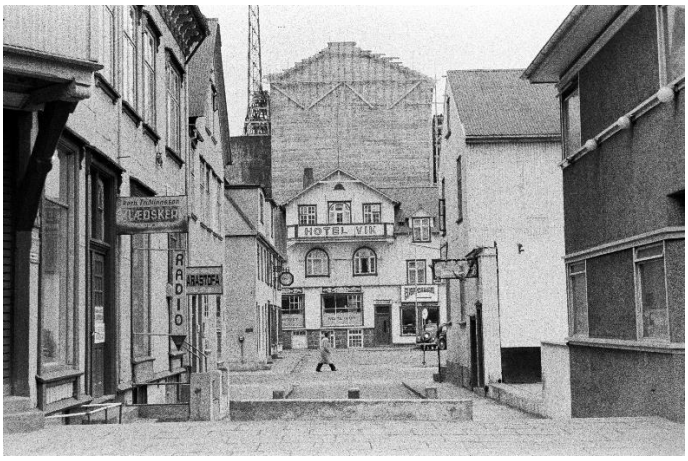
[45] Rb, 1-14-3-019, Ágúst Böðvarsson, "Reykjavík og Seltjarnarnes", 1947.

A plan from the city produced by the power company *Rafmagnsveita Reykjavíkur* in 1950[46] provides a more precise description of the road network, the division into plots, structures and open spaces on the site (M31). It shows the road network completed by Naustin. A building was erected at the corner of this street, slightly recessed from the site, at *Hafnarstræti 5*. It is a 3-storey concrete structure built in 1929 by the *Mjólkurfélags Reykjavíkur* (Milk association of Reykjavik)[47].
The traffic situation changed extensively since our description of 1902-1905, and shows the same divergences with the plan of the city published in 1947. The communication to the main public square of Austurvöllur and to Pósthússtræti via Vallarstræti is closed because a small electric station was built by *Rafmagnsveita Reykjavíkur* in 1944[48]. The traffic is also interrupted for vehicles, on Veltusund, between Austursræti and Hafnarstræti. A photograph from 1955 shows that Veltusund and the Hafnarstræti have now been arranged on different levels, and are interconnected by stairs (M32).



M31. Rafmagnsveita Reykjavíkur, "Grjótaþorp",31 July 1950 (detail)

[46] Rb, I-12-2-036. 1950, Rafmagnsveita Reykjavíkur, "Grjótaþorp", 31 July 1950.
[47] Hjöleifur Stefánsson, Guðný Gerður Gunnarsdóttir (ed.), *op cit.*, p.141.
[48] *Ibid.*, p.54.



M32. Veltusund. View to the Vallarstræti. Connection interrupted for vehicles between Hafnarstræti (to the forefront) and Veltusund, building edges and constructions (foreground, on the left: *Veltusund 1* and *Austurstræti 3*; on the right: Steindór Einarsson taxi stand and *Austurstræti 1*), 1955 (Lms, GRÓ 006 139 2-3.jpg, Gunnar Rúnar Ólafsson)

The plot plan has undergone major changes of course (M31). As mentioned above, the block where the *Hótel Ísland* used to be is completely free of structures. The Veltusund-Hafnarstræti-Aðalstræti-Austurstræti block is partially free of structures, where the contractor Steindór Einarsson established his taxi stand, i.e. at Aðalstræti and Hafnarstræti (unnumbered and unbuilt plot). At Austurstræti on the other hand, the 2-level wooden house built in 1890 and its subsequent extensions are still standing. They house various shops and offices[49]. But changes have occurred elsewhere also. In 1942, the plot situated at *Aðalstræti 4* is finally built: A 2-storey concrete structure for retail and offices[50]. Finally, the plan undoubtedly anticipated slightly that the wooden house next door (*Aðalstræti 6*) would disappear[51]. In 1951, a building was reacted at this location, on the spot of the houses behind it, by *Árvakri hf*, the company that published the daily *Morgunblaðið.*

M33. *Veltusund 3* and *Vallarstræti 4* (*Hótel Vík* and warehouse). The blind wall of the building erected on *Thorvaldsensstræti 4* can be seen in the background, 16. April 1944 (LmsR, KAN 002 105 3-2.jpg, Karl Christian Nielsen)

Let us now also take a look at photographs to consider the landscape as it appeared very briefly between 1944 and 1950, between the fire of the *Hótel Ísland* and the construction of the *Morgunblaðið* which breaks abruptly with the scale of the structures that border the site. The edges of the future square are built by now, with the exception of a vacant area between *Vallarstræti 4* and *Aðalstræti 7* (M28). The *Björnsbakarí* bakery is still in the first wooden house, henceforth joined by the *Hótel* Vík[52]. There is a warehouse next door which is used also to enter the main building (M33). The second, built in 1881, houses a store of household items[53]. (M28)

[49] Guðný Gerður Gunnarsdóttir, Anna Lísa Guðmundsdóttir, Drífa Kristín Þrastardóttir, *op cit.*, p.67.
[50] *Ibid.*, p.29.
[51] *Ibid.*, p.31.
[52] *Ibid.*, p.50.
[53] *Ibid.*, p.51.

M34. *Hafnarstræti 5*. *Mjólkurfélags Reykjavíkur*, 1955 (LmsR, GRÓ 010 034 1-2.jpg, Gunnar Rúnar Ólafsson)

The dimensions on the floor of the structures vary over the entire site. The *Mjólkurfélags Reykjavíkur* building (*Hafnarstræti 5*) is distinguished clearly by the size of the built floor space (M31 and 34). The height dimensions are very harmonious, on the other hand. Most of the buildings have 2 levels, except for the oldest house on the site which houses a store[54] which has 1 level (*Aðalstræti 10*), but also *Fjalakötturinn* (*Aðalstræti 8*) which has 3.

M35. Austurstræti (to the left: numbers 1 and 3; to the right: number 4) and *Hótel Íslandsplan*, 1953-1960 (ÓSG ónr 10.jpg, Óskar Gíslason)

But the landscape is now different, depending on the block destroyed by the fire of 1944, or whether the joint block is considered. The former has changed radically. There is now a parking facility there, delimited by a pavement and by the streets that surround it. It used to be called *Hótel Íslandsplan* (Hótel Íslands square) (M35). It is a sort of improvised square bordered by buildings henceforth visible (M31). There are wooden houses at Austurstræti 1, 3 (built in 1898[55]), and *4*, *Veltusund 3* (built in 1887[56]), *Vallarstræti 4*, *Aðalstræti 7, 10* and *8*; and the concrete building situated at number 4 on that street. The built part of this first square is relatively coherent in terms of height and even style and period of

[54] *Ibid.*, p.33.
[55] *Ibid.*, p.44.
[56] *Ibid.*, p.45.

construction (M36). The landscape would seem harmonious without the semi-detached blind facades of several large buildings which can be seen in background. From the *Vallarstræti*, the blind wall of the 5-level building erected previously on *Thorvaldsensstræti 4* is now clearly visible (M33). The common façade of a 5-storey concrete functionalist building erected in 1945 on the plans of the architect Gunnlaugur Halldórsson[57] is also visible (*Austurstræti 5*).

M36. Aðalstræti. View to the *Hjálpræðisherinn*. Street, building edges and constructions (right: *Aðalstræti 2*, *4*, *6* and *8*; left: *Hafnarstræti 1*, Steindór Einarsson's taxi parking lot, *Hótel Íslandsplan* parking lot and *Aðalstræti 7*), 1948 (LmsR, LOG 007 4-1.jpg, Sigurhans Vignir)

The destruction of the warehouses and the house situated on the corner of the *Aðalstræti* and *Hafnarstræti* on the joint block naturally changed the landscape also, A parking space for the vehicles of Steindór Einarsson's taxi stand was arranged here (M36 and 37).

[57] Hjöleifur Stefánsson, Guðný Gerður Gunnarsdóttir (ed.), *op cit.*, p.101.

M37. *Hafnarstræti 1, Fálkahúsið*. Foreground: Steindór Einarsson's taxi parking lot, 1952-1965 (LmsR, PTH 056 118 1-2.jpg)

The striking feature of the landscape henceforth is the scope of the car parks on the two blocks. These car parks, and the cars parked there, are visible very rapidly, wherever we come from. The automobile age is making a show of force through the amount of space reserved for cars, to drive and/or to park.

In the next two decades, two rationales would continue to transform the landscape of the site in a specific direction, and they announce the future square. The first, which goes back to the years 1920-1930, concerns the reconstruction of the Kvosin and Grjótahverfi quarters after the destruction of the former wooden houses that used to be there and the construction of large, semi-detached buildings. It was a trend supported by the public authorities in charge of urbanism since those years. The Reykjavík expansion plans of 1927, 1948, 1957 and 1965[58] aspired to change the quarter radically and even to replace it completely by a new, denser city centre with better road connections. The second rationale, which emerged in the years 1930-1940, concerns precisely the development of the automobile in the public space.

[58] Trausti Valsson, *op cit.*, pp.122-148.

At the edges of *Aðalstræti 6*, the concrete modernist building of the company that publishes the daily *Morgunblaðið* was constructed to the plans of the architect Gunnar Hansson between 1951 and 1955[59]. Considerable by its ground and height dimensions, the building breaks radically with the scale of existing structures on the site and in the Grjóta-quarter. The building asserts itself on the landscape of the site and its surroundings (M38). From now on, when coming from the Austurstræti, which is the main artery of Kvosin, the perspective reaches this building which conceals the view to the wooden houses on the slope of Grjótahverfi (M39).

M38. Aðalstræti. *Morgunblaðið*, 1965 (LmsR, SKH ÁBS 026.jpg, Skarphéðinn Haraldsson)

M39. Austurstræti. View to the Aðalstræti 6, 13. December 1969 (LmsR, ÞJV 043 095 2-5.jpg, Ari Kárason)

[59] Guðný Gerður Gunnarsdóttir, Anna Lísa Guðmundsdóttir, Drífa Kristín Þrastardóttir, *op cit.*, p.31.

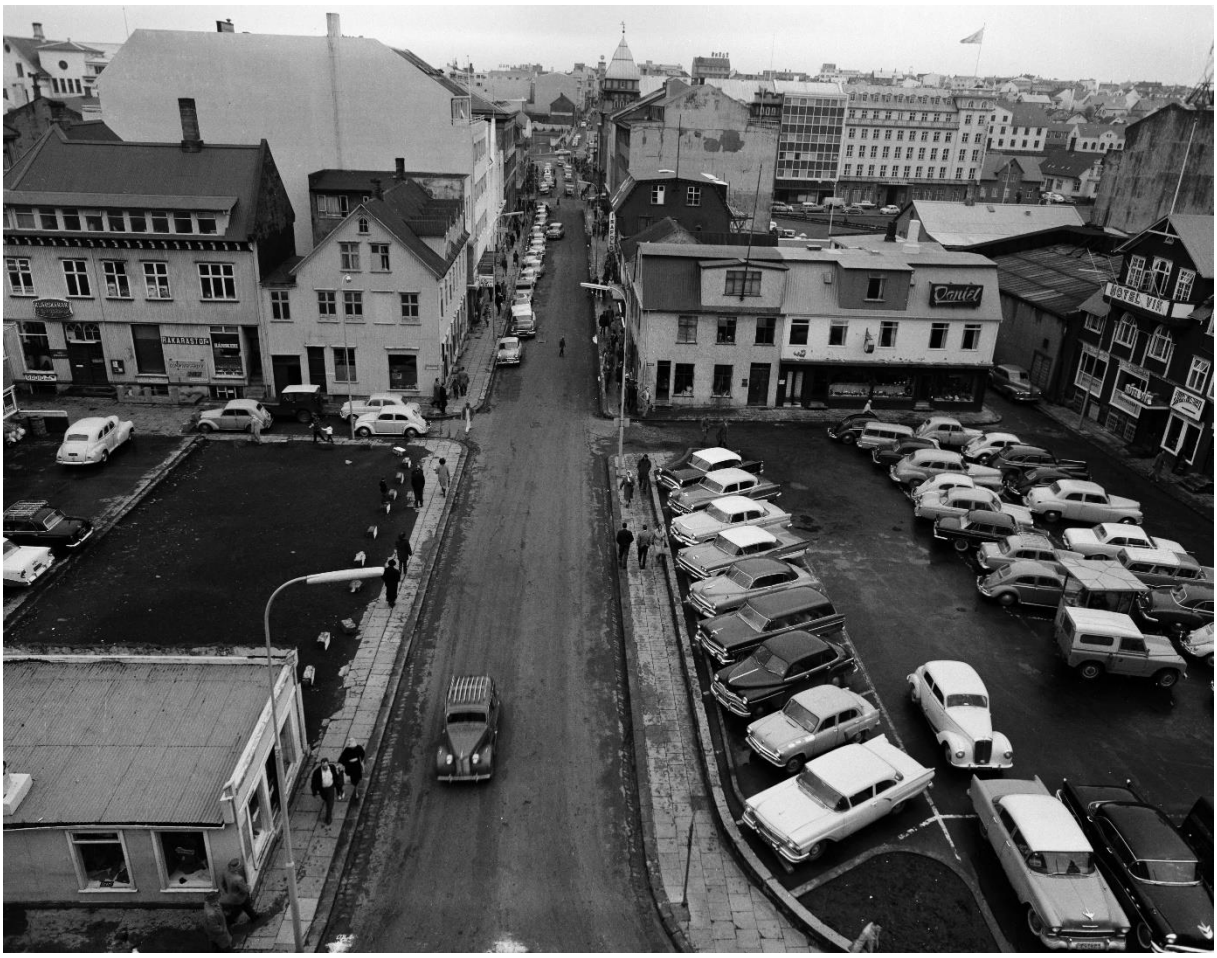
In the immediate vicinity of the *Hótel Íslandsplan*, other major structures or extensions of existing buildings have been erected which assert their semi-detached blind façade in the background of the site (M40-41). This is the extension of *Landsímahúsið* (National Telecom House), located at *Thorvaldsensstræti 4*. Built in 1955 to the designs of the architect Bárður Ísleifsson, the 5-storey concrete extension is at number 11 Aðalstræti today[60]. A 5-storey concrete building was also erected at *6 Austurstræti*, to the plans by the architects Gísli Halldórsson and Jósef Reynis in 1966-1967[61].

M40. View to the *Hótel Íslandsplan/Hallærisplan*, *Hótel Vík* and *Landsímahúsið* (*Thorvaldsensstræti 4* and Aðalstræti 11), 1960-1970 (LmsR, SVÞ 005 122 3-1.jpg, Sveinn Þormóðsson)

M41. *Hótel Islandsplan /Hallærisplan*. Buildings around the square and large buildings in its immediate vicinity (from left: *Austurstræti 5*, *Austurstræti 6* and Aðalstræti 11), 17. April 1965 (LmsR, PTH 028 016 2-2.jpg, Pétur Thomsen)

[60] *Ibid.*, p.53.
[61] *Ibid.*, p.46.

The transformations on the adjacent block concern the gradual disappearance of the structures. In 1955, the City of Reykjavík bought the wooden house at 1 Austurstræti and sold it again for demolition. This was done in 1960-1961[62]. Only a small concrete structure was left standing[63] (M42). For the rest, this area would become a car park. Two improvised squares, one called *Steindórsplan* (Steindór's square) and the other rechristened *Hallærisplan* (Misery square), are now used almost exclusively as a car park (M42).



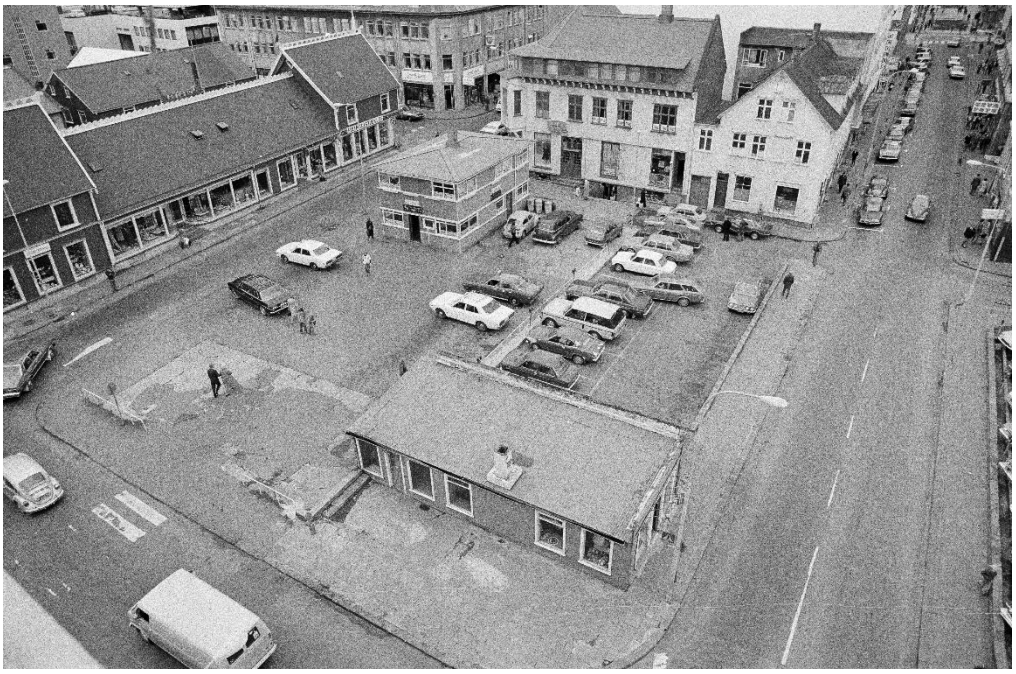
M42. *Steindórsplan* and *Hallærisplan* , around 1962 (LmsR, PTH 058 045 1-1.jpg, Pétur Thomsen)

The names given to them indicate their intended purpose and the way they are perceived. There numerous photographs of these two improvised squares for the 1960s and 1970s. They reveal the highly disparate nature of the landscape and the very rudimentary aspect of the arrangements.

The landscape visible from these squares is henceforth composed of buildings of different size, orientation, style and period. The two squares are free of construction in large measure, but two small structures remain on the *Steindórsplan*, one of which is an aggregation of *Austurstræti 1* (M42). The car parks are laid out in very summary fashion only two small areas with plants on the side of the *Hallærisplan*. They are at times delimited by low curbs and seem to have been initially covered by earth and gravel, before they were asphalted. The streets are designed for car traffic above all. Pavements, at times discontinuous, are used for pedestrian traffic, although there are still none for Brattagata and Fischersund.

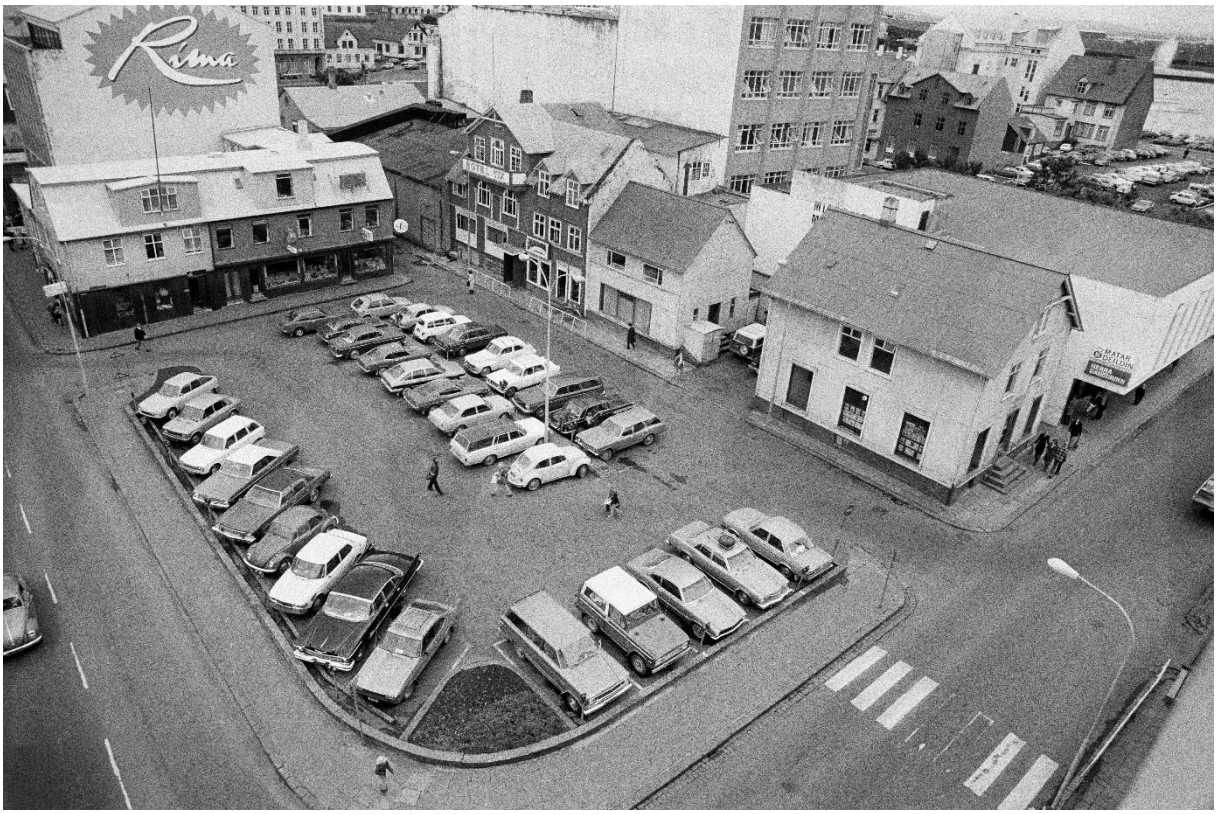
[62] *Ibid*, p.67.
[63] Kvosin, p.97.

This led to an entire signage system devised to separate automobile and pedestrian traffic using stripes on the streets (traffic and guidance lanes, and pedestrian crossings, studded then painted) and the presence of traffic signs. Metal protective barriers are at times installed at the edge of certain pavements. Meters dating from the 1970s can be seen in the paying car parks.



M43. *Steindórsplan*. Streets, parking lots and constructions (Steindór Einarsson taxi stand and aggregation of *Austurstræti 1*), August 1977 (LmsR, ÞJV 017 016 7-4.jpg, Einar Karlsson)

M44. *Steindórsplan*. Streets, parking lots and constructions, August 1977 (LmsR, ÞJV 019 028 7-2 stór.jpg, unknown)

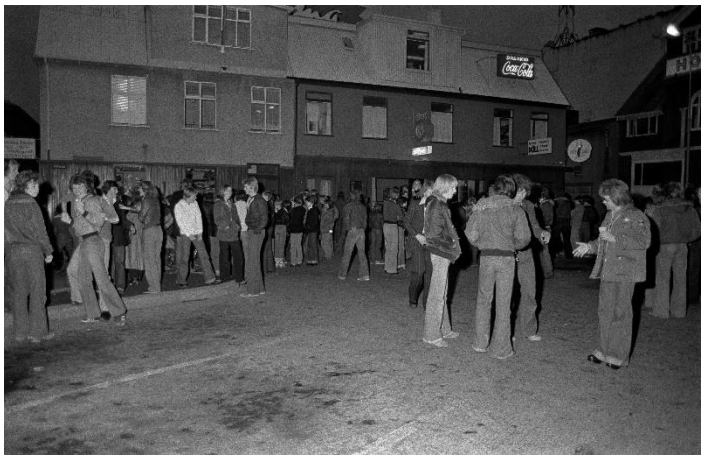


M45. *Hallærisplan*, August 1977 (LmsR, ÞJV 017 016 7-5.jpg, Einar Karlsson)

M46. View to the *Aðalstræti*. *Hallærisplan* and *Steindórsplan*, 12. July 1976 (LmsR, ÞJV 017 016 4-1.jpg, Valdís Óskarsdóttir)

Despite the pervasiveness of the automobile, photographs show temporary use of space, as attested by the presence of advertising billboards, but above all a more diversified use of squares. Various forms of public life come to the fore on occasion. We can see groups of teenagers once night falls, gatherings of bikers, demonstrators or simply a diverse crowd occupy car parks for political events or celebrations (M46-48).

Precarious current arrangement, occupation of space, but also a change of mentality in Iceland as abroad suggest the impending conversion of the site.



M46. *Hallærisplan*, June 1977 (LmsR, 365 verkföll 16.jpg, Einar Gunnar Einarsson)

M47. *Hallærisplan*, Mai 1982 (LmsR, 365 Kvennalistinn 28_2.jpg, Bjarnleifur Bjarnleifsson)

M48. *Steindórsplan*, Autumn 1983 (LmsR, JIM 009 101 3-5.jpg, Jim Smart)

1986-2016

In the years 1960-1970, the two rationales essentially at work since the interbellum, that of replacing the built part of the old city and that of the development of the automobile, will come under severe criticism from certain citizens, observers and practitioners in Iceland and abroad[64]. The anti-*urban renewal* manifesto in Jane Jacob's "The Death and Life of Great American Cities" was published in 1961 in the United States and was widely distributed. In the United Kingdom, the publication by the engineer Colin Buchanan of a report entitled "Traffic in Towns" in 1964 was also a subtle turning point in the way of broaching the automobile in town. Whereas he supports its development, he also suggests protecting the city centres, and in particular the old neighbourhoods. He also proposed developing pedestrian spaces. These works and many others sparked a trend to promote public life in town. In Reykjavík, it was also fed by a strong movement in favour of preserving the architectural heritage[65]. The detailed plan drawn up by the architects Dagný Helgadóttir and Guðni Pálsson for the Kvosin quarter in 1986 (M49), which takes up proposals made in previous studies such as "Kvosin 1983"[66], integrates these new trends in part. Even if it will be implemented only partially, the "Kvosin 86" plan led above all to the development of a public square on the Ingólfstorg site.

M49. Dagný Helgadóttir, Guðni Pálsson, *Tillaga að Deiliskipulag Kvosarinnar*, 17.11.86 (Rb.Bv (detail))

Let us analyse briefly this plan (M49) which aspires to revive the centre of the capital at a time when business activities and services were migrating to the suburbs. To that end, the plan promotes public life in areas redesigned for that purpose, as well as the densification and harmonization of the built part[67]. It thus proposes to make a large part of the streets of Kvosin for pedestrians only and to limit parking with priority given to peripheral car parks. It moreover proposes developing new squares, including *Borgartorg* i.e. Ingólfstorg. Shelters and tree alignments are provided to encourage life in the public space and to beautify the city. As regards the built part, the team in charge of the project announced in no uncertain terms that it wanted to take up the change to harmonize rather than repair the voids, between the buildings or between the heights of buildings. In this respect, it appropriated the recommendations of the expansion plan of 1927 which was in favour of erecting semi-detached, 3- to 4-storey buildings and those of the plan of 1965 which wanted to generalize the height to 4 levels while replacing low

[64] David Mangin, *La ville Franchisée. Formes et structures de la ville contemporaine*, Paris, Editions de la Villette, 2004, p.45-46.
[65] Trausti Valsson, *op cit.*, pp.145-148.
[66] Ss, Dagný Helgadóttir, Guðni Pálsson, *Kvósin 1983. Skipulagstillaga. Aðalstræti og umhverfi*, Reykjavík, 1983.
[67] SS, Dagný Helgadóttir, Guðni Pálsson, *Kvosin' 86. Deiliskipulag af Kvosinni 17. nóvember 1986*, Reykjavík, Borgarskipulag Reykjavíkur, 1986, p.3.

structures. The authors nonetheless declared that they were partial to the historical architectural heritage of the city. They underscored above all the value of stone and concrete buildings erected during the first half of the century, and in particular those of the architect Guðjón Samúelsson. In the case of wooden houses, they regretted to announce that some of them would have to be moved.

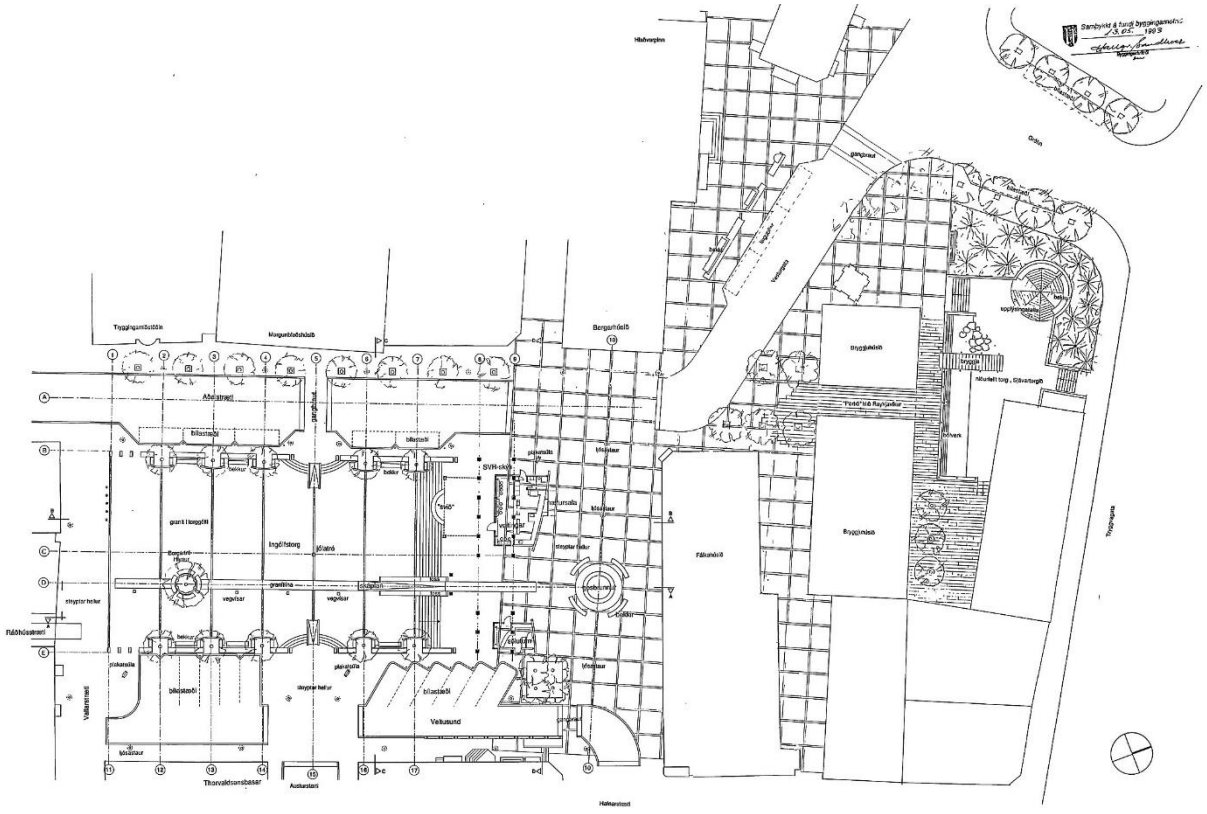
M50. Dagný Helgadóttir, Guðni Pálsson, *Tillaga að Deiliskipulag Kvosarinnar*, 17.11.86 (Rb.Bv (detail))

The square proposed in the plan is deployed only on the *Hallærisplan*[68] (*Hótel Íslandsplan* in the plan (M50)). *Borgartorg* is actually directly planned continuing from the pedestrian Austurstræti[69]. The reopening of the Vallarstræti enables the new square to communicate with Austurvöllur. A pedestrian path was planned to connect with the *Kirkjugarðsgarður*. Finally, the Aðalstræti is a pedestrian street lined by trees where the bus can also run. These pedestrian streets are to be paved so that they can be distinguished clearly from the others. As regards the built part[70], the plan proposes to line the square by erecting a 3.5-storey public building on the *Steindórsplan*, to preserve the wooden houses at *Veltusund 3* and *3b*, to move those that are situated at *Vallarstræti 4* and *Aðalstræti 7* in order to build two new 3.5-storey buildings, to preserve the oldest house in the city (*Aðalstræti 10*), but to move *Fjalakötturinn* in order to erect a 4.5-level building, a height recommended also for the new building desired at number *4 Aðalstræti*, i.e. on the other side of the *Morgunblaðið*.

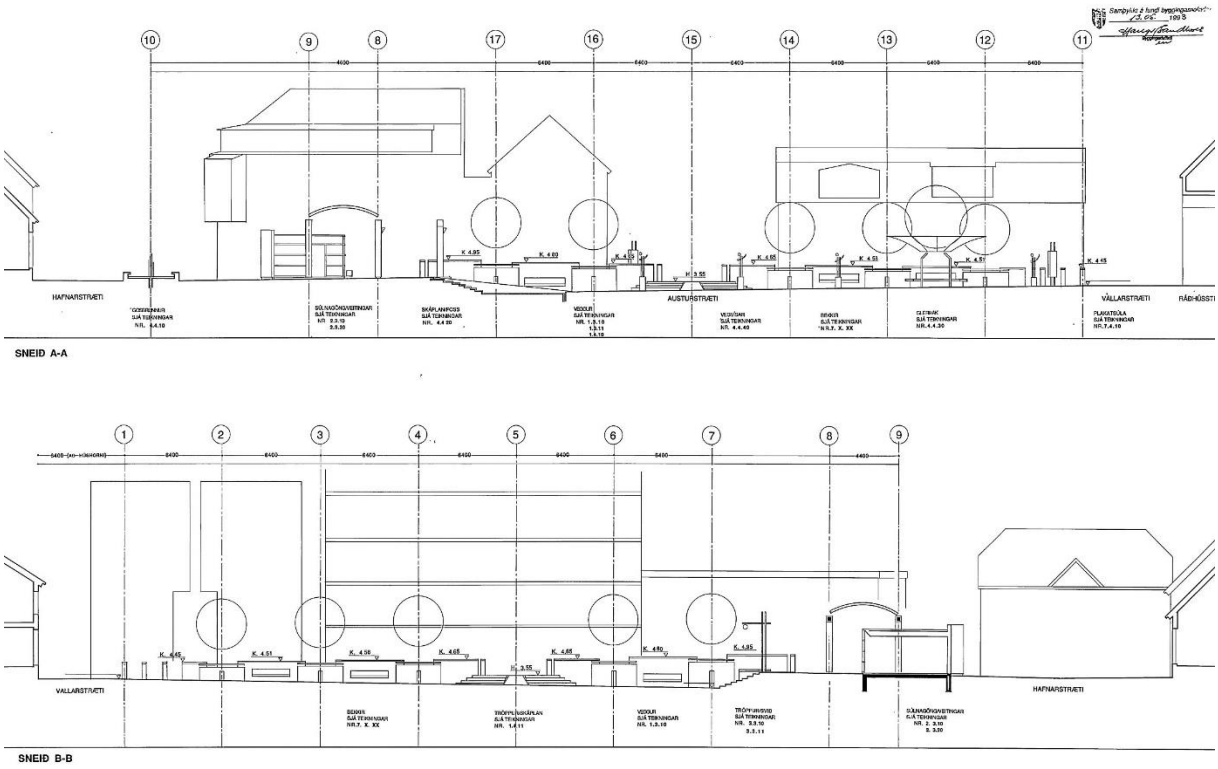
The plan therefore breaks only partially with the reconstruction rationale in Kvosin. For the automobile on the other hand, it sides clearly with pedestrian traffic and the deployment of public life. This plan, which is still in force, will nonetheless be followed only partially.

[68] *Ibid.*, p.10.
[69] *Ibid..*, p.5.
[70] *Ibid.*, pp.16-17.

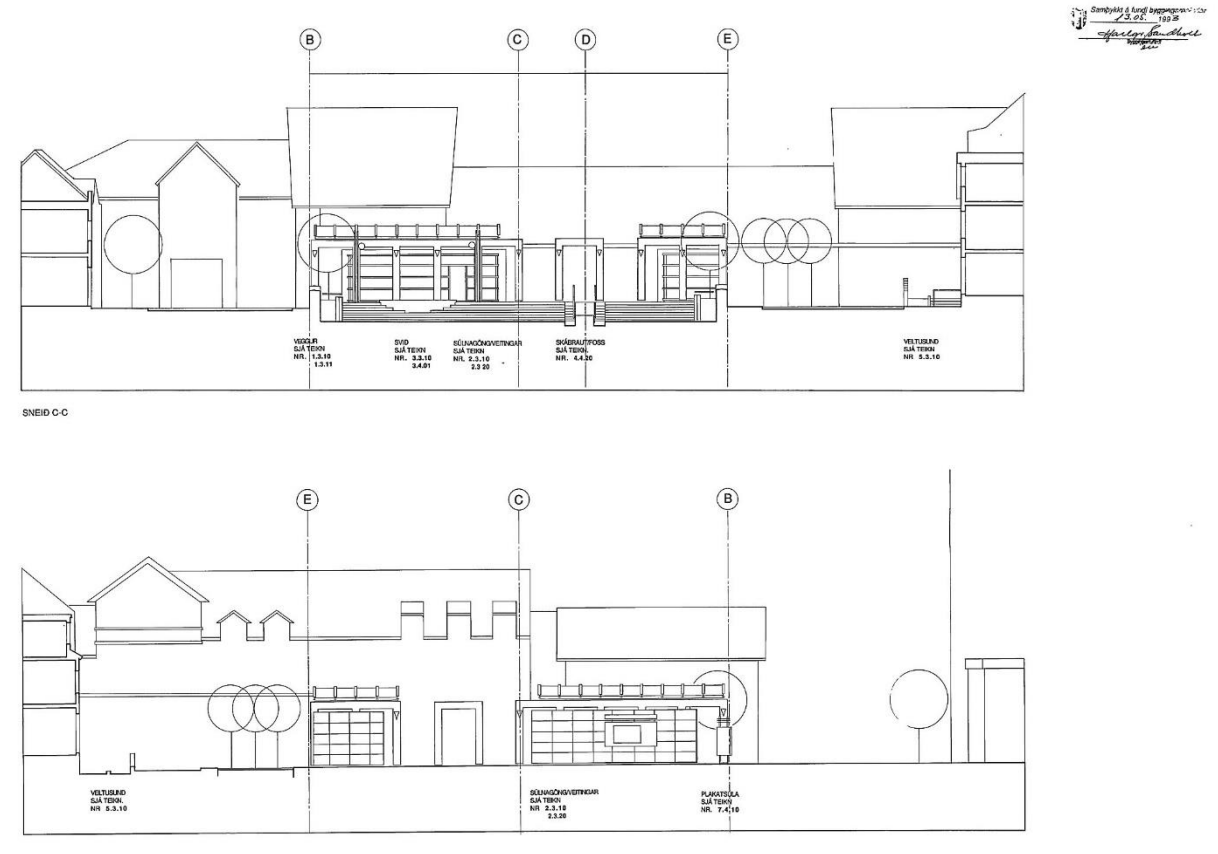
In 1993, a plan relative to the design of the public square envisaged on the two blocks, *Steindórsplan* and *Hallærisplan*, is this time implemented by the architectural firm of *Verkstæði 3 Arkitektar* (Elín Kjartansdóttir, Haraldur Örn Jónsson and Helga Benediktsdóttir) in the spirit of "Kvosin 86." It presents a highly structured public square (M51), composed of several areas earmarked for different types of intended use and traffic; extensively drawn spaces with different materials, levels and elements, endowed with various structures and furniture, trees and ponds. The square, which is the purpose of the project, is obviously bordered by the buildings we have mentioned. Two streets open to automobile traffic are preserved: the Aðalstræti (one way) to Vesturgata and Veltusund in the direction of the Hafnarstræti. Pavements are provided for the built part which borders the Aðalstræti and Veltusund, and the Aðalstræti is lined with trees; there are parking places on the central square. But on the whole, Ingólfstorg square is above all designed for soft modes of transport and many other types of use. A central perimeter extending from Vallarstræti to Hafnarstræti and comprising these two streets is closed to automobile traffic. This perimeter is composed of different spaces (M51-52). On the Vallarstræti side, bollards, bins and trees outline a partially buried rectangular esplanade (M51, 54 and 55), accessible from the stairs and ramps along the Austurstræti axis. There are benches at the edges of the esplanade (M59-62), which ends in the north by bleachers giving access to a terrace where two single-level structures have been erected – a restaurant and a kiosk designed by the same architects (M53, 56 and 59). Behind -them is part of the Hafnarstræti with a fountain in the centre, whose waters in the ditches flow towards the esplanade (M59). The arrangement of this part, covered by concrete pavements, is part of a whole which connects this area with the first wooden houses of Vesturgata and Grófin (M51, 56-58). Wooden houses are shown at Aðalstræti 2, Vesturgata 2 and Hafnarstræti 1 on the plan. This heritage complex is clearly treated as a distinct whole from Ingólfstorg, where the built part is very diverse as we have seen (M51).



M51. Verkstæði 3 Arkitektar (Elín Kjartansdóttir, Haraldur Örn Jónsson, Helga Benediktsdóttir), "Ingólfstorg – Grófartorg. Grunnmynd", 4 January 1993 (Rb.Bv)



M.52. Verkstæði 3 Arkitektar (Elín Kjartansdóttir, Haraldur Örn Jónsson, Helga Benediktsdóttir), “Ingólfstorg. Sneið A-A og B-B (Málsetningar og Tilvísanir)”, 21 February 1993 (Rb.Bv)



M.53. Verkstæði 3 Arkitektar (Elín Kjartansdóttir, Haraldur Örn Jónsson, Helga Benediktsdóttir), “Ingólfstorg. Sneið C-C, D-D”, 13 April 1993 (Rb.Bv)

Whereas the plan seems to have been carried out in the main lines, changes will be made on occasion nonetheless. For instance, the Vallarstræti and Hafnarstræti will be open to motor vehicle traffic on occasion.

M54. Ingolfstorg esplanade with temporary green installation. View to the kiosks, July 2013
(Google map – street)

M55. Vallarstræti and Ingolfstorg esplanade at the same level, November 2016
(Google map – street views, Stefán Pálsson)

M56. Aðalstræti. View to the Vesturgata 2, Hafnarstræti 1, Ingolfstorg kiosks and terrace, July 2013 (Google map – street)

M57. Aðalstræti. View to the Vesturgata 2 and to the space between Hafnarstræti 1 and Ingolfstorg kiosks. Streets and pavements are at the same level, July 2013 (Google map – street)

M58. Hafnarstræti. View to the space between Hafnarstræti 1 and Ingolfstorg kiosks. Streets and pavements are at the same level, July 2013 (Google map – street)

M59. Ingólfstorg esplanade. View to the stairs, ramp, terrace and kiosks, Mai 2018 (Google map – street views, Fransisco Vargas)

M60. Ingólfstorg esplanade. View to the kiosks, to the Velstusund and the Austurstræti, Mai 2018
(Google map – street views, Fransisco Vargas)

M61. Ingólfstorg esplanade. View to the Veltusund and the Vallarstræti buildings, Mai 2018
(Google map – street views, Fransisco Vargas)

M62. Ingólfstorg esplanade. View to the Aðalstræti buildings, Mai 2018 (Google map – street views, Fransisco Vargas)

As regards the built part, the trend towards reconstruction contained in the "Kvosin 86" was confirmed, even if it ran up against resistance from defenders of heritage sites.

M63. Vallarstræti and Ingólfstorg esplanade with temporary green installation. View to the Aðalstræti large buildings (numbers 8, 6 and 4), July 2013 (Google map - street)

The new structures erected on Ingólfstorg are at times higher than foreseen (M63). A 5-storey building is designed for number 4 Aðalstræti[71], by the architect Guðni Pálsson who drew up the plan of 1986. It concerns a hotel built in 2003. At number 8[72], i.e. the other side of the building which initially housed the *Morgunblaðið* daily, the wooden house of *Fjalaköturinn* was destroyed in 1985, in spite of protests from the national commission for houses (*Húsafriðunarnefnd*), despite the protests of the chief curator of the historical heritage or Reykjavík (*Umhverfismálaráð Reykjavíkur*). A 4-storey building designed by the architect Ingimundur Sveinsson replaced it in 1990. On this side of Ingólfstorg, the landscape connection with the Grjóta quarter is therefore definitely broken by an alignment of large buildings.

M64. Aðalstræti and Ingólfstorg esplanade with temporary green installation. View to the large building on Aðalstræti 9, July 2013
(Google map - street)

Finally, whereas the wooden houses located on Vallarstræti 4 (with the exception of the warehouse) and Aðalstræti 7 were not demolished in the end. The semi-detached façade of a new large structure emerged in the background overlooking Ingólfstorg (M64). It is the building initially erected on 2 levels in 1972, located at Aðalstræti 9[73]. In 1993, the building was raised and renovated by the architects of the plan of 1986 to reach 5-levels, thereby covering the landscape of the square on that side with semi-detached facades (M64).

[71] Guðný Gerður Gunnarsdóttir, Anna Lísa Guðmundsdóttir, Drífa Kristín Þrastardóttir, *op cit.*, p.29.
[72] *Ibid.*, p.32.
[73] *Ibid.*, p.52.

Conclusion

Ingólfstorg is not a public square built at the initiative of a public authority and stemming from the imagination of a practitioner who designed a plan designating a perimeter to be built and subdivided into plots, an architecture of buildings to be constructed and ultimate a public space to be developed for a specific type of use. Ingólfstorg is the product of a gradual construction generated by the action of the public authorities and of private entrepreneurs, by an accident (the fire of the Ísland Hotel in 1944), and the conversion of this block into a car park, by the re-composition of the plots of the adjacent block and its use as a taxi stand, and finally, by the emergence of two areas almost free of structures to allow for the occasional appropriation of the area by the public: Hallærisplan/Hótel Íslandsplan and Steindórsplan. The authorities expressed their determination in no uncertain terms to turn these two areas into a public square. Plans were designed which concern the square and the structures that surround it. The Deiliskipulag of 1986 creates in theory a square called Borgartorg and regulates buildings on it. But the plan was implemented partially. The plan of 1993 only designs the square we know today. Ingólfstorg is therefore ultimately the result of an incomplete execution of grand designs for public development projects.

Ingólfstorg is, in a way, a public square "stolen" from the rational of construction and reconstruction of old buildings in the city centre and of the automobile. That it is precisely what marks the singularity and complexity of the landscape of this public square, which consists of an assembly of widely diverse structures in terms of their history, style, dimensions and orientation. The development of the public space and its street design/architecture today confer an aesthetic identity to a landscape which does not have one – or rather which has several, on different levels. Because in order to approach the landscape of Ingólfstorg, it is necessary not only to look at the buildings which delimit the square – the structures situated in the foreground, we would say – but also the considerably high buildings built in the immediate vicinity of Ingólfstorg which are highly visible from the square, i.e. structures located in the background. Two coherent sets of very inequal importance emerge in the foreground. One, with a very large majority, is composed of buildings of 1 to 3 levels maximum, mainly wooden houses the construction period of which stretches from the second half of the 18th to the beginning of the 20th century. These houses are located between Fischersund and Brattagata (Aðalstræti 2, Vesturgata 2, Hafnarstræti 1-3, Hafnarstræti 4 and 5 (unique concrete structure), Austurstræti 3, Austurstræti 4/Veltusund 3, Veltusund 3b, Vallarstræti 4, Aðalstræti 7 and Aðalstræti 10). Then there is a second, clearly more curtailed set of buildings erected in the second half of the 20th century, which are far higher than the previous ones, since they rise to 4 to 6 levels. They are located between the Brattagata and Fischersund (Aðalstræti 4, 6 and 8). The break between the two is clean and sudden. When the buildings located in the background are considered, the landscape becomes more complex between Hafnarstræti and Aðalstræti. The semi-detached facades of several considerable buildings in terms of size behind the wooden houses of Hafnarstræti 4, Austurstræti 3, Austurstræti 4/Veltusund 3, Veltusund 3b, Vallarstræti 4 and Aðalstræti 7 are highly visible from Ingólfstorg and have an undeniable impact on the climate of the square, in particular on the incidence of sunshine. These are Austurstræti 5-Austurstræti 6, Thorvaldsensstræti 4/Aðalstræti 11 and Aðalstræti 9. There is a sudden break between the two, not only in terms of scale, but also of orientation. This phenomenon, which started when the building was erected on Thorvaldsensstræti 4 in 1931, is probably the product of a speculative rationale given the increased value of plots of land in the centre as the town grows. But it is clearly sustained by a certain way of thinking about the urbanism of Kvosin, including the Grjótahverfi quarter, which has condemned the old wooden houses there to be torn down. As regards the site under study, the little interest that was shown to these buildings came from the approaches to Ingólfstorg, even if some houses had to be demolished or moved on the site itself.

The consequences on the landscape of the square on the whole are not less spectacular for all that, since a very select group of low houses have ultimately remained in the street scape when considered in terms of the foreground and the background. These are Aðalstræti 2, Vesturgata 2 and Hafnarstræti 1-3, to which the low building at Hafnarstræti 5 can undoubtedly be added. This heritage complex is in the minority on the square today in fact. The paradox is that in wishing undoubtedly to enhance the first wooden houses situated on Vesturgata and Grófin by grouping them, the developments outlined in the plan of 1993 wound up making them invisible from the other side of Ingólfstorg, on the esplanade, for example.

To recapitulate, the small, low town from the 18th to the beginning of the 20th century and the modern and contemporary high-rise town meet without communicating in Ingólfstorg as one had to replace the other. Therefore, one of the key issues in the planning of the square today is certainly how to connect them, how to harmonize the existing architectural complex, primarily in terms of orientation and size. Should low structures be raised to the level of the higher buildings? The preservation of listed old houses goes against it. Should the height of large buildings be reduced then? The measure would bear a big price tag. If neither one nor the other solution is viable, are we to admit that the landscape of the square as a whole does not work? And consequently, we decide to restrict the open space of the square by dividing one of the two initial blocks into plots for public or private purposes?
In the competition for "Ingólfstorg Kvosin"[74] in 2011, many proposals try to redefine the outskirts of the square. The winning proposal (M65) builds on the plot where Hotel Ísland was and cleans up the space for an open square on the north part. In that way the historical houses get a more important spot on the square and the high modern buildings become more secondary by being ending closer to the corner of the square. The architecture of a new building on the Hótel Ísland plot would be very important for hierarchy, the sunlight and the lecture of the redefined space.

M65. SKA arkitektar ehf (Þorsteinn Helgason, Gunnar Örn Sigurðsson), Proposal 61, 1st place (City of Reykjavik in collaboration with the Association of Icelandic Architects, *Ingólfstorg Kvosin…*, p.18)

There remains to assess the richness represented by this open space and its potential for future development in terms of occupation and deployment of public life.

[74] City of Reykjavik in collaboration with the Association of Icelandic Architects, *Ingólfstorg Kvosin. A competition for the development of central Reykjavik Judges' assessment*, Reykjavik, Reykjavíkurborg, undated.

References

Bibliography

Alþingistíðindi 1921. Þrítugasta og þriðja löggjafarþing. A. Þingskjöl. 6. Hefti, Reykjavík, Prentsmiðjan Gutenberg, 1921.

Anna Agnarsdóttir, "The Urbanization of Iceland in the 18th and early 19th centuries", pp.115-140, in Thomas Riis (ed.), *Urbanization in the Oldenburg Monarchy*, Ludwig, Kiel, 2012.

Eggert Þór Bernharðsson, *Saga Reykjavíkur. Borgin 1940-1990,* Reykjavík, Iðunn, 1998.

City of Reykjavik in collaboration with the Association of Icelandic Architects, *Ingólfstorg Kvosin. A competition for the development of central Reykjavik Judges' assessment*, Reykjavik, Reykjavíkurborg, undated.

Council of Europe, *European Landscape Convention*, [online] http: www.coe.int/en/web/conventions/full-list/-/conventions/rms/0900001680080621

Guðjón Friðrikson, *Saga Reykjavíkur. Bærinn vaknar (1870-1940)*, Reykjavík, Iðunn, 1991.

Simon Gunn, 'The Buchanan report, Environment and the Problem of Traffic in 1960s Great Britain', pp.521-542, *Twentieth Century British History*, vol.22, issue 4, 1 December 2011.

Guðný Gerður Gunnarsdóttir, Anna Lísa Guðmundsdóttir, Drífa Kristín Þrastardóttir, *Ingólfstorg og nágrenni. Skrá yfir fornleifar og hús í vesturhluta Kvosar*, Skýrsla 157, Reykjavík, Minjasafn Reykjavíkur, 2011.

Helga Maureen Gylfadóttir, Guðný Gerður Gunnarsdóttir, *Húsakönnun. Aðalstræti – Vallarstræti – Thorvaldsensstræti – Kirkjustræti - Kirkjustræti*, Skýrsla 125, Reykjavík, Minjasafn Reykjavíkur, 2005.

Peter Hall, *Cities of tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century*, Oxford, Blackwell Publishing, 1988.

Chester Harvey et al., "Effects of skeletal streetscape design on perceived safety", pp.18-28, *Landscape and Urban Planning*, 142, 2015.

Guðmundur Jónsson and Magnús S. Magnússon (ed.), *Hagskinna. Icelandic Historical Statistics.* Reykjavík, Hagstofa Íslands, 1997.

Klemens Jónsson, *Saga Reykjavíkur*, Reykjavik, Kostnaðarm: Steindór Gunnarsson, 1929.

Astrid Lelarge, *Hringbraut og sammiðja brautir í Evrópu - Reykjavík í samanburði við Brussel og Genf frá 1781 til 1935*, Reykjavík, 2018, [on line], available on Minjastofnun Íslands website http: www.minjastofnun.is/media/skjol-i-grein/Hringbraut.pdf

Ali Madanipour, *Design of Urban Space*, New York, Wiley, 1996.

David Mangin, *La ville Franchisée. Formes et structures de la ville contemporaine*, Paris, Editions de la Villette, 2004.

Vikas Mehta, "Evaluating Public Space", pp.53-88, *Journal of Urban Design*, vol.19, n.1, 2014.

Minjastofnun Íslands, *Friðlýst hús og mannvirki. Reykjavík*, [online] http: www.minjastofnun.is/hus-og-mannvirki/fridlyst-hus-og-mannvirki/reykjavik/

Minjastofnun Íslands, *Friðuð hús og mannvirki*, [online] http: www.minjastofnun.is/hus-og-mannvirki/fridud-hus-og-mannvirki/

Bjarni Reynarsson, *Borgir og borgarskipulag. Þróun borga á Vesturlöndum. Kaupmannahöfn og Reykjavík*, Reykjavik, Forlagið, 2014.

Id., "The planning of Reykjavik, Iceland: three ideological waves – a historical overview", pp.49-67, *Planning Perspectives*, 14, 1999.

Skipulagsstofnun, *Landskipulagsstefna 2015-2026*, [online] http: www.landsskipulag.is/media/pdf-skjol/Landsskipulagsstefna2015-2026_asamt_greinargerd.pdf

Hjöleifur Stefánsson, Guðný Gerður Gunnarsdóttir (ed.), *Kvosin. Byggingarsaga miðbæjar Reykjavíkur*, Reykjavík, Torfusamtökin/Forlagið, 1987.

UN, *UN Sustainable development goals 2015*, [online] http: www.un.org/sustainabledevelopment/cities/
UNESCO, *Recommendation on the Historic Urban Landscape, including a glossary of definitions*, [online] http: portal.unesco.org/en/ev.php-URL_ID=48857&URL_DO=DO_TOPIC&URL_SECTION=201.html
Trausti Valsson, *Planning in Iceland from the settlement to present times*, Reykjavík, University of Iceland Press, 2003.
Id., *Reykjavík – Vaxtarbroddur. Þróun höfuðborgar*, Reykjavik, Fjölvaútgafan, 1986.
Knud Zimsen and Lúðvik Kristjánsson, *Úr bæ í borg : nokkrar endurminningar Knud Zimsens um þróun Reykjavíkur*, Reykjavík, Helgafell, 1952.

Sources

Borgarskjalasafn Reykjavíkur (BsR)
Málasafn Borgarstjóra, Skipulagsmál 1923-1939m Askja 812, Aðfnr. 3400, Skipulagsnefndin, Geir G. Zoëga, "Skipulag Reykjavíkur", 12 January 1928.

Google map - street
Ingólfstorg, Reykjavik, July 2013 and November 2016, [online], available on: https://www.google.com/maps/

Google map – street views
Stefán Pálsson, Ingólfstorg, Reykjavik, November 2016, [online], available on: https://www.google.com/maps/@64.1477845,-21.9413887,3a,75y,328.91h,86.68t/data=!3m8!1e1!3m6!1sAF1QipOZ2D2HvtkWHXZoEV8Tuw8DOhk7g_pZGTMx9fY!2e10!3e11!6shttps:%2F%2Flh5.googleusercontent.com%2Fp%2FAF1QipOZ2D2HvtkWHXZoEV8Tuw8DOhk7g_pZGTMx9fY%3Dw203-h100-k-no-pi-0-ya134.92082-ro-0-fo100!7i7200!8i3600
Fransisco Vargas, Ingólfstorg, Reykjavik, Mai 2018, [online], available on: https://www.google.com/maps/@64.1481617,-21.9413448,3a,75y,43h,97.69t/data=!3m8!1e1!3m6!1sAF1QipOkxZOpoW2OCA_QuoaP2RARoSH8Ntr4TbezhXLy!2e10!3e11!6shttps:%2F%2Flh5.googleusercontent.com%2Fp%2FAF1QipOkxZOpoW2OCA_QuoaP2RARoSH8Ntr4TbezhXLy%3Dw203-h100-k-no-pi-0-ya273.92383-ro0-fo100!7i8704!8i4352

Landsbókasafn Íslands – Háskólabókasafn (Lbs-Hbs)
Rasmus Lievog, "Kort og Grundtegning over Handel Stædet Reikevig i Island med angrændsende Huusmænds Pladser, som efter Kongelig Allernaadigste Befalning skal anlegges til Kiöbstæd", 1787, [online], available on: https://islandskort.is/is/map/show/1123
Ole Mentzen Aanum, Ole Ohlsen, "Kort over Reikiavik med Omliggende Baijer", 1801, [online], available on: https://islandskort.is/is/map/show/1128
Sveinn Sveinsson, "Uppdráttur Reykjavíkur", 1876, [online], available on: https://islandskort.is/is/map/show/1126
Generalstabens Topografiske Afdeling, "Reykjavík", 1903, [online], available on: https://islandskort.is/is/map/show/1136

Ljósmyndasafn Reykjavíkur (LmsR)
2001 11 1 001.jpg, unknown, Aðalstræti in the summer 1905, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vQSVDMyVCMGYlQzMlQjZuZy8yMDAxJTIwMTElMjAxJTIwMDAxLmpwZy5pbmZv

MAÓ ÁBS MR 076.jpg, Magnús Ólafsson, Austurstræti, 1908, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vTWFnbiVDMyVCQXMlMjAlQzMlOTNsYWZzc29uL01BJUMzJTkzJTIwJUMzJTgxQlMlMjBNUiUyMDA3Ni5qcGcuaW5mbw==
ADF 2005 5 24-5.jpg, Sigfús Eymundsson, Hafnarstræti, 1895, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vU2lnZiVDMyVCQXMlMjBFeW11bmRzc29uL0FERiUyMDIwMDUlMjA1JTIwMjQtNS5qcGcuaW5mbw==
2001 21 7.jpg, Sigfús Eymundsson, Miðbær, 3. febrúar 1900, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vU2lnZiVDMyVCQXMlMjBFeW11bmRzc29uLzIwMDElMjAyMSUyMDcuanBnLmluZm8=
MAÓ 150.jpg, Magnús Ólafsson, Austurstræti 16, 1910, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vTWFnbiVDMyVCQXMlMjAlQzMlOTNsYWZzc29uL01BJUMzJTkzJTIwMTUwLmpwZy5pbmZv
ADF 2005 5 24-7.jpg, Sigfús Eymundsson, Aðalstræti, around 1900, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vU2lnZiVDMyVCQXMlMjBFeW11bmRzc29uL0FERiUyMDIwMDUlMjA1JTIwMjQtNy5qcGcuaW5mbw==
MAÓ 337_2.jpg, Magnús Ólafsson, Kirkjustræti 2-16, around 1910, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vTWFnbiVDMyVCQXMlMjAlQzMlOTNsYWZzc29uL01BJUMzJTkzJTIwMzM3XzIuanBnLmluZm8=
MAÓ 154.jpg, Magnús Ólafsson, Hafnarstræti 1-3, Fálkahúsið, 1914-1920, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vTWFnbiVDMyVCQXMlMjAlQzMlOTNsYWZzc29uL01BJUMzJTkzJTIwMTU0LmpwZy5pbmZv
MAÓ 146.jpg, Magnús Ólafsson, Björnsbakarí, 1910, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vTWFnbiVDMyVCQXMlMjAlQzMlOTNsYWZzc29uL01BJUMzJTkzJTIwMTQ2LmpwZy5pbmZv
GOE 002b.jpg, Guðmundur O. Eiríksson, Aðalstræti, 1898, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vR3UlQzMlQjBtdW5kdXllMjBPJTIwRWlyJUMzJUFEa3Nzb24vR09FJTIwMDAyYi5qcGcuaW5mbw==
FFF 0062.jpg, unknown French traveller, Austurstræti, 3. - 4. July 1910, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vRnJhbnNrdCUyMGFsYiVDMyVCQW0vRkZGJTIwMDA2Mi5qcGcuaW5mbw==
FFF 0068.jpg, unknown French traveller, Hafnarstæti, 3. - 4. July 1910, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vRnJhbnNrdCUyMGFsYiVDMyVCQW0vRkZGJTIwMDA2OC5qcGcuaW5mbw==
MAÓ 205.jpg, Magnús Ólafsson, Austurstræti 16, hús Nathan & Olsen, 1916-1918, [online], available on:https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vTWFnbiVDMyVCQXMlMjAlQzMlOTNsYWZzc29uL01BJUMzJTkzJTIwMjA1LmpwZy5pbmZv
2011 1 01.jpg, unknow, Aðalstræti, around 1920, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vQSVDMyVCMGYlQzMlQjZuZy8yMDExJTIwMSUyMDAxLmpwZy5pbmZv
2014 37 alb 004 3-1.jpg, Kristinn E. Magnússon, Aðalstræti-Vesturgata, around 1920, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vMjAxNCUyMDM3JTIwYWxiJTIwMDA0JTIwMy0xLmpwZy5pbmZv

ÓSG GLE 135.jpg, Óskar Gíslason, Austurstræti, 1926, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vJUMzJTkzc2thciUyMEclQzMlQURzbGFzb24vJUMzJTkzU0clMjBHTEUlMjAxMzUuanBnLmluZm8=
KAN 001 043 4-2.jpg, Karl Christian Nielsen, Vesturgata and Hafnarstræti, 1937-1940, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vS2FybCUyME5pZWxzZW4vS0FOJTIwMDAxJTIwMDQzJTIwNC0yLmpwZy5pbmZv
LOG 020 3-2.jpg, Loftur Guðmundsson, *Hótel Ísland fire*, 3. February 1944, [online], available on: http://ljosm.reykjavik.is/fotoweb/archives/5000-Heim/Ljosmyndasafn/Loftur%20Gu%C3%B0mundsson/LOG%20020%203-2.jpg.info#c=%2Ffotoweb%2Farchives%2F5000-Heim%2F%3Fq%3DLOG%2520020%25203-2.jpg
GRÓ 006 139 2-3.jpg, Gunnar Rúnar Ólafsson, Veltusund, 1955, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vR3VubmFyJTIwUiVDMyVCQW5hciUyMCVDMyU5M2xhZnNzb24vR1IlQzMlOTMlMjAwMDYlMjAxMzklMjAyLTMuanBnLmluZm8=
KAN 002 105 3-2.jpg, Karl Christian Nielsen, Hótel Vík, 16. April 1944, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vS2FybCUyME5pZWxzZW4vS0FOJTIwMDAyJTIwMTA1JTIwMy0yLmpwZy5pbmZv
GRÓ 010 034 1-2.jpg, Gunnar Rúnar Ólafsson, Hafnarstræti 5, 1955, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vR3VubmFyJTIwUiVDMyVCQW5hciUyMCVDMyU5M2xhZnNzb24vR1IlQzMlOTMlMjAwMTAlMjAwMzQlMjAxLTIuanBnLmluZm8=
ÓSG ónr 10.jpg, Óskar Gíslason, Austurstræti, 1953-1960, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vJUMzJTkzc2thciUyMEclQzMlQURzbGFzb24vJUMzJTkzU0clMjAlQzMlQjNuciUyMDEwLmpwZy5pbmZv
LOG 007 4-1.jpg, Sigurhans Vignir, Aðalstræti, 1948, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vTE9HJTIwMDA3JTIwNC0xLmpwZy5pbmZv
PTH 056 118 1-2.jpg, Pétur Thomsen, Hafnarstræti 1-3, Fálkahúsið, around 1952-1965, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vUCVDMyVBOXR1ciUyMFRob21zZW4vUFRIJTIwMDU2JTIwMTE4JTIwMS0yLmpwZy5pbmZv
SKH ÁBS 0026.jpg, Skarphéðinn Haraldsson, Aðalstræti, 1965, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vU2thcnBoJUMzJUE5JUMzJUIwaW5uJTIwSGFyYWxkc3Nvbi9TS0glMjAlQzMlODFCUyUyMDAwMjYuanBnLmluZm8=
ÞJV 043 095 2-5.jpg, Ari Kárason Austurstræti, Aðalstræti, 13. December 1969, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vJUMzJTlFaiVDMyVCMyVDMyVCMHZpbGppbm4vJUMzJTlFSlYlMjAwNDMlMjAwOTUlMjAyLTUuanBnLmluZm8=
SVÞ 005 122 3-1.jpg, Sveinn Þormóðsson, Aðalstræti and Austurstræti, 1960-1970, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vU3ZlaW5uJTIwJUMzJTlFb3JtJUMzJUIzJUMzJUIwc3Nvbi9TViVDMyU5RSUyMDAwNSUyMDEyMiUyMDMtMS5qcGcuaW5mbw==

PTH 028 016 2-2.jpg, Pétur Thomsen, Hallærisplan, 17. April 1965, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vUCVDMyVBOXR1ciUyMFRob21zZW4vUFRIJTIwMDU4JTIwMDQ1JTIwMS0xLmpwZy5pbmZv
PTH 058 045 1-1.jpg, Pétur Thomsen, Austurstræti, Veltusund and Vallarstræti, around 1962, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vUCVDMyVBOXR1ciUyMFRob21zZW4vUFRIJTIwMDU4JTIwMDQ1JTIwMS0xLmpwZy5pbmZv
ÞJV 017 016 7-4.jpg, Einar Karlsson, Steindórsplan, August 1977, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vJUMzJTlFaiVDMyVCMyVDMyVCMHZpbGppbm4vJUMzJTlFSlYlMjAwMTclMjAwMTYlMjA3LTQuanBnLmluZm8=
ÞJV 019 028 7-2 stór.jpg, unknown, Steindórsplan, August 1977, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vJUMzJTlFaiVDMyVCMyVDMyVCMHZpbGppbm4vJUMzJTlFSlYlMjAwMTklMjAwMjglMjA3LTIlMjBzdCVDMyVCM3IuanBnLmluZm8=
ÞJV 017 016 7-5 stór.tif, Einar Karlsson, Hallærisplan, August 1977, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vJUMzJTlFaiVDMyVCMyVDMyVCMHZpbGppbm4vJUMzJTlFSlYlMjAwMTclMjAwMTYlMjA3LTUuanBnLmluZm8=
ÞJV 017 016 4-1.jpg, Valdís Óskarsdóttir, Morgunblað building, Aðalstræti 6, 12. July 1976, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vJUMzJTlFaiVDMyVCMyVDMyVCMHZpbGppbm4vJUMzJTlFSlYlMjAwMTclMjAwMTYlMjA0LTEuanBnLmluZm8=
365 verkföll 16.jpg, Einar Gunnar Einarsson, Hallærisplan, June 1977, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vRGFnYmxhJUMzJUIwaSVDMyVCMCUyMFYlQzMlQURzaXIvMzY1JTIwdmVya2YlQzMlQjZsbCUyMDE2LmpwZy5pbmZv
365 Kvennalistinn 28_2.jpg, Bjarnleifur Bjarnleifsson, Hallærisplan, Mai 1982, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vRGFnYmxhJUMzJUIwaSVDMyVCMCUyMFYlQzMlQURzaXIvMzY1JTIwS3Zlbm5hbGlzdGlubiUyMDI4XzIuanBnLmluZm8=
JIM 009 101 3-5.jpg, Jim Smart, *Steindórsplan*, Autumn 1983, [online], available on: https://ljosmyndasafn.reykjavik.is/?href=L2ZvdG93ZWIvYXJjaGl2ZXMvNTAwMC1IZWltL0xqb3NteW5kYXNhZm4vSmltJTIwU21hcnQvSklNJTIwMDA5JTIwMTAxJTIwMy01LmpwZy5pbmZv

Reykjavíkurborg (Rb)

Victor Lottin, “Plan de Reykiavik”, 1836, [online], available on: https://reykjavik.is/sites/default/files/plan-de-reykjavik_web.jpg
Ólafur Þorsteinsson, “Reykjavíkur Kaupstaður. BL.1”, 1915-1918, [online], available on: https://reykjavik.is/sites/default/files/reykjavik-1_2000-olafur-tho_0.jpg
HNIT Verkfræðistofa, “Reykjavíkurborg. Mælingadeild. BL.32”, 1990, [online], available on: https://reykjavik.is/sites/default/files/a20_iii-9-2-013.jpg

Reykjavíkurborg. Borgarvefsjá (Rb.Bv)
Dagný Helgadóttir, Guðni Pálsson, *Tillaga að Deiliskipulag Kvosarinnar*, Reykjavík, Borgarskipulag Reykjavíkur, 17.11.86, [online], available on:
https://lukrskjol.reykjavik.is/skipulagssja/upplysingar/DSK_PDF/Kvos_01_10_1987.pdf
Verkstæði 3 Arkitektar (Elín Kjartansdóttir, Haraldur Örn Jónsson, Helga Benediktsdóttir), "Ingólfstorg – Grófartorg. Grunnmynd", 4 January 1993, [online], available on:
https://teikningar.reykjavik.is/fotoweb/archives/5000-Aðaluppdrættir/My%20Computer/2010/01/2/1993-05-13_2.tif.info#c=%2Ffotoweb%2Farchives%2F5000-A%25C3%25B0aluppdr%25C3%25A6ttir%2F%3Fq%3D202%253A172495
Verkstæði 3 Arkitektar (Elín Kjartansdóttir, Haraldur Örn Jónsson, Helga Benediktsdóttir), "Ingólfstorg. Sneið A-A og B-B (Málsetningar og Tilvísanir)", 21 February 1993, [online], available on: https://teikningar.reykjavik.is/fotoweb/archives/5000-Aðaluppdrættir/My%20Computer/2010/01/2/1993-05-13_3.tif.info#c=%2Ffotoweb%2Farchives%2F5000-A%25C3%25B0aluppdr%25C3%25A6ttir%2F%3Fq%3D202%253A172495
Verkstæði 3 Arkitektar (Elín Kjartansdóttir, Haraldur Örn Jónsson, Helga Benediktsdóttir), "Ingólfstorg. Sneið C-C, D-D", 13 April 1993, [online], available on:
https://teikningar.reykjavik.is/fotoweb/archives/5000-Aðaluppdrættir/My%20Computer/2010/01/2/1993-05-13_4.tif.info#c=%2Ffotoweb%2Farchives%2F5000-A%25C3%25B0aluppdr%25C3%25A6ttir%2F%3Fq%3D202%253A172495
Verkstæði 3 Arkitektar (Elín Kjartansdóttir, Haraldur Örn Jónsson, Helga Benediktsdóttir), "Ingólfstorg. Grunnmynd (Málsetningar og Tilvísanir)", 6 April 1993, [online], available on:
https://teikningar.reykjavik.is/fotoweb/archives/5000-Aðaluppdrættir/My%20Computer/2010/01/2/1993-05-13_5.tif.info#c=%2Ffotoweb%2Farchives%2F5000-A%25C3%25B0aluppdr%25C3%25A6ttir%2F%3Fq%3D202%253A172495
Verkstæði 3 Arkitektar (Elín Kjartansdóttir, Haraldur Örn Jónsson, Helga Benediktsdóttir), "Ingólfstorg. Troppur/Svið, grunnmynd, útlit, sneiðar", 13 April 1993, [online], available on:
https://teikningar.reykjavik.is/fotoweb/archives/5000-Aðaluppdrættir/My%20Computer/2010/01/2/1993-05-13_7.tif.info#c=%2Ffotoweb%2Farchives%2F5000-A%25C3%25B0aluppdr%25C3%25A6ttir%2F%3Fq%3D202%253A172495
Verkstæði 3 Arkitektar (Elín Kjartansdóttir, Haraldur Örn Jónsson, Helga Benediktsdóttir), "Ingólfstorg 3. Dairy Queen. Afstöðum., grunnm., sneið og útlit", 20 July 1993, [online], available on:
https://teikningar.reykjavik.is/fotoweb/archives/5000-Aðaluppdrættir/My%20Computer/2010/01/2/1993-08-12.tif.info#c=%2Ffotoweb%2Farchives%2F5000-A%25C3%25B0aluppdr%25C3%25A6ttir%2F%3Fq%3D202%253A172495
Verkstæði 3 Arkitektar (Elín Kjartansdóttir, Haraldur Örn Jónsson, Helga Benediktsdóttir), "Ingólfstorg 1. Hlöllabátar. Afstöðum., grunnm., sneið og útlit", 20 July 1993, [online], available on: https://teikningar.reykjavik.is/fotoweb/archives/5000-Aðaluppdrættir/My%20Computer/2010/01/2/1993-08-12_2.tif.info#c=%2Ffotoweb%2Farchives%2F5000-A%25C3%25B0aluppdr%25C3%25A6ttir%2F%3Fq%3D202%253A172495

Reykjavíkurborg. Umhverfis -og skipulagssvið (Rb.U-ss)
R1-II-14-1-016, Knud Zimsen, “Reykjavík”, 1905.
Rb, II-10-2-004, 55; II-10-2-005, 54; II-10-2-008, 45; II-102-009, 44, Anonymous (Ólafur Þorsteinsson) and undated (around 1915).
1-14-3-019, “Teiknað hefur Ágúst Böðvarsson eftir uppdráttum bæjarins og eigin mælinga 1947”, “Reykjavík og Seltjarnarnes”, 1947.
I-12-2-036. 1950, Rafmagnsveita Reykjavíkur, “Grjótaþorp”, 31 July 1950.

Skipulagsstofnun (Ss)
Guðjón Samúelsson, “Skipulagsuppdráttur af Reykjavík innan Hringbrautar”, Reykjavík, 15 December 1927.
Dagný Helgadóttir, Guðni Pálsson, *Kvosin‘ 86. Deiliskipulag af Kvosinni 17. nóvember 1986*, Reykjavík, Borgarskipulag Reykjavíkur, 1986.
Borgarverkfræðingur, *Kvosin. Skipulag umferðar og bílastæða*, Reykjavík, October 1986.
Dagný Helgadóttir, Guðni Pálsson, *Kvósin 1983. Skipulagstillaga. Aðalstræti og umhverfi*, Reykjavík, 1983.

Second part: Public life

Social-psychological evaluation

December 2019

Introduction to second part

Public life should be understood in the broadest sense from the complex actions, expressions and versatile life that unfolds in that space. Hence, using a psychological approach is beneficial and complementary to the morphological analysis, and combined it has a broad informational value for planners and policymakers.

The built-in environment has the potential to direct people's behaviour, but it does so not exclusively. Behaviour is largely governed by social and psychological factors such as experience, expectations and attitudes. These factors are the main theme for social-, community- and environmental psychologists. Social- and psychological factors are extremely understudied in planning and developmental studies but are essential as these studies are exploring social components of land use. The behaviour of the users in the space is highly dependent on psychological factors such as understanding, reading of the environment, attitude, former experience, knowledge, habits etc.

The second part of this project addressed two objectives using a social-psychological focus. First, to explore how the space is currently being used and secondly to explore who it was serving. The latter also involved exploring how people experience the space, how it meets their needs, the attachment to it and their future expectation of the space, etc. A two-folded pilot study was performed to explore these objectives. A psychological observation at the location, Ingólfstorg and the surrounding environment was performed first, and then a detailed survey was designed exploring visiting frequency, attitude, safety, experience and demography. This survey was distributed on social media.

The two studied are presented separately followingly, but the findings together give valuable and broad insight into the practicality, value and limitations of the location. Such information is highly valuable for city-planners and urban policymakers.

Observation

Aim

This study is exploratory, and the purpose is not to produce a generalizable result about number of people passing by, dwelling or engaging in activities, but rather to explore how the spaces was being used, by exploring the typography of activities, the relationship between the environment and activities, the user group and the interaction between people.

Methodology

Naturalistic observation is a common qualitative research method used by psychologists. The main strength of this method is that it allows the observer to study the behaviour of interest as it occurs in natural settings. It has strong face validity and construct validity, but the greatest drawback has to do with generalizability. Since the observation takes place in a particular point of time, day and season, the observed findings only detail a sample of possible outcomes for a particular group. Another limitation involves observer bias which can be limited with observer training and preparation. To enhance generalizability and reduce observer bias, well-conducted studies utilizing naturalistic observation methods often require a team of well-trained researchers and many hours of observation during the study in which behaviours are observed (Eby, 2011).

Measurements and variables

In a naturalistic observation study, three classes of variables are generally studied, namely **descriptive, inferential,** and **evaluative**. For *descriptive variables*, a researcher simply records what is being observed

without any interpretation or inference. *Inferential variables* require the researcher to make an assumption about what is being observed and *evaluative variables* require the researchers to make both an inference and a judgment (Eby, 2011). Gehl and Svarre (2013) point out that the list of questions that can be asked about the interaction between life and form is essentially endless, however, the most basic and important ones when studying the interaction between people and their surroundings are: who the individuals are, what do they do and how long, and where they stay. In addition, activities in outdoor space can be categorized into three categories; necessary activities, optional activities and social activities (also known as resultant activities) (Gehl, 2011). Necessary activities include those that are more or less compulsory, such as everyday activities that are more often related to walking, like going to school or to work, shopping, waiting for a bus or a person and running errands. These activities will take place throughout the year, under nearly all conditions, and are more or less independent of the exterior environment (Gehl, 2011). Optional activities are participated in if there is a wish to do so and if time and place make it possible, only under favourable exterior conditions, when weather and place invites them. These activities include taking a walk to get a breath of fresh air, standing around enjoying life, or sitting and sunbathing (Gehl, 2011). Lastly, social activities are all activities occur spontaneously and depend on the presence of others in public spaces and include children at play, greetings and conversations and communal activities of various kinds. Simply seeing and hearing other people is categorized herein and is the most widespread social activity. These activities develop in connection with the other activities because people are in the same space, meet, pass by one another, or are merely within view. Social activities are indirectly supported whenever necessary and optional activities are given better conditions in public spaces. With better quality of the area, the activities become more complex and social, as the environment invites, supports and provides opportunity for people to stop, sit, eat, play and so on (Gehl, 2011). Figure 1 depicts Jan Gehl (2011) representation of the relationship between the quality of an outdoor space and the rate of each type of activities.

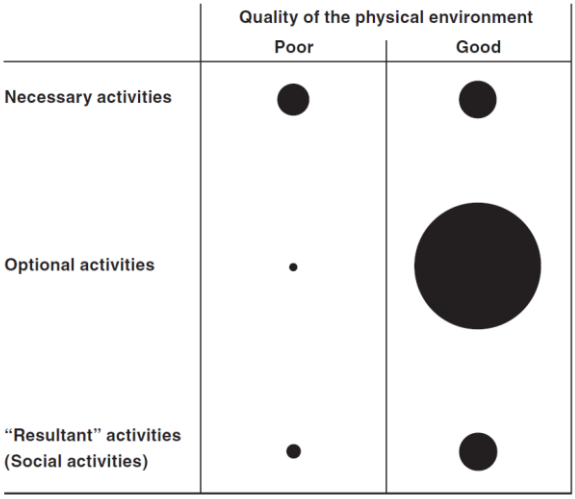


Figure 1. *Graphic representation of the relationship between the quality of outdoor spaces and the rate of occurrence of outdoor activities (Gehl, 2011).*

These definitions guided the development of a check list of questions and variables based on the objective of the study (see appendix 1). Such a checklist supports the researcher, keeps the observation systematic and focused, allowing the researcher to collect data following the same procedures throughout the study.

In this study, the observation recorded descriptive activities (also type of activity as necessary, optional or social), transportation mode, direction through the space and use of the space through the design. Inferential variables included the subject's mood or emotional status, and evaluative variables involved

making an inference and judgement about conflict between pedestrians and/or different travel modes and estimating how different user groups distribute the space between them.
Additionally, the twelve-quality criteria tool available at Gehl institute was used when initiating the observation (Gehl Institute, 2019). This tool is used to evaluate whether different features of a public space are protective, comfortable, and enjoyable for people spending time there. The following three main arguments lie behind these categories: 1) without basic protection from cars, noise, rain, and wind, people will generally avoid spending time in a space; 2) without elements that make walking, using a wheelchair, standing, sitting, seeing, and conversing comfortable, a place won't invite people to stay; 3) great public spaces tend to offer positive aesthetic and sensory experiences, take advantage of local climate, and provide human-scale elements so visitors don't feel lost in their surroundings (Gehl Institute, 2019). The twelve-quality criteria tool can be seen in appendix 2.

It is worth mentioning that Mehta (2014) created the Public Space Index (PSI) which also provides a good overview of variables, weightings, scoring and measuring criteria aimed to score the dimensions that are considered to promote quality in public space. It is based on a different methodological approach and is more elaborative, hence for the purposes of this study the twelve urban criteria tool was employed.

Sampling design

A naturalistic observational study design will involve increments of time observing and recording the behaviour of interest, known as sampling. A good sampling design in naturalistic observational studies is essential to be able to generalize results to the larger population being studied and to reduce potential bias. The goals of a good sample design are to select observation sites and times that accurately represent the behaviour of interest, minimize survey error and bias, and be economically feasible to conduct (Eby, 2011). Data collected during the relatively short sampling periods is treated as an estimate of a particular behaviour that continues to occur when researchers are not observing (provided the sampled location and time were randomly selected).
To maximize the generalizability of the survey results to the larger population, it is important to minimize potential biases in the design. An ideal design, in terms of generalizability, would have completely random observation sites at which data collection takes place on random days and times. Thus, any location, day-of-week, or time-of-day biases in the behaviour of interest would be minimized (Eby, 2011). Another way to improve generalizability is to statistically weight the raw observational data (corrected by the actual population of interest) to make it proportional to the larger population of interest (Eby, 2011).
Acknowledging that this is an explorative study that is severely limited by economical resources, it was necessary to adjust the sampling design accordingly. As a result, two sampling periods were performed in September 2019, with a two-folded perspective. Table 1 depicts the details of the sampling on the two dates. One researcher was present and followed the designed checklist and the twelve-quality criteria tool.

Table 1. Sampling of observation

	Observation 1	Observation 2
Date	01.09.2019	17.09.2019
Time	16-18:00	15-17:00
Day	Sunday	Tuesday

The weather conditions were good on both days, with temperatures around 14° in the former observation and around 10° in the latter, sunny with clouds and little or no wind.

The researcher that conducted this observation is a trained psychologist with experience in qualitative studies. She performed a direct observation (in contrast to unobtrusive observation), meaning that she was clearly visible but passive while sitting or standing in the space. Because direct observation allows the observed subjects to see the researcher and know they are being observed, they may change their behaviour. To minimize this effect the researcher did not dwell in the same spot for long under each observation but instead moved around the small area. Also, it needs to be noted that the researcher could only direct the observation towards limited number of groups or individuals at a time.

Findings

In the observations, extensive hand-written material was collected. The results from these observations will be presented in three subchapters.
First, the twelve-quality criteria tool will be presented. Followingly, the material from the observation will be discussed, but the material was thematically analysed into the following categories: 1) user (who), 2) activities (what), 3) direction and location (where), and lastly 4) interaction/conflict in shared space. Table 2. shows how the variables in the study were categorized. The findings will be presented as a summary in tables and discussed in a descriptive manner with reference to photographs instead of trying to increase generalizability by weighting the cases observed. Lastly, a flow analysis through the space is presented.

Table 2. Researcher's categorization of variables in observation

Descriptive variables	Inferential variables	Evaluative variables
Activities (what):	Identity and nationality (who)	Inference and judgement about conflict between pedestrians and/or different travel modes
Necessary activities	Emotional status/mood	Estimating how different user groups distribute the space between them
Optional activities		
Social activities		
How long		
Where		
Transportation mode		
Direction through the space		
Use of elements in space		

Twelve urban quality criteria

According to the Gehl Institute (2009), great public spaces tend to offer positive aesthetic and sensory experiences, take advantage of local climate conditions (for example, offering shade in warmer cities), and provide human-scale elements so visitors don't feel lost in their surroundings. To measure such qualities in a public space they have developed the Twelve Quality Criteria worksheet that addresses three main themes in a public space: 1) protection, 2) comfort, and 3) enjoyment. Without protection people will generally avoid spending time in a space. Protection from cars, noise, rain, and wind is critical for a space to be regularly used. Comfort refers to elements that make walking, standing, sitting, seeing, and communicating comfortable, but without such elements a place generally won't invite anyone to spend time there. Enjoyment is the opportunity for play and exercise, that can also make the space more inviting to people of all ages (Gehl Institute, 2019). It is important to be aware that such an evaluation will always be subject to bias by the researcher opinion, views, values and experience.

The location for this evaluation was set to cover the whole Ingólfstorg including the streets surrounding it. Figure 2. shows a map of the location.

Figure 2. *Areal map of Ingólfstorg and its surrounding streets that were subject to the 12- urban quality criteria assessment (from. www.ja.is).*

The procedure is simple to follow but requires that the observer takes time to understand the elements of the space and gains understanding of the functional aspects from different angles. As the researcher had observed the surroundings at Ingólfstorg for a while, each criteria was given a score: a happy, neutral or sad face (meaning yes, in between, or no, respectively). Findings for the 12 elements are broken down after the three main themes, followed with a supporting argument. Some suggestions are being made in order to improve the place and future studies are suggested were relevant.

For the first theme, protection all three elements are given a neutral character. See figure 3 below.

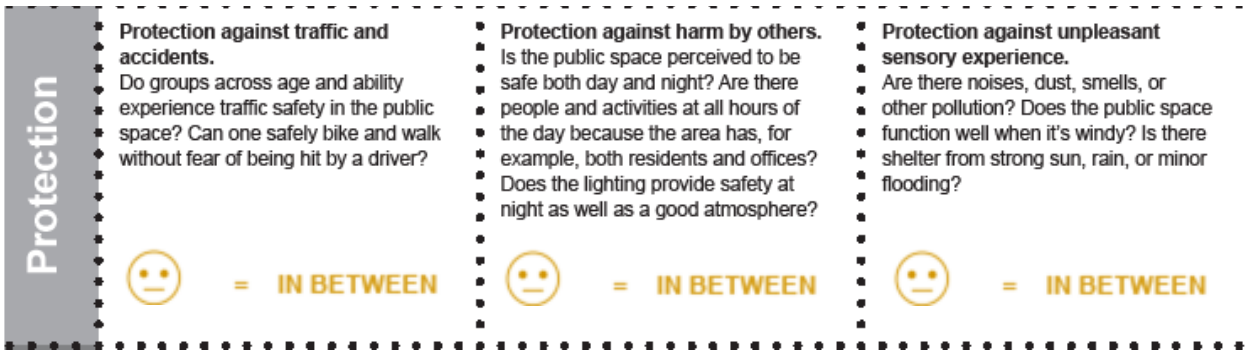


Figure 3. *How well Ingólfstorg is performing on the protection theme of the 12 urban quality criteria according to observation.*

On the first criteria, Ingólfstorg has the potential to increase physical protection against car-traffic. The surrounding streets have different volume of car traffic, and hence different approaches could be beneficial. Veltusund that connects to Austurstræti could be closed off easily as both streets do not seem to have high traffic volume but serve instead as parking option (see figure 4). Reclaiming the parking places gives more public life the opportunity to thrive at the square. Aðalstræti, that connects to Vesturgata in north is more difficult. That part of Vesturgata that is visible in the map in figure 2 is a declared shared space with 15 km top speed, and the streetscape is designed so that the street and sidewalks are equal. However, approaching this shared space one must go through Aðalstræti, which is a one-way street, and is serving both taxies as they have a resting place located alongside the square,

and the hotels and restaurants that operate in the area (see figure 5). Although regular traffic is somewhat regular there, the operative function of Aðalstræti is to provide supplies and bring people to the location (to the hotels) and therefore it might not be wise to close this street off completely. Instead regular traffic could be forbidden or severely limited as is recommended for good transport and hotel busses. Goods could for example be delivered before 11 am and forbidden until 06:00 am next day. Hotel busses could drop off people in the nearby parking locations, giving the tourists the option to walk through the area on their way to the hotel. The distance should not be longer than 400 m though. It is recommended that planners study any changes in public life as a result of closing or limiting the streets for traffic and reclaiming the parking in Veltusund and Austurstræti.

Figure 4 and 5. *Parking is available alongside the left side of Veltusund and an example of the typical traffic in Aðalstræti.*

In regard to criteria 2, which involves safety caused by others, lighting is considered to be important and also that the area is populated or balanced with companies and habitants. In addition to the fact that the buildings surrounding the area are mainly hotels, service providers (stores and restaurants) or offices, the unfortunate development in down town Reykjavik over the past years have resulted in a lot of new hotel buildings and Airbnb options for tourists. Since the observed individuals were not asked about their residency this would be a good subject for future studies to explore – that is the ratio of locals v.s. others, that are using the square and see value in it.

The square is part of the down-town city life with restaurants and clubs and therefore more people pass by during weekends and hence the issue of it being a safe place for others harm is important. However, there was no observation during such hours, or after dark to assess lighting and people's safety. As a result, it was not possible to give this criterion a yes based on this observation alone. In order to compensate for this, safety questions were included in the survey (which is discussed later). Future studies could explore safety issues in greater detail.

Criteria 3 also gets a middle score, mainly because of issues with sound quality or noises at the square. There is considerable noise at the square although no formal sound testing was performed. There was traffic, bus and freight vehicles, sound from motorcycles and from the wheels of the skateboarders when running over the concrete tiles in the square. Also, there is a small fountain and water running alongside a ramp leading into the square that produce somewhat loud noises (see figure 6 and 7), sounds from the restaurants and the people enjoying themselves there. Clearly the most annoying sounds according to the researcher where from motorized transport and freight vehicles and then the water sounds. The skateboarders drew attention to their activity with the sound of the wheels running over the surface tiles assembly lines in the square, which could be reduced with better surface. There were limited to no natural sounds from birds. Natural sounds do have a relaxing effect on people but

given that this square does is in most part concrete and does not have much greenery for birds to thrive in, it was not to be expected.

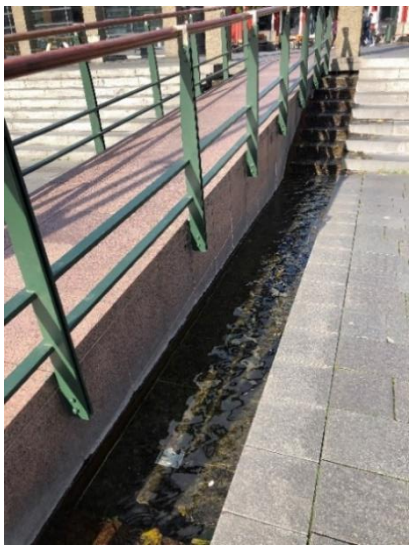


Figure 6 and 7. The fountain and waterfall.

Next theme has to do with comfort. Here, six criterions are presented and five are estimated as adequate with a green simile face, but the sixth is estimated as a yellow neutral face (see figure 8).

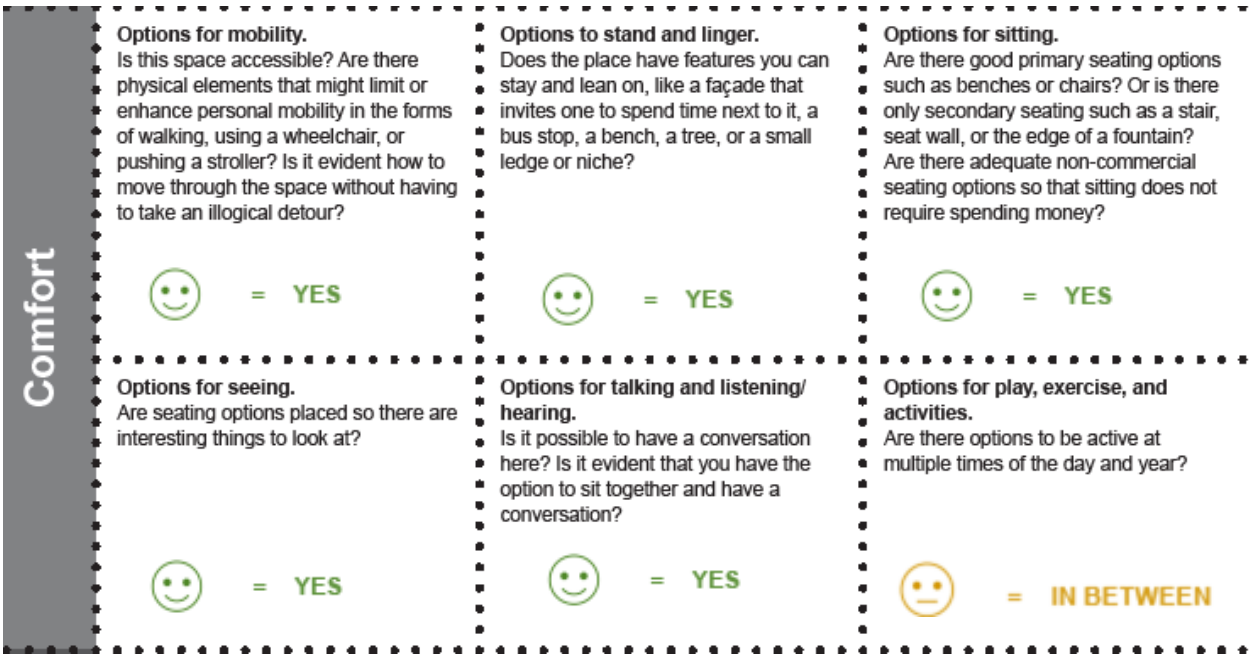


Figure 8. How well Ingólfstorg is performing on the comfort theme of the 12 urban quality criteria according to observation.

The reason for the neutral smile in the last criteria is mainly due to lack of variety, as option for play, exercise and activities is limited. There are groups of skaters that use the area for play and exercise but that is the only exercise that was observed. Other than that, play was only witnessed around the small fountain in the northern end of the square as two children enjoyed themselves there while parents were dining. Importantly the square has many functions throughout the year as a public place for bigger activities and these are not included in the observation. However, it should be evaluated if the space

could be improved by inducing the opportunity for more activities for more diverse users, such as children and older individuals.

Enjoyment is the next factor with three criteria. All were rated as neutral (see figure 9).

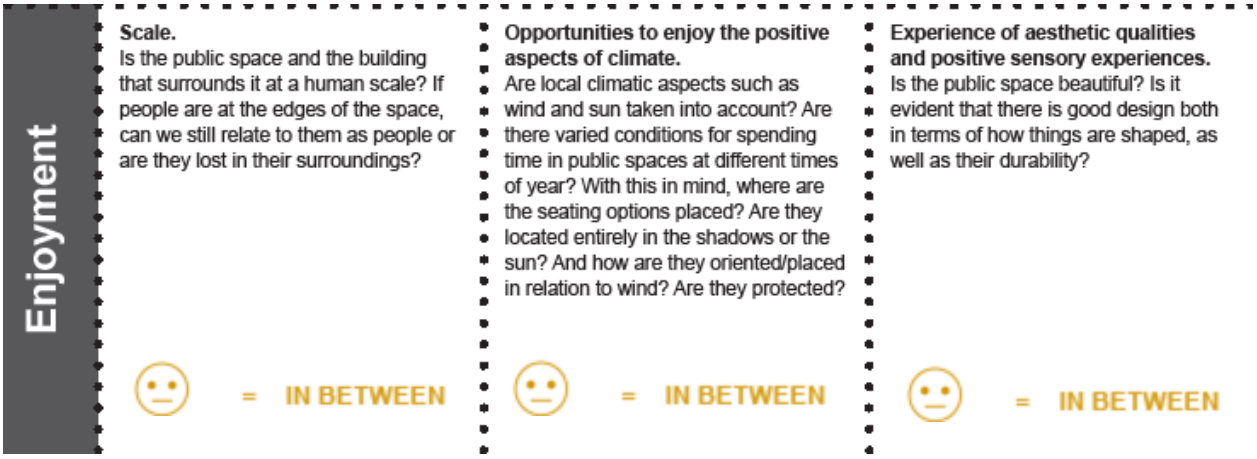


Figure 9. *How well Ingólfstorg is performing on the enjoyment theme of the 12 urban quality criteria according to observation.*

On the south and west edge of the square there are newer houses that are up to 8 stories high compared to the small 1-3 stories high old historical houses (or historical replicas). Due to this, the complete area is not considered to be at a human scale. The reason that the second criteria is rewarded a yellow neutral character, has to do with sun and shadow at the square. It is not a general custom here to avoid the sun over the summer, as summers are short and mild. It is a common conception that when presented with the option of sitting in the sun instead of the shadow, the sunny side of the bench is preferred in this country. However, the height of some of the newer houses surrounding the square, block the sun after lunch and therefore the southern and western part of the square is at large in the shadow, eliminating half of the benches available from those seeking to sit in the sun. Therefore, the researcher suggests that the northern end of the square which it includes a staircase that receives sun for a long time during the day, is possibly the most valued sitting area for pedestrians looking for a few minutes in the sun while dwelling there. Figure 10 and 11 below show the height of the houses that are somewhat to blame for the shadow and figure 12 shows the stark difference between customers of the

Figure 10, 11 and 12. *The newer buildings on the left side of the square that are partially to blame for shadow in the afternoon, and on the right end is a picture of the difference between customers choice of seating (sun or no sun).*

two restaurants in the northern end of the square, nobody chooses to sit outside in the shade but where there was sun (just covered by a cloud when the picture was taken), there were a lot of people.

The third criteria under the "enjoyment" theme involves an aesthetic evaluation of the qualities of the area and other positive sensory outputs. Assessing aesthetical qualities is largely subjective, and with that disclaimer the researcher believes that design, form and function could be improved considerably to improve aesthetic quality of the space. The major reasons for that are due to the lack of variety in the design, lack of greenery, lack of activities for different users and badly planned building area around the square. The newer houses around the south and west end of the square are two high and pass considerable shadow over the square, especially when the sun rises low (fall, winter and spring). Older houses in the area are commonly well preserved and beautiful but are overshadowed and do not live up to their estimated aesthetical or historical value, but these houses are amongst the oldest houses in the city.

All in all, the estimation indicates that there is considerable room for improvement, but the square is rewarded 6 positive similes and 6 neutral yellow similes. Using a tool such as this quality criteria is a simple and cost-effective procedure which gives planners an indication where to direct efforts to improve attributes and elements that foster public life in the public realm.

Thematic analysis

When understanding the different user groups in the square, a lot of information needed to be inferred apart from gender. Also, it is important to understand that despite the limited scope of the observation, the absence of particular social groups was evident and was noted.

Two of the present groups were stereotypical for Ingólfstorg, these were the skaters and the motorcyclists. During the observations, one woman skater was present, but the skater groups consisted of 5 individuals at the fewest and 9 individuals at the most. However, it is not known if these individuals were part of the same groups. The skaters soon saw the benefits of the design of the square and repurposed shortly after it was restored in its current form. The presence of this group there is believed to be largely accepted by others and they are a source for entertainment for others. The motorcyclists were only 2-4 individuals at a time, but not present for the whole time. One woman was identified. The motorcyclists have a long history of using the square when it was in its previous form as Hallærisplanið. To date their location on the square has remained relatively similar. A more recent population in the square are the tourists, but apart from being near numerous hotels the square serves as a starting point for walking tours directed at tourists, but these individuals seem not to dwell there for long, but just passing by in most cases. Most only dwelled there if they were waiting for a walking tour that started at the square.

Other group identities were more difficult to identify, but table 3 details the findings.

Table 3. Researcher's categorization of users, activity and location in observation

User group	Identity	Nationality	Activity type	Activity in detail	Emotion	Direction and location (where)
Skaters	Majority young men under 25, two younger women	Natives, foreign speaking	Social activities	Exercise and play on skateboards. One practices on a bicycle. They challenge each other and socialize within group. They record tricks with phone, listen to music with portable speaker, drink non-alcoholic and alcoholic beverages, eat food from Hlölli or hot dog stand. Vape. Create a show and activity that others enjoy watching. Exciting activity although noisy. Individuals from the group present throughout the observation time but individuals do walk in and out of the square.	Good	On the western side of the square, relax in the sun, keep things on benches in the shadow, stay longer in the sun in the stairs, walk in and out, go to stores (ÁTVR and food), Use ramp on both sides, but not the ramp over the stairs in the north east. Sitting in and standing by benches and stairs, also use benches and stairs for

						their things. Take up nearly 1/3 of the square.
MC	Majority men older than 45, one woman	Natives	Social activities	Motorcyclist of both genders (man predominately), dressed appropriately in safety gear, talk show details in bikes. Do not socialize with other groups. Attract some attention from others. Vape. Stay for 30-40 minutes.	Good	Stand and sit in benches in the south east of the square, use ramp in the middle west to enter and exit the square. Area for MC is subjectively clear. Only shadow in their area during observation.
Young boys	School boys around 10-13 years old	Natives	Social activities	Trying out skateboard, scooters or just to watch the other skaters. Walk around. Two boys have brought in a toddler's tricycle and try to gain attention. Watch the older boys with admiration. Stay for some 30 min+. Do not eat or drink.	Good	Mainly around the edges of the square, middle of it and those with scooters are within skater area but not part of the skater group socially, keep suitable distance from skaters. Skaters attract this group.
Young women alone	In their twenties	Natives, foreign speaking	Optional activities	Eat and drink in the stairs (mainly) and benches (next to Hlölli and the hot dog seller). Some are on their phone. Some possibly working in the area and are on break. One takes a short sunbath and takes her jacket off. She cycled into the square and leaves the bicycle near the stairs while sitting in the stairs, in the sun. All seek to sit in the sun. They stay for a short while and then keep on with their journey, around 20 min.	Good	Stairs mainly and food court benches.
Young women in pair	In their twenties and thirties	Natives	Optional activities	Sitting and talking. Few have bought drinks in a portable cup. Some possibly working in the area. Enjoying the sun. Spending about 30-40 min at the stairs.	Good	Stairs mainly and benches in the sunny east side secondary.
Parent with children	Majority women	Natives, foreign speaking	Optional activities	Eating and dwelling. Sitting in the benches from the hot dog stand. Sitting for about 20 minutes	Content, busy	Food court benches in the north - east end.
Middle aged men	Men older than 50	Foreign	Optional activities	Two middle aged day drinkers. They might have been construction workers or foreigners. They were there before the observer, but left after a short while, about 15 min.	Content	Sitting on one of the food court benches.
Tourists	Couples or groups, teenagers, individuals over 25 and more common around middle age and older.	Foreign	Optional activities	Looking around at activity in the square, looking at houses, mainly passing by without interaction with others or elements in the design but some seek a walking tour that start in front of the MC area. Spend a short time, more often only passing through.	Content, curious, unfamiliar	Mainly in the edges, walking paths through the square, or standing in the area in front of the MC were walking tours start.
Pre-teen	Boys and girls 15-17 years old	Natives, foreign	Social activities	One group of tourist teens rented all the Donkey republic bicycles, cycling around, some walking, some eating. Dwelling in and around the square for 30 min.	Good, having fun	Cycling in the streets surrounding the square, cycling the big ramp in the north east end.
Children with parent	Girls 5-8 years old	Foreign	Optional activities	Eating with parent. Children running to the fountain and back to the food court benches. Drawing with chalk next to fountain. Dwelling for a short period, 20 min.	Good, happy	Playing nearby the small fountain in front of the food court in the northern end.

Parents with stroller	Usually women, one man, in thirties and forties	Natives	Necessary activities	Walking through passively, often accompanied with a friend and talking	Good, content	Walking by through Vallarstræti or alongside the edges of the square.

The obvious absence of families, women within the identified groups, families and children, and older adults dwelling in the square was noted. Surely young parents with strollers were seen walking by but not staying in the square. Also, it is the judgement of the researcher that the space supports limited number of activities, which could be the main reason for the absence of these groups. Nearby public spaces such as Austurvöllur might have more value, depending on these people's needs and activity but this would need to be studied. Issues with mobility options or accessibility could also be a contributing factor and distance if these groups do not live in the surrounding area.

Figure 13. *The stairs and a bench in the so-called food court area.*

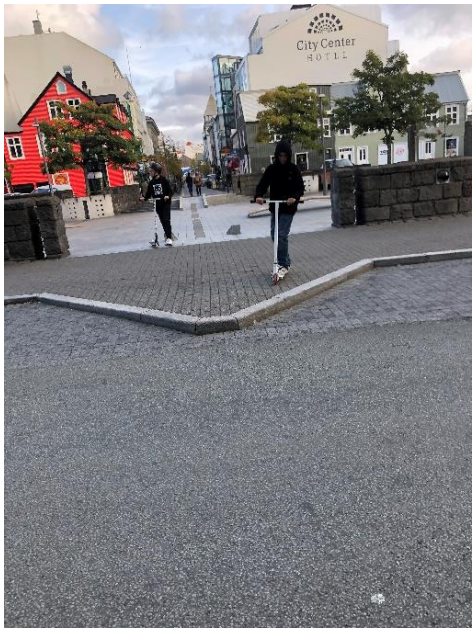


Figure 14 and 15. *The skaters, using the entrance ramp on the west side and two standing in the middle of the square.*

Figure 16 and 17. *The bikers place within the square, they also used benches on the eastern side.*

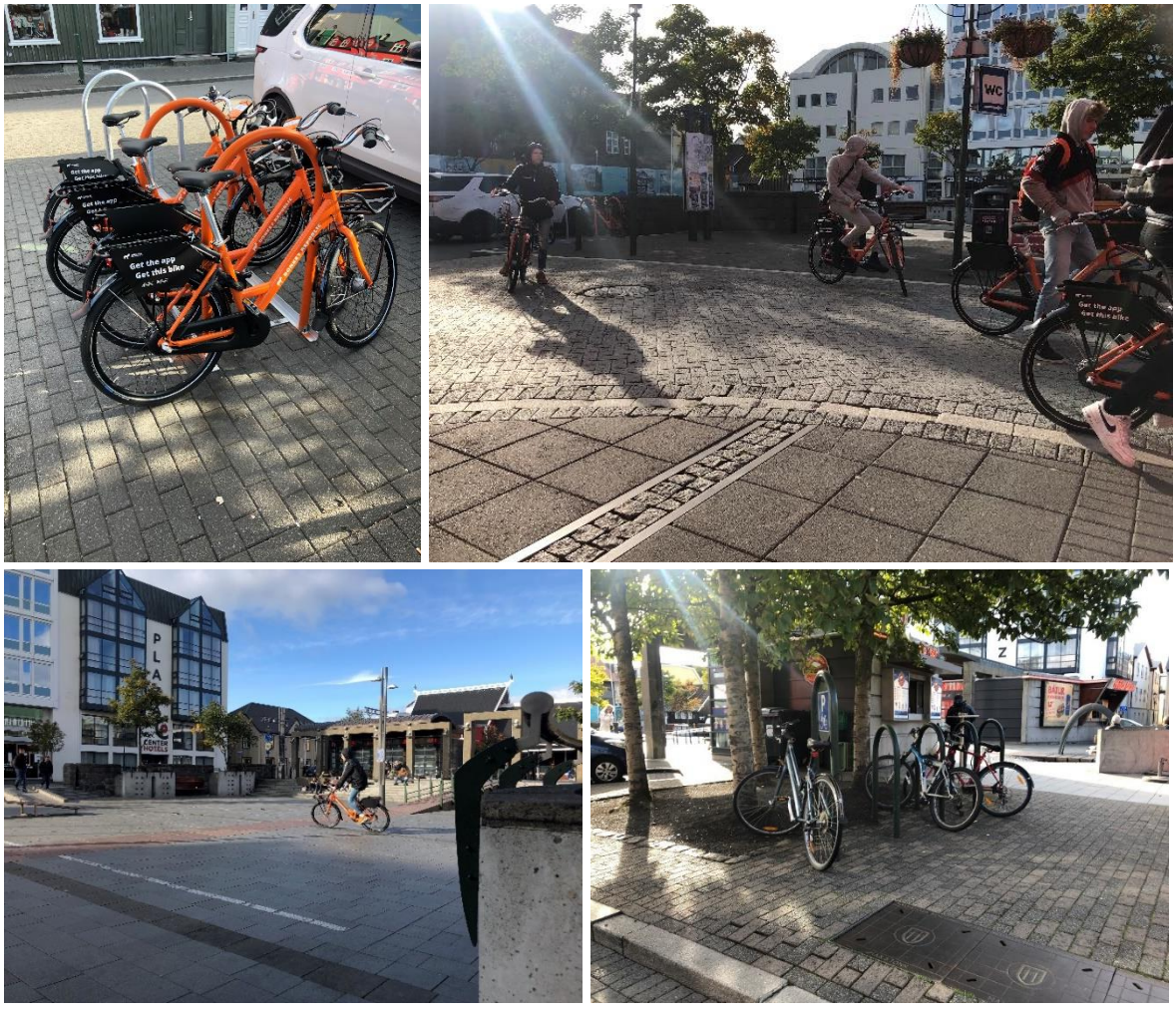


Figure 18-21. *The presence of rental cycles and bicycle racks are an example of elements that invite to an opportunity for practical, fun and social activities.*


Figure 22 and 23. *The tourists place within the square, e.g. the walking tour meeting place on the left. On the right a tourist couple gazes around as the walk pass the square.*

Figure 24 and 25. *Billboards on the north side of the square, one seems to be neglected and the other is a map of the area in English, both are directed to tourists but not locals.*

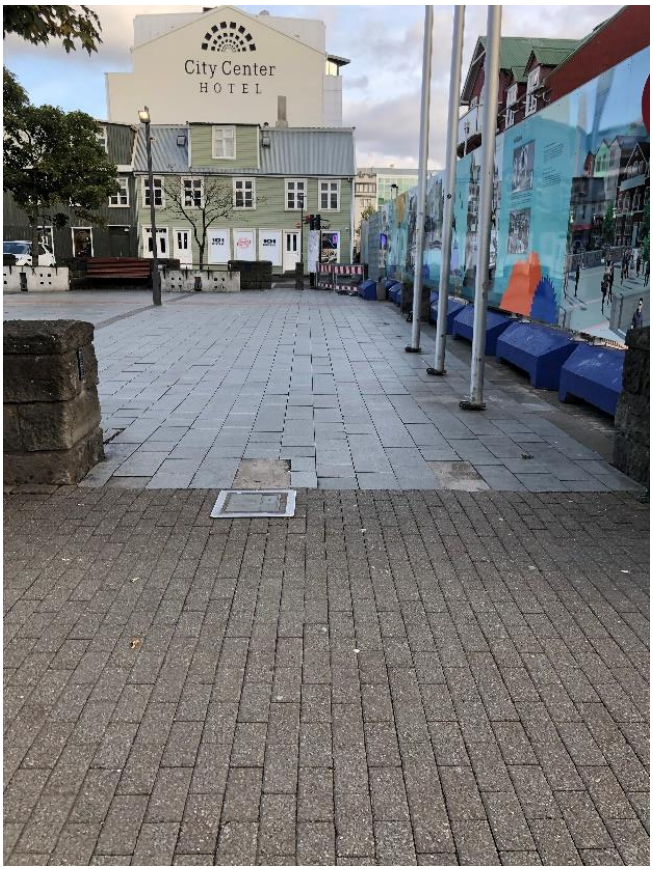


Figure 26 and 27 (below). *Construction work in Vallarstræti, narrowing the pedestrian space. Barriers decorated with historical pictures and description of the development of the area presented. The concreate tiles here are wearing off.*

Figure 28 and 29. *The north end of the square (left) and the area behind the north end (to the right). The stairs are probably the most underrated element of the square as it has high functional value. People seemed to prefer to sit there instead of the benches located in the edges of the square. The area behind is closed off for traffic and the restaurants use the space for more seating. The seating in the sun as can be seen in the picture is more popular and in good days this area is vibrant and joyful.*

Figure 30. To the left, two columns rise from the ground in the southern end of the square. Steam comes out through the top. There is no sign or apparent purpose of this in the square, but tourists were prone to look around them for explanation.

Figure 31. The pavement on the western side of the square is wide and accessible but narrows when there is a handicap parking placed in the space.


Figure 32 and 33. *Parents with small children walked around the area and did not dwell in the square, however the figure on the right shows the art of toddlers around the fountain in the north end.*

Figure 34. *The entrance ramp on the east side, the only public toilet in the area is the green structure and the trees surrounding the square can be seen.*

Flow analysis

The researcher counted the transport modes of those crossing or dwelling in the square for 10 minutes in the later observation, as seen from the entrance ramp on the east side in Veltusund (see figure 34). During this time, five persons cycled through the ramps located at Aðalstræti and Veltusund (from both directions). Six skateboarders kept to their location in the square (marked in blue in figure 35). Twelve individuals that seemed native and five that were obviously tourists walked in various directions through the square.

Ingólfstorg is serving different transport modes in such a small area and it seems that there is some form for mutual considerations between pedestrians. However, the speed of the cyclists through the square was considerable, probably enough to cause harm if there would be a collision. In the 10-minute time frame there were no motorcycles present but they came later and kept to themselves in the area marked with brown in figure 35. There seems to be a mutual understanding over the distribution of space between groups, which would be interesting to study in regard to how this understanding came about and evolved over time.

Figure 35. *Flow of pedestrians and distribution of area between skaters (blue) and MC (brown) according to observation.*

Interaction and conflict in shared space

Understanding how the shared space in Vesturgata functioned and was being used was explored in the observation. Turns out that all modes and groups seem to approach the shared space with ease and little or no worries about their safety. The traffic was light this day and car drivers kept a slow speed.

Aðalstræti and Vesturgata up to Grófin are a one- way street, but it was common to see cyclists going head on in opposite direction as seen in figures 38-40. With regard to drivers, during the observation period no conflict was observed, the drivers were cautious and drove slowly, giving into for pedestrian needs. However, one incident with conflict was observed between a walking pedestrian and a cyclist, but the cyclist was travelling from Vesturgata to Aðalstræti (opposite direction in regard to car transport) and when passing the corner were the street meets a pedestrian nearly walked into the cyclist path who was cycling in the street. The pedestrian did not see the cyclist due to the corner, and possibly he did not expect him since the street is a one-way street.

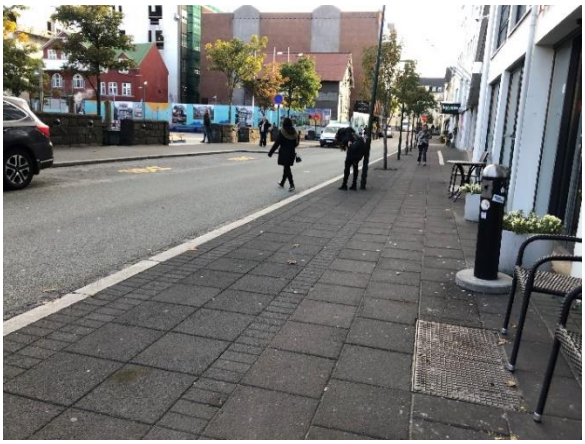


Figure 36 and 37. *Carefree flow of pedestrians walking over shared space intersection of Aðalstræti and Vesturgata.*

Figure 38, 39 and 40. *Cyclists cycling against traffic in Aðalstræti.*

As cycling is a growing transportation in Reykjavik, one can expect that the streets will be occupied by this transport mode in greater numbers in the near future, apart from all the innovation and increase in micromobility which also uses the same space as bicycles. It is therefore reason for planners to be aware of increasing risk for conflict between the softer transport modes in shared space.

The small part of Veltusund, where it connects Austurstræti and Hafnarstræti was also studied, but this street has little traffic volume but the whole left side of Veltusund is reserved for parking spots. Here, walking pedestrians´ selection of pathway was studied. There is a narrow pavement on the right side of Veltusund, which has a barrier (see figure x.) but no clerly marked crossing. However, where Austurstræti meets Veltusund, the street is designed as a shared space, with the street and pawement in the same height. Nearly all pedestrians' that were heading north or north west did not use the pavement on the right side of Veltusund, but instead strolled carefree over the street, almost always halfway through Veltusund, in a similar matter as was observed in the shared space in Vesturgata. Figure 41 shows an example of this behaviour. People simply seemed not to be expecting car traffic there despite the obvious sign of their existence with the parking options on the left side of the street. Here, two things could be considered in order to improve pedestrian quality and safety. Eradicate the parking and create better and wider pavements with safe crossing, create a shared space throughout Veltusund altogether, or close the street (and Austurstræti) for cars.

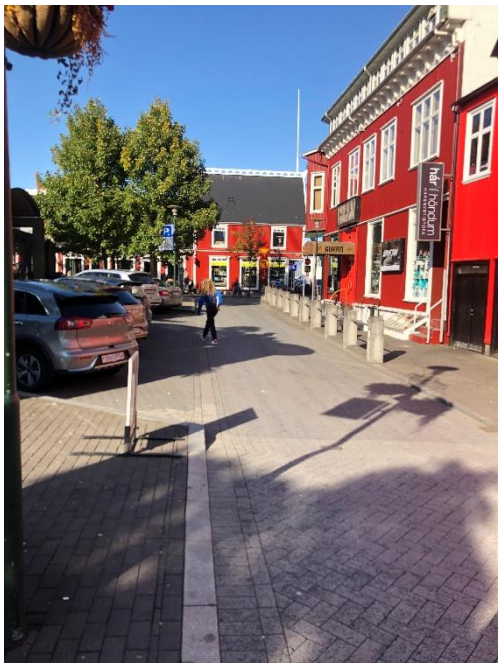


Figure 41. *Pedestrian crossing Veltusund*

Action framework

Part of the methodology in this part was to create an action framework for policymakers and planners to guide the management of the public space in question. In this case study, the themes for the Twelve urban criteria are used to categorize the actions; **protection, comfort and enjoyment**, in addition to an open theme for other suggestions. Presenting the objective under the theme first, the framework introduces a suggested action based on the findings from the observation, followed by suggested positive and negative impact of the action, the scale of the action is broken down after soft action (human-directed) and hard action (infrastructure directed). Lastly, it is important to follow up on the impact of the action and hence the measurement approach and sometimes precise indicator is suggested.

This framework is flexible and can be used to support other themes of interest and more categories could also be presented for each action (e.g. stakeholders involved, time and duration of the action, responsibility for action and impact, financial cost etc.). It is important to note that the actions suggested here are data driven from the findings, but the data collection was based on a limited time frame and hence these actions are by no means an exhaustive list. The suggested impact is also based on the researchers inferred assumptions, as was discussed in the methodology.

As this project is a case study lacking an overall objective from policymakers, the framework is presented in its basic form with limited description of each action, to be elaborated on if taken up by policymakers.

Table 4. Action framework - Protection theme

	Objective	Action	Suggested positive impact	Suggested negative impact	Soft actions	Hard actions	Measurement (indicators) for improvement
Protection	**Increase protection against traffic and accidents**	Close off Austurstræti and Veltusund for cars	Reclaiming the streets gives the opportunity for increased flow and public life to thrive at streets leading to the square. It also gives pedestrians increased feeling of safety from cars	Opposition from stakeholders (e.g. store owners, opposition from people with limited mobility and handicap).	Introduce the change through official planning and to local stakeholders. Offer the store owners and restaurants the opportunity to reclaim part of the street for their businesses if possible, include them in planning and aim to meet their concerns with compromise	Remove any signs and re-direct traffic using appropriate measures, barriers or renew surface	Pedestrian flow, accident statistics, business activity (increased sales), survey (compare to baseline - relevant questions include e.g. safety perception, how long do people stay and what do they do, what groups are being served, is the square an enjoyable place?). Ask the stakeholders as well how the chang e is being perceived
		Remove parking in Austurstræti and Veltusund and	Increased flow and the opportunity for	↓	Innovate with space, induce the	Construction. Remove any markings of	↓

		reclaim space for pedestrians, cyclists and public life	more public life to thrive at the square		opportunity for collaborative placemaking with community and key actors	the parking and adjust the surface indicating that the area is for pedestrians.	
		Limit Aðalstræti to goods transport, bus, shuttle and taxi transport but close it for private cars	Increase protection, pedestrian safety perception and improve sound quality.	↓	↓	Design and construction. Introduce an appropriate street design for limited traffic	↓
		Allow the limited transportation in Aðalstræti only early in the morning when pedestrian traffic is at its minimum	↓	↓	x	x	↓
	Increase protection against harm by others	Explore how lighting, surveillance and composition of public life is at other times (e.g. weekends and nights), explore peoples safety perception and reasoning for insecurity	x	x	x	x	Field study and survey
	Increase protection against unpleasant sensory experience	Change the surface of the square to minimize noise	Less noise from skaters	Opposition from stakeholders	Involve the stakeholders through collaborative placemaking	Construction	Measuring db before and after, survey about people's sound experience
		Re-design the waterfall and possibly the fountain or completely remove them	Less noise	Architectural rights		↓	
		Increase natural vegetation for sound buffering	Less noise and more nature sounds			↓	
		Fix the surface and broken tiles	Smooth surface is more enjoyable to walk on, has more aesthetical value and is safer			↓	

Table 5. Action framework – Comfort

	Objective	Action	Suggested positive impact	Suggested negative impact	Soft actions	Hard actions	Measurement (indicators) for improvement
Comfort	**Options for mobility**	Remove the north end ramp and improve the design of the staircase as a seating area (the study suggests that role of the staircase is highly functional as a seating area, a function that was not key in the original design)	More space for sitting in the sun, more space in the actual square for public life. Importantly removing the ramp and improving the stairs could help guide people were to sit and where to walk. It would also remove the option for cycling down the ramp for fun which could be dangerous to walking pedestrians	Architectural rights		↓	Observation and questionnaire, measure the use, people's views and satisfaction
	Options for play, exercise and activities	Explore actions and design options that support children's play	Serving more diverse groups - More families would potentially stop at the square	Space demanding, bad integration for the area and other elements	Use removable elements for fast prototyping to see results	x	↓

Table 6. Action framework – Enjoyment

	Objective	Action	Suggested positive impact	Suggested negative impact	Soft actions	Hard actions	Measurement (indicators) for improvement
Enjoyment	**Scale - Is the public space and the building that surrounds it at a human scale?**	Forbid new or redeveloped buildings higher than three storages high	Increase the human scale in the square	Opposition from stakeholders	x	Policy change	x
		Support the heritage of older houses and historical knowledge by introducing facts in appropriate way in the place	Gives the area a historical value, induces respectful behaviour (e.g. non littering), gives a sense of communal value		Signs, markings on houses, historical knowledge tours, smart solutions (e.g. apps, bar codes, historical walking tour in 3D).		Survey (attitudes)
	Opportunities to enjoy the positive aspects of climate	Redesign the staircase so that people can enjoy the sun there at later hours more comfortably	People could dwell for longer period in the area, they would be more comfortable			Design and construction	
		Remove the food court houses so that the north end is exposed to as much sun as possible and use space for public life activities or the cafes and restaurants could use it as seating area	More flow and more public life in the area	Opposition from stakeholders and business owners		↓	Observation of flow and activities. Survey about attitudes and satisfaction
	Experience of aesthetic qualities and positive sensory experiences	Intertwine more aesthetic design with greenery and more opportunities for diverse activities for different users. Include the area around the square	More enjoyment while dwelling in the area	x		↓	Observation and survey about attitudes and satisfaction
		Introduce art in the space	↓			↓	↓
		Update and clean billboards, make sure public information is in both Icelandic and English	Visitors would feel more welcome				x
		Introduce the historical facts at other places, not	Less friction between those passing by and			↓	Observation

		where people are walking	those enjoying reading about the place history				
		Introduce the function of the two columns at the southern end of the square	More understanding		Install a sign on pavement or columns		x

Table 7. Action framework – Other

	Objective	Action	Suggested positive impact	Suggested negative impact	Soft actions	Hard actions	Measurement (indicators) for improvement
Other	Policy and future planning	Define a strategic planning purpose for the square with actions to accomplish the set agenda					
		Serve more diverse groups					
		Increase the opportunity for public life					
		Increase the sense of community					
		Increase place attachment					
		Increase willingness for public engagement in placemaking					
	Improve pedestrian understanding and behaviour in shared space	Increase knowledge about the existence of the area and about the appropriate behaviour for all pedestrian groups in the area					
		Increase perceived safety in shared space					
	Increase shelter in other seasons of the year						
	Study the square in other seasons, times and while in use for public engagement (protests, holidays, sport matches, 1. of Mai etc.)	Explore the psychological effect people are after while dwelling there, such as wanting to be in an environment that is relaxing, interesting, calming, happy, sociable, restoring, complex, intriguing, calls for attention and so on					
	Regularly study the public life in the square and in the surrounding environment after changes with the aim to serve the public life better						

Conclusion

The findings for the twelve-urban quality criteria and possible actions to improve the public area are elaborated on. An action framework was created using the main themes in the twelve-urban quality criteria and is presented in table 4 to table 7. This framework could serve policymakers and planners in any similar project with the aim to manage and improve a public space.

This observation was indeed explanatory, giving the first insight into the value of Ingólfstorg and for whom. The space has been evaluated by a broad quality criterion which indicates how to improve public life on a given factor. Using a specially designed check list, the primary user groups at the time of the observation were identified, their activities observed and the lack of other social groups in the space noted. Furthermore, the interaction and conflict of different pedestrians and transport modes were observed and the role of the design in directing the behaviour was recorded. Photographs were collected to support the observer's conclusion.

There are some limitations to this study. First, it is nearly impossible to conduct a cost-effective naturalistic observation study that is generalizable to a large population. In addition, some populations may be difficult to locate in natural settings (Eby, 2011). It is therefore important to define the population of interest and acknowledge the limitations of generalizability when it comes to absent populations. Importantly, this analysis was only exploring Ingólfstorg as a public place when there were no events planned there, but the location has a central importance as a gathering place when there are specific events such as holidays, sports events, protests etc. How the location functions in such planned events requires a separate study.

What was not observed is also a lesson, apparently the environment does not invite diverse groups to dwell for long and the opportunity for diverse activities is limited. It is however, not to say that Ingólfstorg needs to meet the needs of all, but it is in the hands of the city´s planners to ensure that there are places in the city for all. Ingólfstorg probably needs a declared role, and if that role is to sustain the primary groups observed here or invite a broader user group to engage in wider array of activities, then this analysis can be utilized to do better. It is highly recommended that future studies would be performed with similar methodology in order to be able to compare the development of the public life in the square, especially when there are changes made. Preferably, public life should be systematically studied in the city, to gain better understanding of what is valuable, considered as quality in the design and for whom.

Attitude survey

Aim

The overall objective with the survey was to gain deeper understanding about "who" attends Ingólfstorg and "why", that is to understand the nature of the activity (necessary, optional or social). Also, a question about why people did not visit the place was posed. The survey included an extensive list of attitude questions using items from different psychological measurement scales in addition to a variety of questions about visiting frequency, safety, experience and demography. For the purposes of this scrutiny, the focus of the analysis will be to explore the who and why, hence these results are preliminary.

Methodology

The survey was an internet-based questionnaire that relied on participants self-report account of their behaviour and attitude without being in the actual environment. In self-reports, the content of the responses is assumed to reflect a respondent's reality. Self-reports and especially questionnaires have many advantages. They are usually cost-effective, they provide more detailed information than observations, and they can reach large numbers of people. Representativeness of the sample is easy to establish and can be measured with direct statistical comparisons. Moreover, the reliability of items and measurements can be easily evaluated with standard statistics (Lajunen & Özkan, 2011).

Statistical analysis was performed in SPSS 26, using chi-square measurement for significance testing where appropriate. The chi-square significance test is used to evaluate whether different percentages between groups are statistically significant. If statistically significant difference occurs, it is indicated with stars. One star indicates that there is less than a 5% probability that the difference between different groups of respondents will occur if there is no difference between the groups in the population ($p \leq 0,05$). Two stars indicate that there is less the a 1% probability that the difference between groups of respondents occurs if there is no difference between the groups in the population ($p \leq 0,01$) and three stars indicate that there is less than a 0,1% probability that the difference between groups of respondents will occur if there is no difference between the groups in the population ($p \leq 0,001$). However, since this study had a small sample size, any significant difference needs to be cautiously interpreted.

Participants and procedure

The survey was posted and boosted on social media (Facebook). The sampling was therefore a convenience sample and the results are therefore not generalizable over the general population.

The survey was available online from 10.10.19 - 11.11.2019. In all, 218 individuals started the questionnaire but 108 finished all questions. The completion rate was therefore approximately 50%.

The survey was only available in Icelandic. Demographical questions were presented lastly in the survey.

Preliminary findings

Since this was not a representative sample, no weighting of the data occurred. Main preliminary findings are presented in frequency tables, based on answers from all participants, also those that did not complete the survey. Because of this the total number of responses can differ between questions. Frequency tables that are contrasted with background variables include answers from those that have given an answer to the background variables (that were presented las in the survey), not those that dropped out of the survey before. To increase power in the analysis, attitudinal options to the questions were often combined (from 5 options to 3).

Demography

Seven demographical variables were included in this analysis. Considerably more women participated in the survey compared to men, the largest age group was in their thirties and early forties, and participants had high educational level (see table 4).

Table 4. The demographical variables

Gender	**N**	**%**
Man	22	20.6
Woman	85	79.4
Total	107	100
Age group	**N**	**%**
<29	9	8.6
30-45	35	33.3
46-65	41	39
66+	20	19
Total	105	100
Education	**N**	**%**
Gymnasium level or less	21	19.4
University	87	80.6
Total	108	100
Occupation	**N**	**%**
In the labour force/school	93	86.1
Not in the labour force	15	13.9
Total	108	100
Living location	**N**	**%**
Reykjavík or Seltjarnarnes	88	81.5
Outside Reykjavík	20	18.5
Total	108	100
Children	**N**	**%**
No	66	61.7
Yes	41	38.3
Total	107	100
Marital status	**N**	**%**
Married	46	43
Living together	13	12.1
In a relationship but not living together	8	7.5
Single	40	37.4
Total	107	100

Visiting Ingólfstorg

Visiting frequency on average

Table 5. How often do you visit Ingólfstorg on average?

Gender*				
	Almost never	Monthly - every other month	Weekly - daily	Total
Man	3	16	3	22
	13.6%	72.7%	13.6%	100%
Woman	37	39	9	85
	43.5%	45.9%	10.6%	100%
Total	40	55	12	107
	37.4%	51.4%	11.2%	100%
Age group				
	Almost never	Monthly - every other month	Weekly - daily	Total
<29	1	6	2	9

	11.1%	66.7%	22.2%	100%
30-45	10	21	4	35
	28.6%	60.0%	11.4%	100%
46-65	18	19	4	41
	43.9%	46.3%	9.8%	100%
66+	10	8	2	20
	50.0%	40.0%	10.0%	100%
Total	39	54	12	105
	37.1%	51.4%	11.4%	100%
Education				
	Almost never	Monthly - every other month	Weekly - daily	Total
Gymnasium level or less	7	13	1	21
	33.3%	61.9%	4.8%	100%
University	34	42	11	87
	39.1%	48.3%	12.6%	100%
Total	41	55	12	108
	38.0%	50.9%	11.1%	100%
Occupation				
	Almost never	Monthly - every other month	Weekly - daily	Total
In the labour force/school	34	49	10	93
	36.6%	52.7%	10.8%	100%
Not in the labour force	7	6	2	15
	46.7%	40.0%	13.3%	100%
Total	41	55	12	108
	38.0%	50.9%	11.1%	100%
Residency				
	Almost never	Monthly - every other month	Weekly - daily	Total
Reykjavík or Seltjarnarnes	31	45	12	88
	35.2%	51.1%	13.6%	100%
Outside Reykjavík	10	10	0	20
	50.0%	50.0%	0.0%	100%
Total	41	55	12	108
	38.0%	50.9%	11.1%	100%
Children				
	Almost never	Monthly - every other month	Weekly - daily	Total
No	28	31	7	66
	42.4%	47.0%	10.6%	100%
Yes	12	24	5	41
	29.3%	58.5%	12.2%	100%
Total	40	55	12	107
	37.4%	51.4%	11.2%	100%
Marital status				
	Almost never	Monthly - every other month	Weekly - daily	Total
Married	19	22	5	46
	41.3%	47.8%	10.9%	100%
Living together	5	7	1	13
	38.5%	53.8%	7.7%	100%
In a relationship but not living together	1	7	0	8
	12.5%	87.5%	0.0%	100%
Single	15	19	6	40
	37.5%	47.5%	15.0%	100%
Total	40	55	12	107
	37.4%	51.4%	11.2%	100%

Here, gender difference was significant for $p<.05$, as men visited the place more often than women.

When are you most likely to visit Ingólfstorg?

The participants were asked when they would be most likely to visit Ingólfstorg in regard do what weekday, time of day and time of year. The options for these questions were given as a multiple-choice, as a result it was not possible to perform significance testing using the raw data, and results are presented for all valid answers after popularity. The frequency (%) in the following tables indicates the ratio of those that selected the option, in table 6 for example; 51,4% of those that answered this question choose Saturdays as the day that they were most likely to visit Ingólfstorg.

Table 6. What day would you be most likely to visit Ingólfstorg?

Weekday	N	%
Saturday	112	51.4
Sunday	84	38.5
Holiday	83	38.1
Friday	51	23.4
Thursday	31	14.2
Wednesday	29	13.3
Tuesday	24	11
Monday	22	10.1

Table 7. What time of day would you be most likely to visit Ingólfstorg?

Time of day	N	%
Afternoon	143	65.6
Lunchtime	65	29.8
Evening	43	19.7
Dinnertime	39	17.9
At night	21	9.6
Morning	12	5.5

Table 8. What time of year would you be most likely to visit Ingólfstorg?

Time of year	N	%
Summer	157	72
Spring	96	44
Fall	72	33
Winter	66	30.3

Most people prefer to visit the place during weekends and holidays, preferably in the afternoon in the summer.

Time

Table 9. For how long do you dwell at Ingólfstorg while visiting on average?

Gender						
	Never	1-20 min	21-40 min	41-60 min	1 hour or more	Total
Man	0	15	4	1	1	21
	0.0%	71.4%	19.0%	4.8%	4.8%	100%
Woman	24	44	3	4	2	77
	31.2%	57.1%	3.9%	5.2%	2.6%	100%
Total	24	59	7	5	3	98
	24.5%	60.2%	7.1%	5.1%	3.1%	100%
Age group						
	Never	1-20 min	21-40 min	41-60 min	1 hour or more	Total
<29	0	7	1	0	1	9
	0.0%	77.8%	11.1%	0.0%	11.1%	100%
30-45	7	21	1	3	0	32
	21.9%	65.6%	3.1%	9.4%	0.0%	100%
46-65	10	20	3	1	2	36
	27.8%	55.6%	8.3%	2.8%	5.6%	100%
66+	7	9	2	1	0	19
	0.368	0.474	0.105	0.053	0	1
Total	24	57	7	5	3	96
	25.0%	59.4%	7.3%	5.2%	3.1%	100%
Education						
	Never	1-20 min	21-40 min	41-60 min	1 hour or more	Total
Gymnasium level or less	2	12	4	1	1	20
	10.0%	60.0%	20.0%	5.0%	5.0%	100%
University	23	47	3	4	2	79
	29.1%	59.5%	3.8%	5.1%	2.5%	100%
Total	25	59	7	5	3	99
	25.3%	59.6%	7.1%	5.1%	3.0%	100%
Occupation						
	Never	1-20 min	21-40 min	41-60 min	1 hour or more	Total
In the labour force/school	21	52	4	5	3	85
	24.7%	61.2%	4.7%	5.9%	3.5%	100%
Not in the labour force	4	7	3	0	0	14
	28.6%	50.0%	21.4%	0.0%	0.0%	100%
Total	25	59	7	5	3	99
	25.3%	59.6%	7.1%	5.1%	3.0%	100%
Residency						
	Never	1-20 min	21-40 min	41-60 min	1 hour or more	Total
Reykjavík or Seltjarnarnes	21	48	5	5	3	82
	25.6%	58.5%	6.1%	6.1%	3.7%	100%
Outside Reykjavík	4	11	2	0	0	17
	23.5%	64.7%	11.8%	0.0%	0.0%	100%
Total	25	59	7	5	3	100%
	25.3%	59.6%	7.1%	5.1%	3.0%	100%
Children						
	Never	1-20 min	21-40 min	41-60 min	1 hour or more	Total
No	17	31	7	3	1	59
	28.8%	52.5%	11.9%	5.1%	1.7%	100%
Yes	7	28	0	2	2	39
	17.9%	71.8%	0.0%	5.1%	5.1%	100%
Total	24	59	7	5	3	98
	24.5%	60.2%	7.1%	5.1%	3.1%	100%
Marital status						
	Never	1-20 min	21-40 min	41-60 min	1 hour or more	Total
Married	7	29	2	1	0	39

	17.9%	74.4%	5.1%	2.6%	0.0%	100%
Living together	3	7	0	2	0	12
	25.0%	58.3%	0.0%	16.7%	0.0%	100%
In a relationship but not living together	1	6	1	0	0	8
	12.5%	75.0%	12.5%	0.0%	0.0%	100%
Single	13	17	4	2	3	39
	33.3%	43.6%	10.3%	5.1%	7.7%	100%
Total	24	59	7	5	3	98
	24.5%	60.2%	7.1%	5.1%	3.1%	100%

These results indicate that the majority of visits to Ingólfstorg are quite short, 24,5% never dwell there and 60,2% stay for 20 minutes or less.

Influence of weather

Table 10. Does the weather influence your choice to visit Ingólfstorg?

Gender			
	Yes. If weather it is bad, I rather not visit the place	No. I will visit the place regardless of the weather conditions	Total
Man	14	7	21
	66.7%	33.3%	100%
Woman	58	17	75
	77.3%	22.7%	100%
Total	72	24	96
	75.0%	25.0%	100%
Age group			
	Yes. If weather it is bad, I rather not visit the place	No. I will visit the place regardless of the weather conditions	Total
<29	6	2	8
	75.0%	25.0%	100%
30-45	25	7	32
	78.1%	21.9%	100%
46-65	31	7	38
	81.6%	18.4%	100%
66+	9	7	16
	56.3%	43.8%	100%
Total	71	23	94
	75.5%	24.5%	100%
Education			
	Yes. If weather it is bad, I rather not visit the place	No. I will visit the place regardless of the weather conditions	Total
Gymnasium level or less	12	5	17
	70.6%	29.4%	100%
University	60	19	79
	75.9%	24.1%	100%
Total	72	24	96
	75.0%	25.0%	100%
Occupation			
	Yes. If weather it is bad, I rather not visit the place	No. I will visit the place regardless of the weather conditions	Total
In the labour force/school	64	20	84
	76.2%	23.8%	100%
Not in the labour force	8	4	12
	66.7%	33.3%	100%
Total	72	24	96
	75.0%	25.0%	100%

Residency			
	Yes. If weather it is bad, I rather not visit the place	No. I will visit the place regardless of the weather conditions	Total
Reykjavík or Seltjarnarnes	59	21	80
	73.8%	26.3%	100%
Outside Reykjavík	13	3	16
	81.3%	18.8%	100%
Total	72	24	96
	75.0%	25.0%	100%
Children			
	Yes. If weather it is bad, I rather not visit the place	No. I will visit the place regardless of the weather conditions	Total
No	40	17	57
	70.2%	29.8%	100%
Yes	32	7	39
	82.1%	17.9%	100%
Total	72	24	96
	75.0%	25.0%	100%
Marital status			
	Yes. If weather it is bad, I rather not visit the place	No. I will visit the place regardless of the weather conditions	Total
Married	28	14	42
	66.7%	33.3%	100%
Living together	8	3	11
	72.7%	27.3%	100%
In a relationship but not living together	8	0	8
	100.0%	0.0%	100%
Single	28	7	35
	80.0%	20.0%	100%
Total	72	24	96
	75.0%	25.0%	100%

Bad weather are severely limiting visits to Ingólfstorg, but 75% would not visit if weather conditions were not favourable.

Purpose

Table 11. For what purposes do you visit Ingólfstorg?

Gender				
	Personal errands	Occupational errands	Both	Total
Man	19	0	0	19
	100%	0%	0%	100%
Woman	56	2	9	67
	83.6%	3.0%	13.4%	100%
Total	75	2	9	86
	87.2%	2.3%	10.5%	100%
Age group				
	Personal errands	Occupational errands	Both	Total
<29	7	0	1	8
	87.5%	0.0%	12.5%	100%
30-45	27	2	1	30
	90.0%	6.7%	3.3%	100%
46-65	29	0	6	35
	82.9%	0.0%	17.1%	100%
66+	10	0	1	11
	90.9%	0.0%	9.1%	100%

Total	73	2	9	84
	86.9%	2.4%	10.7%	100%
Education				
	Personal errands	Occupational errands	Both	Total
Gymnasium level or less	15	0	1	16
	93.8%	0.0%	6.3%	100%
University	60	2	8	70
	85.7%	2.9%	11.4%	100%
Total	75	2	9	86
	87.2%	2.3%	10.5%	100%
Occupation				
ÓG	Personal errands	Occupational errands	Both	Total
In the labour force/school	66	2	8	76
	86.8%	2.6%	10.5%	100%
Not in the labour force	9	0	1	10
	90.0%	0.0%	10.0%	100%
Total	75	2	9	86
	87.2%	2.3%	10.5%	100%
Residency				
	Personal errands	Occupational errands	Both	Total
Reykjavík or Seltjarnarnes	61	2	7	70
	87.1%	2.9%	10.0%	100%
Outside Reykjavík	14	0	2	16
	87.5%	0.0%	12.5%	100%
Total	75	2	9	86
	87.2%	2.3%	10.5%	100%
Children				
	Personal errands	Occupational errands	Both	Total
No	43	1	6	50
	86.0%	2.0%	12.0%	100%
Yes	32	1	3	36
	88.9%	2.8%	8.3%	100%
Total	75	2	9	86
	87.2%	2.3%	10.5%	100%
Marital status				
	Personal errands	Occupational errands	Both	Total
Married	31	1	5	37
	83.8%	2.7%	13.5%	100%
Living together	10	0	1	11
	90.9%	0.0%	9.1%	100%
In a relationship but not living together	7	0	1	8
	87.5%	0.0%	12.5%	100%
Single	27	1	2	30
	90.0%	3.3%	6.7%	100%
Total	75	2	9	86
	87.2%	2.3%	10.5%	100%

Ingólfstorg attracts people much more for personal errands, as 87% of the participants claimed their main purpose was personal, in comparison to occupational errands which were only 2,3%. About 10,5% of the participants claimed that they were coming to Ingólfstorg for both purposes.

Following this question, participants answered a multiple-choice question about what kind of activity they typically engaged in while staying at Ingólfstorg. Table 12 shows all answers for this question after popularity. Following this table, the open-ended answers to this question are presented.

Main activity while visiting

Table 12. Main activities while visiting Ingólfstorg

Activity	N	%
I walk through or around the square on my way to other location	108	49.5
I look at the public life	75	34.4
I attend scheduled events, e.g. speeches and concerts	74	33.9
I buy refreshments from restaurants or food courts at the square	70	32.1
I go out at nearby clubs	53	24.3
I go skating in the winter	39	17.9
I listen to the public life / the environment	35	16.1
I chat with my colleagues	32	14.7
I allow the children I follow to play	27	12.4
I drink alcohol	19	8.7
I cycle through or around the square on my way otherwise	17	7.8
I relax and charge the "batteries"	15	6.9
I work or use social media over the phone	13	6
I talk on the phone	10	4.6
I eat lunch	7	3.2
I walk around the square for health	5	2.3
I read (electronic media as well as in paper form)	5	2.3
I practice on a skateboard, scooter or bike	3	1.4
I work or use social media through a computer	1	0.5

Walking past the square was the most mentioned activity. The comments for the open-ended question were as follows:

- Hang out with friends.
- Shop in nearby stores.
- Take pictures.
- I would stay there to relax if the square wasn't so uninteresting. Other places attract me more.

Where do you stay at the square?

Table 13. Main location to stay at Ingólfstorg

Location	N	%
I sit where the sun is	59	27.1
I shop at restaurants or cafés in the square and stick to areas on their roads	56	25.7
I almost never visit the place	53	24.3
It's different	38	17.4
I sit on a bench	33	15.1
I mostly stand outside the square	27	12.4
I stay where shelter is the best in the area	27	12.4
I sit on the stairs	18	8.3
I sit where the fewest people are	15	6.9
I am mostly in the square	14	6.4
Where there is greenery	6	2.8
It doesn't matter, just in the next vacant seat	6	2.8
I sit where most people are	4	1.8

Not surprisingly, sitting where there was sun is popular, followed by attending the nearby shops or cafés. Other open-ended answers were as follows:

- In the end where the motorcycles are.
- Just passing through mainly.
- I walk past the square. I had not realized that there were seats there.
- I go through very often but rarely stop. There are usually a lot of skateboarders and I have to get past them. I like to watch them.
- It doesn't feel good to be at Ingólfstorg.
- I just walk through.
- Only walk through the square – not tempting to stop by.
- Nowhere, the area is so unattractive that I walk through it as fast as I can and try not to become a skateboard on the way across the square.
- Strolling through the square on the way somewhere else.
- I think there is little reason to stop in the square, there is no shelter and no vegetation, sometimes I have bought ice cream there on sunny days and stroll on to Austurvöllur.
- Never stop there.
- I don't stop at all but just go through.

General attitude

Table 14. How negative or positive are you towards Ingólfstorg?

Gender				
	Somewhat to very negative	Neither nor	Somewhat or very positive	Total
Man	8	5	9	22
	36.4%	22.7%	40.9%	100%
Woman	28	32	24	84
	33.3%	38.1%	28.6%	100%
Total	36	37	33	106
	34.0%	34.9%	31.1%	100%
Age group				
	Somewhat to very negative	Neither nor	Somewhat or very positive	Total
<29	0	4	5	9
	0.0%	44.4%	55.6%	100%
30-45	14	10	11	35
	40.0%	28.6%	31.4%	100%
46-65	17	14	10	41
	41.5%	34.1%	24.4%	100%
66+	4	8	7	19
	21.1%	42.1%	36.8%	100%
Total	35	36	33	104
	33.7%	34.6%	31.7%	100%
Education				
	Somewhat to very negative	Neither nor	Somewhat or very positive	Total
Gymnasium level or less	3	8	9	20
	15.0%	40.0%	45.0%	100%
University	33	30	24	87
	37.9%	34.5%	27.6%	100%
Total	36	38	33	107
	33.6%	35.5%	30.8%	100%
Occupation				
	Somewhat to very negative	Neither nor	Somewhat or very positive	Total
In the labour force/school	33	32	28	93
	35.5%	34.4%	30.1%	100%
Not in the labour force	3	6	5	14
	21.4%	42.9%	35.7%	100%

Total	36	38	33	107
	33.6%	35.5%	30.8%	100%
Residency				
	Somewhat to very negative	Neither nor	Somewhat or very positive	Total
Reykjavík or Seltjarnarnes	27	31	30	88
	30.7%	35.2%	34.1%	100%
Outside Reykjavík	9	7	3	19
	47.4%	36.8%	15.8%	100%
Total	36	38	33	107
	33.6%	35.5%	30.8%	100%
Children*				
	Somewhat to very negative	Neither nor	Somewhat or very positive	Total
No	18	29	18	65
	27.7%	44.6%	27.7%	100%
Yes	18	8	15	41
	43.9%	19.5%	36.6%	100%
Total	36	37	33	106
	34.0%	34.9%	31.1%	100%
Marital status				
	Somewhat to very negative	Neither nor	Somewhat or very positive	Total
Married	15	14	16	45
	33.3%	31.1%	35.6%	100%
Living together	4	4	5	13
	30.8%	30.8%	38.5%	100%
In a relationship but not living together	2	4	2	8
	25.0%	50.0%	25.0%	100%
Single	15	15	10	40
	37.5%	37.5%	25.0%	100%
Total	36	37	33	106
	34.0%	34.9%	31.1%	100%

In general, attitudes range quite evenly from negative to positive. The indifference toward the space is somewhat not surprising given that 37% of the sample never visit the place. This would be interesting to explore further.

Main reason for not visiting

Participants were offered a multiple-choice question about the reasons that influence their lack of visits to Ingólfstorg. These are listed in table 15.

Table 15. Main reasons for not visiting Ingólfstorg

Reasons	N	%
The environment is not attractive	110	50.5
I have nothing to attend to there	103	47.2
I live far away from it	57	26.1
It's hard to relax there	48	22
I have access to better public areas in my local area	47	21.6
It is too difficult to get there by car	36	16.5
There is no privacy there	36	16.5
It's too far away for me	18	8.3
There are too many tourists there	15	6.9

Participants also had the opportunity to list other reasons for not visiting. These were as follows:

- It is unsafe for children because of the skaters and Other places appeal to me more.
- I do not party as much as before.
- I often go around Ingólfstorg, sit down a few times if there is something like a skating rink, outdoor meeting or market.
- I sometimes go there when I go out on a motorcycle, but I don't ride out often enough. Sometimes I take tourists for a walk there, but I take fewer such trips than I did before.
- No activity's there.
- Nothing to do there.
- No proper facilities to sit down and be comfortable, too much concrete there and little vegetation.
- I just don´t go out to enjoy the environment so much. Need to do it more often.
- I pass the square frequently on my way to other places, but rarely stop there.
- Not allowed to let the dog run free.
- Because of the motorbikes.
- It is too noisy Uncomfortable benches there, noise, cannot be relaxed there. Too gray.
- Environment nice but the square itself is not very attractive.
- The weather.
- It is not a place for senior citizens loud noise from cycling dishes and motorcycles.
- It's messy (not serviced).

All in all, not being attractive enough and not inviting people for more broader range of activities is a limiting factor for people and as a result they visit the location less.

Room for improvement

Table 16. What could be improved at Ingólfstorg?

Actions for improvement	N	%
I would like to see more vegetation at Ingólfstorg	86	39.4
I would like to see older buildings at Ingólfstorg being appreciated more than they are now	67	30.7
I would like to see increased public life at Ingólfstorg	62	28.4
I would like to see improvements to the design and look of Ingólfstorg	61	28
I would like the parking around Ingólfstorg to be reclaimed for public life	56	25.7
I would like to see a more diverse service / retail area	51	23.4
I would like to limit car traffic to the streets around Ingólfstorg	50	22.9
I would like to see changes in the utility functions of Ingólfstorg	39	17.9
I would like to participate in the planning the future of the area	35	16.1
I would like to see that the food court houses in the square, Hlölli and the ice cream/hot dog seller, would be removed	27	12.4
I would like to contribute to reforming the area	24	11

Here the findings indicate that people want more natural area, more diversity in activities and to give the older houses in the area more weight. Other reasons were welcomed via an open-ended option. The comments were as follows:

- Improve the skateboard facilities
- Improve cleaning, collecting the trash
- I haven't been to downtown for many years, because I have decreased mobility and as such, I am not welcome down-town. Everyone should be walking or cycling which is impossible for me.
- Take Bryant Park in NY as a role model. There is a skating rink and Christmas market for Christmas (like at Ingólfstorg), but different things are going on depending on the season. E.g. there are more of tables and chairs when the weather is good and then people can buy food

and eat in the square. Always something fun but easy going. I know that Bryant Park is bigger and in a bigger city, but we can still learn from Bryant Park.

- I would like to be able to talk to other people at Ingólfstorg without having to scream. It is devastating to be there when the motorcyclists start to strain their engines inside the square.
- I want there to be proper public toilets at Ingólfstorg and other public areas in Reykjavik. One can´t take children to public areas if the only toilet available is a nasty little chamber.
- More benches that are not next to the trash can.
- Perhaps not feasible but the number of tourists could be reduced to a considerable extent elsewhere in the city centre (and in the natural areas of Iceland).
- Ingólfstorg is one of the best located in the town's public areas but poorly used for the public. It should be a little friend in the "desert" with more vegetation and less concrete. Pedestrian traffic and small children playing do not coincide with skateboard activity.
- You could clean the area better. Garbage is smothering everything (from the pothole and the ice cream parlour). Put better tiles in the surface. The current ones are skewed and loose. Selected accident risk.
- More play, more motivation for movement of young and old.
- Most importantly, do not build high-rise buildings at the square, which makes it a shadow square. People stop by to eat, talk and check out events. The square is hardly big enough for larger events but smaller events that are fun to look at without looking to the end of the square would be perfect.
- More frequent sale booths at or in the square, cafes and small shops.
- Lifting bar / gymnastics bar and small trampoline for children.
- There has been considerable bus service to the area in recent years. I think it has decreased a lot. It can completely disappear in my opinion.
- There could be more of seasonal events and those. Like the EM Square, the skating rink, this has such a multi-use square and when nothing is going on it could increase the number of seats and better connect the square to, for example, the activities of the museums around.
- It needs to increase the accessibility of cars there again so that you can drive around and find parking spaces outside these 5 days a year which is good weather. Hallærisplanið was a much more fun place than Ingólfstorg and was much more connected to the city's culture. The local drive through the city no longer exists, because all the streets have been closed.

Shared space experience

The questionnaire addressed the shared space experience (Vistgata or living street) in Vesturgata and but the first question had to do with if participants were aware of the nature of the street (see table 17).

Table 17. Are you aware that part of Vesturgata is a shared space/living street?

	N	%
Yes	40	36%
No	71	64%
Total	111	100

Table 18. How safe do you feel in regard to the traffic in the shared space?

	N	%
Very unsafe	6	5.5%
Rather unsafe	34	31.2%
Neither unsafe or safe	35	32.1%
Rather safe	29	26.6%
Very safe	5	4.6%
Total	109	100%

Only 31,2% of the participants state that they feel safe compared to 36,7% who state that they feel rather or very unsafe. In a calm street such as Vesturgata, the low safety perception of the shared space area is concerning. This is something planners need to be aware of and prospective analysis will explore this in more detail.

Table 19. How bad or good is your understanding about the appropriate behaviour of different pedestrian modes in the shared space in Vesturgata?

	N	%
Very bad understanding	4	3.7%
Rather bad understanding	19	17.4%
Neither bad nor good understanding	28	25.7%
Rather good understanding	43	39.4%
Very good understanding	15	13.8%
Total	109	100%

Of the given answers, 53,2% believe that they pose a rather good or very good understanding of how different transport modes behave in the shared space area. But this drops to 12,2% when asked about the perception of others (see table 20).

Table 20. How bad or good do you think the understanding of others is about the appropriate behaviour of different pedestrian modes in the shared space in Vesturgata?

	N	%
Very bad understanding	16	15.1%
Rather bad understanding	47	44.3%
Neither bad nor good understanding	30	28.3%
Rather good understanding	12	11.3%
Very good understanding	1	0.9%
Total	106	100%

Conclusion

The finding presented for this part are preliminary. Apart from exploring the findings presented here in more detail the survey included a wide range of attitudinal questions that are subject for future scrutiny.

The findings from the survey back up several findings from the observation and give deeper understanding of how the place is being used, or not, and by whom. For instance, women were more likely not to visit the place (43,5% never visit the place in contrast to 13,6% of the men) and the main reasons for not visiting had to do with the place not being an attractive location to stay in (50,5%) and a lack of activities there (47,2%). Most participants stated that they would most likely visit on a weekend or holiday, during the afternoon in the summer. However, the time estimated for a visit to Ingólfstorg on average was relatively short (60% stated that their visits were 1-20 min on average). This is in accordance with the result from the question about the main activity engaged in the place. Here, 50% state that they are mostly passing by the area, not dwelling, but 34,4% say that they watch the public life there, followed by 34% being there for organized events or activities. This should be explored further, with the aim to understand the psychological effect people are after while dwelling there, such as wanting to be in an environment that is relaxing, interesting, calming, happy, sociable, restoring, complex, intriguing, calls for attention and so on. When asked where people like to stay in the square, staying in the sun was most popular (27%) followed by sitting in the outdoor café or restaurant area (26%). The weather was a limitation for visiting, with 75% avoiding visiting in unfavourable weather conditions. Ingólfstorg could be improved with more shelter from the weather or indoor activities to decrease this. In all the general attitude toward the place is mixed, and this should be explored in greater detail. About 34% were negative toward the place, 35% were indifferent and 31% were positive. This is interesting given that 37% of the sample never visit the place.

When asked about the main reasons for not attending Ingólfstorg, 50,5% agree that the environment is not attractive and 47,2% have nothing to attend to there. When posed with suggestions for improvement 40% of the sample agree that more vegetation would be preferable, 31% would like to see the older buildings being more appreciated, 28,4% would like to see more public life there, 28% would like improvements to the design and 26% would like to reclaim parking for public life there. Also, the items regarding being involved with improvements were not particularly popular, only 11% would be interested in contributing to such a reform in any way, indicating that any future collaboration planning and placemaking between authorities and inhabitants might be a challenge.

Findings about the shared space were interesting and prospective studies will explore these findings in more detail. Majority of participants did not know about the shared space in Vesturgata and over a third of the participants feel unsafe in the area. However, 53,2% believe that they pose a rather good or very good understanding of how different transport modes should behave in the shared space area. But when asked about the understanding of other pedestrians this drops to 12,2%. This is a common attributional bias in people's judgement of their own vs others behaviour and from a psychological viewpoint it is an interesting research topic as a deeper understanding could improve the design and safety of shared space areas for different pedestrians and transport modes.

Furthermore, future analysis of this data could explore user groups in more detail and utilize the psychological attitudinal questions for those purposes.

This study has a limitation in regard to the sampling. Participants are not randomly drawn from the population but approached through a convenient sampling on Facebook. This was however cost-effective. We do not suggest that our findings are generalizable over the population, but instead these findings give us valuable indications into the main themes and what to look for in future studies.

References

Eby, D. W. (2011). Naturalistic observational field techniques for traffic psychology research. In Porter, B. E. (Ed.). *Handbook of traffic psychology* (pp. 61-72). Academic Press.

Gehl Institute (2019). *The twelve urban quality criteria*. Retrieved 03.08.2019 from https://gehlinstitute.org/tool/quality-criteria/

Gehl, J. (2011). *Life between buildings: Using public space*. Island press.

Gehl, J., & Svarre, B. (2013). *How to study public life*. Island press.

Lajunen, T., & Özkan, T. (2011). Self-report instruments and methods. In Porter, B. E. (Ed.). *Handbook of traffic psychology* (pp. 43-59). Academic Press.

Mehta, V. (2014). *Evaluating public space*. Journal of Urban design, 19(1), 53-88.

GENERAL CONCLUSION

The objective of this project was to develop a methodology to be used for public authorities and practitioners to study public space and manage it according to national requirements (IS: Landsskipulagsstefna) that will in its revised form will take the UN sustainability goals into account.

This approach is named MAPS (Multidisciplinary Assessment of Public Space). It is a systematic research approach that combines theoretical assumptions from diverse fields of urban studies, namely, social, psychological, architectural, historical and urban planning perspective. The method relies on a range of complementary research methods, a historical morphological analysis, architectural and planning policy analysis, naturalistic observation and a self-report survey. Importantly, a systematic evaluation framework and observation checklist were developed, and findings were reported in an action framework. These frameworks are flexible in use dependent on the public space and ensure a systematic approach to study public life. Also, they are to be used to support the actions designed followingly to improve public life and to measure the impact of each intervention.

The value of this work is three folded. First, it has a systematic value on a governmental level, as a tool to understand how the public space has been governed and managed in the past and hence improve the methodology and work procedures. There is a growing demand that planning is performed in consensus to the stakeholders and participatory planning or collaboratory placemaking is something that cities need to be focus more on and perform efficiently. Secondly, it has great instrumental value, as a tool to detail what needs to be improved in infrastructure in order to achieve the set goal for the public space. The methodology provides support for the assumptions made about the impact of the built-in environment and the effect it has on public life. Thirdly, this methodology provides social- and community value, as the results directly point out how and where the space influences, supports or hinders opportunities for social interactions, thriving public life and appreciation for the space.

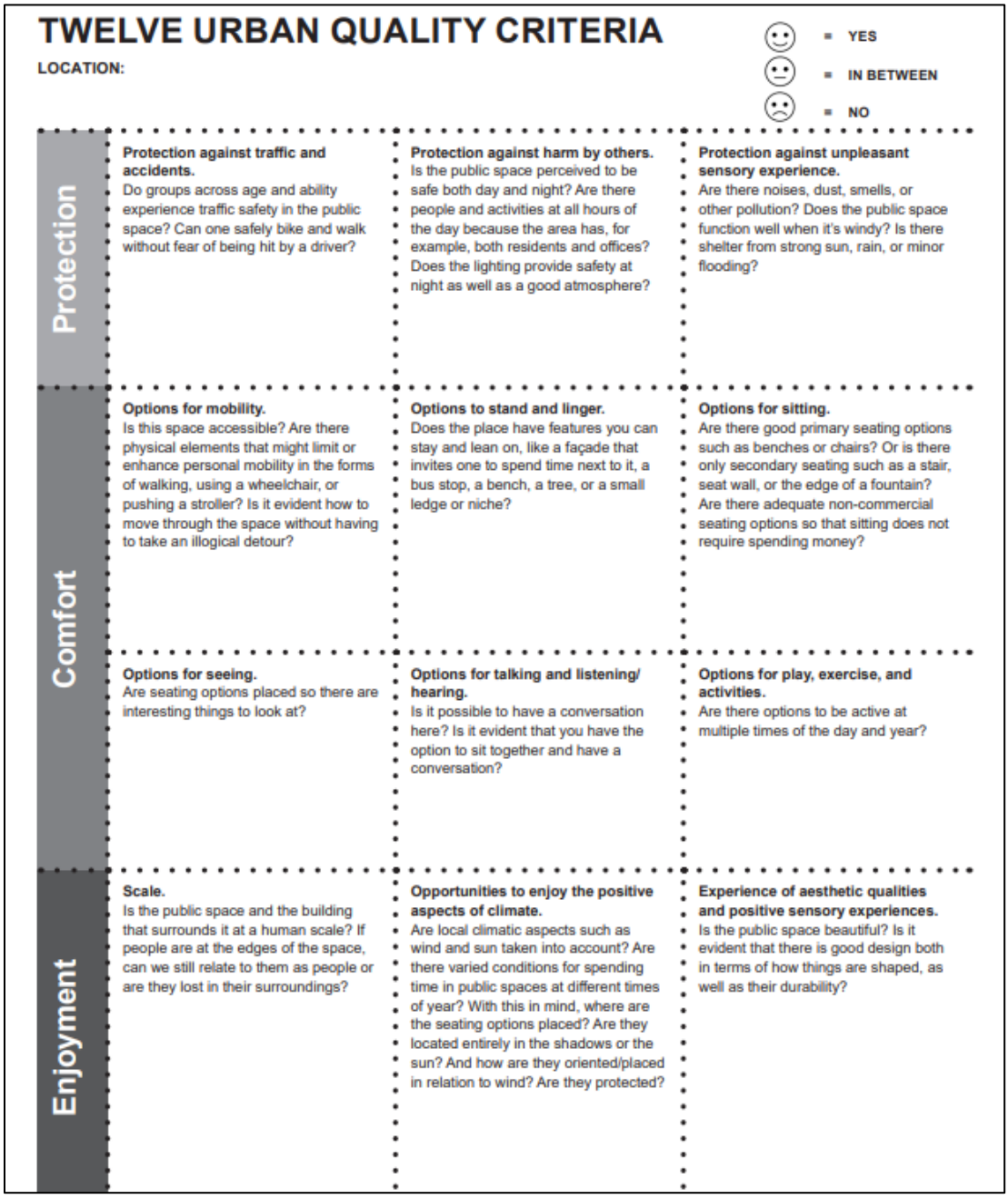
Cities face many challenges that need to be addressed effectively within the next years. There are several themes; inclusiveness, sustainability, being safe, smart, resilient and liveable above all. Public space if managed well can support actions within these all themes. Therefore, it is important that cities use a wholistic and systematic assessment in their approach in order to implement successful actions that serve the needs of diverse stakeholders within different public space. It is our belief that the MAPS methodology is excellent for these purposes and propose that policymakers implement it for their benefit when managing public space of any kind.

Appendix 1. Observation check list

Day:	
Time:	
Weather:	
Place:	
Subject / User group	
User group?	Age
	Gender
	Tourist
	Local (Student, business, worker…)
	Family
	Single adult
	Youngster/child
Activities	Active/passive
	Sitting alone
	sitting with other
	discussing
	on the phone
	distracted
	focused
	reading
	recharging
	Eating (what food)
	Drinking
	Standing
	Standing with other
	Sunbathing
	Reading
	Playing
	Riding
	Exploring
	…
Time	How long do they do each activity or stay?
Feelings	
	Content
	Happy/sad
	Safe/Unsafe
	Intrigued/curious
	Relaxed/ stressed
	Joy/angry
Travel mode	
	On foot
	Bike (holding it or riding)
	Skater
	Roller blades
	Motorbike
	Scooter
	Pram
	Dog
Place / Direction	Where do they stay?
	What are they looking at?
	Where do they come from?

	Where do they go?
Design features	Angle/view
	Scale
	Surface
	Space (private space within public space)
	Shelter from weather?
	Sun/shadow
	Service (food, drink, toilets)
	Seating
Conflict between pedestrians/travel modes?	
Distribution of space - what part of the space do they use? Is there space distributed exclusively for this group?	

Appendix 2. The twelve urban quality criteria



TWELVE URBAN QUALITY CRITERIA

LOCATION:

= YES

= IN BETWEEN

= NO

Protection	**Protection against traffic and accidents.** Do groups across age and ability experience traffic safety in the public space? Can one safely bike and walk without fear of being hit by a driver?	**Protection against harm by others.** Is the public space perceived to be safe both day and night? Are there people and activities at all hours of the day because the area has, for example, both residents and offices? Does the lighting provide safety at night as well as a good atmosphere?	**Protection against unpleasant sensory experience.** Are there noises, dust, smells, or other pollution? Does the public space function well when it's windy? Is there shelter from strong sun, rain, or minor flooding?
Comfort	**Options for mobility.** Is this space accessible? Are there physical elements that might limit or enhance personal mobility in the forms of walking, using a wheelchair, or pushing a stroller? Is it evident how to move through the space without having to take an illogical detour?	**Options to stand and linger.** Does the place have features you can stay and lean on, like a façade that invites one to spend time next to it, a bus stop, a bench, a tree, or a small ledge or niche?	**Options for sitting.** Are there good primary seating options such as benches or chairs? Or is there only secondary seating such as a stair, seat wall, or the edge of a fountain? Are there adequate non-commercial seating options so that sitting does not require spending money?
	Options for seeing. Are seating options placed so there are interesting things to look at?	**Options for talking and listening/ hearing.** Is it possible to have a conversation here? Is it evident that you have the option to sit together and have a conversation?	**Options for play, exercise, and activities.** Are there options to be active at multiple times of the day and year?
Enjoyment	**Scale.** Is the public space and the building that surrounds it at a human scale? If people are at the edges of the space, can we still relate to them as people or are they lost in their surroundings?	**Opportunities to enjoy the positive aspects of climate.** Are local climatic aspects such as wind and sun taken into account? Are there varied conditions for spending time in public spaces at different times of year? With this in mind, where are the seating options placed? Are they located entirely in the shadows or the sun? And how are they oriented/placed in relation to wind? Are they protected?	**Experience of aesthetic qualities and positive sensory experiences.** Is the public space beautiful? Is it evident that there is good design both in terms of how things are shaped, as well as their durability?